[0001] Effect of hypnosis and suggestion on the EEG-power spectrum in the preparatory interval (author's transl)
Leistungsspektren des EEG bei Hypnose und Suggestion in der Vorreizperiode
EEG EMG Z Elektroenzephalogr Elektromyogr Verwandte Geb 9;4
Ehlers W; Kugler J

Fourier-analysis of the EEG (P4 O2, P3 O1, CZ A1) in the stimulation period (1 sec) before acoustic stimulation showed significant differences between hypnosis and waking. Diminished power was found in the slower spectrum (0-3 and 4-7 c/sec) over the right hemisphere (P4O2) during hypnosis. Increased power was found in the alpha-spectrum (8-13 c/sec) over the Vertex (CZA1) during suggestion. We interpreted this effect as inhibition of exteroceptive perception during suggestion. Power spectrum was averaged over 30 stimulation periods before acoustic stimulation with identic tones (sinus of 500 c/sec, 70 dB, duration 40 msec, stimulus interval 3-10 sec). The combination of experimental conditions (Hypnosis/Waking and Suggestions) were given in a balanced order to control serial effects. We examined 12 persons in a repeated measurement design.

[0002] Changes in cerebral hemispheric lateralization with hypnosis
Frumkin LR; Ripley HS; Cox GB

Cerebral hemisphere dominance was measured in 20 subjects before, during, and after hypnotic suggestion. During hypnosis, subjects demonstrated lower right ear/left hemisphere laterality scores on a dichotic listening task compared to pre- and posthypnosis periods. These results support the view that hypnosis facilitates greater participation of the right cerebral hemisphere in cognition and may partially account for several well known hypnotic effects.

[0003] Self-hypnosis training in anxiety reduction
Aust Fam Physician 1978 Jul;7(7):905-10
Davidson GP; Farnbach RW; Richardson BA

Twenty three adult patients with problems of anxiety in a suburban general practice were invited to participate in a study to determine the effectiveness of self-hypnosis training in reducing anxiety levels. In an initial interview (T1), Experimenter 1 gave subjects two C-60 cassette tapes for home use. These contained the voice of Experimenter 2 who was unknown to the subjects, instructing them in self-hypnosis. After six weeks (T2), measures by Experimenter 1 of both psychological anxiety and blood pressure showed significant reduction (with the exception of systolic blood pressure), and in some cases subjects reduced their anxiolytic medication. A follow-up nine months later of as many subjects as were available (12) showed that these desirable effects were still detectable to a significant degree. It is suggested that audiotaped training in self-hypnosis represent a valid non-pharmacological method for anxiety reduction.
Teaching self-hypnosis to patients with chronic pain
Sacerdote P

For the past twenty years hypnotherapy and self-hypnosis have been utilized as valid tools for the successful management of severe protracted pain. Control often has been achieved in cases where other modalities of pain management had been inadequate. Hypnosis properly applied can bring some degree of improvement to 90 percent of patients. More remarkable degree of pain relief is achievable in the 25 percent of patients who have high hypnotic "talent," and with very limited expenditure of time and effort. The author discusses basic theories of pain, pain-control, pain-control and hypnosis, and he clarifies the effects of physiological, biochemical, and psychological variables which can affect the procedures and the results. Presentation of a clinical case with quoted excerpts of verbalization serves to illustrate the most important points.

Hypnosis and related clinical behavior
Frankel FH

The essential aspect in the experience of the hypnotized person is the altered or distorted perception that is suggested to him. Not all people are capable of the experience, but it is possible that spontaneous distortions occur in those with high hypnotizability. These distortions are frequently experienced as frightening symptoms. The author draws attention to the similarity between hysterical symptoms and events in hypnosis and to the high hypnotic responsivity in hysterical subjects reported in the clinical literature of the nineteenth century. Phobic patients have relatively high hypnotic responsivity. The author believes that it is sometimes possible to predict hypnotizability from clinical behavior, and that hypnotic responsivity can be utilized in psychodynamically sensitive therapy to teach such patients that they can learn to gain control of their symptoms.

Relieving suffering—and pain—with hypnosis
Geriatrics 1978 Jun;33(6):87-9
Ewin DM

It is helpful to perceive pain and suffering as separate entities when planning therapy. The physical, anatomic, and electrochemical expression of pain is treated by physical therapy, medicines, nerve block, electric stimulators, and surgery. The suffering component involves the patient's (1) nonacceptance, (2) fear of the unknown, (3) pessimistic evaluation of the meaning of pain, (4) feeling of no time limit to suffering, and (5) often self-destructive feelings of guilt and resentment. These emotions and imaginings are quite amenable to good hypnotherapy. When suffering is removed, pain tends to become tolerable or may even disappear.

Hypnotherapy in the management of childhood habit disorders
J Pediatr 1978 May;92(5):838-40
Gardner GG

Hypnotherapy may sometimes be helpful in treating childhood habit disorders, provided that it is used with the same caution as are other treatment modalities. This paper clarifies some common misconceptions about hypnosis with children, notes indications and contraindications, describes a patient in whom hypnotherapy was used to treat hair pulling, and offers information about training in hypnosis and locating qualified hypnotherapists.

Treatment of anxiety: a comparison of the usefulness of self-hypnosis and a meditational relaxation technique. An overview
Psychother Psychosom 1978;30(3-4):229-42 (ISSN: 0033-3190)
Benson H; Frankel FH; Apfel R; Daniels MD; Schniewind HE; Nemiah JC; Sifneos PE; Crassweller KD; Greenwood MM; Kotch JB; Arns PA; Rosner B

We have investigated prospectively the efficacy of two nonpharmacologic relaxation techniques in the therapy of anxiety. A simple, meditational relaxation technique (MT) that elicits the changes of decreased sympathetic nervous system activity was compared to a self-hypnosis technique (HT) in which relaxation, with or without altered perceptions, was suggested. 32 patients with anxiety neurosis were divided into 2 groups on the basis of their responsivity to hypnosis: moderate-high and low responsivity. The MT or HT was then randomly assigned separately to each member of the two
responsivity groups. Thus, 4 treatment groups were studied: moderate-high responsivity MT; low responsivity MT; moderate-high responsivity HT; and low responsivity HT. The low responsivity HT group, by definition largely incapable of achieving the altered perceptions essential to hypnosis, was designed as the control group. Patients were instructed to practice the assigned technique daily for 8 weeks. Change in anxiety was determined by three types of evaluation: psychiatric assessment; physiologic testing; and self-assessment. There was essentially no difference between the two techniques in therapeutic efficacy according to these evaluations. Psychiatric assessment revealed overall improvement in 34% of the patients and the self-rating assessment indicated improvement in 63% of the population. Patients who had moderate-high hypnotic responsivity, independent of the technique used, significantly improved on psychiatric assessment (p = 0.05) and decreased average systolic blood pressure from 126.1 to 122.5 mm Hg over the 8-week period (p = 0.048). The responsivity scores at the higher end of the hypnotic responsivity spectrum were proportionately correlated to greater decreases in systolic blood pressure (p = 0.075) and to improvement by psychiatric assessment (p = 0.003). There was, however, no consistent relation between hypnotic responsivity and the other assessments made, such as diastolic blood pressure, oxygen consumption, heart rate and the self-rating questionnaires. The meditational and self-hypnosis techniques employed in this investigation are simple to use and effective in the therapy of anxiety.

[0009]
Hypnosis, suggestions, and altered states of consciousness: experimental evaluation of the new cognitive-behavioral theory and the traditional trance-state theory of "hypnosis"
Ann N Y Acad Sci 1977 Oct 7;296:34-47 (ISSN: 0077-8923)
Barber TX; Wilson SC

Sixty-six subjects were tested on a new scale for evaluating "hypnotic-like" experiences (The Creative Imagination Scale), which includes ten standardized test-suggestions (e.g. suggestions for arm heaviness, finger anesthesia, time distortion, and age regression). The subjects were randomly assigned to one of three treatment groups (Think-With Instructions, trance induction, and Control), with 22 subjects to each group. The new Cognitive-Behavioral Theory predicted that subjects exposed to preliminary instructions designed to demonstrate how to think and imagine along with the suggested themes (Think-With Instructions) would be more responsive to test-suggestions for anesthesia, time distortion, age regression, and so on, than subjects exposed to a trance-induction procedure. On the other hand, the traditional Trance State Theory predicted that a trance induction would be more effective than Think-With Instructions in enhancing responses to such suggestions. Subjects exposed to the Think-With Instructions obtained significantly higher scores on the test-suggestions than those exposed either to the traditional trance-induction procedure or to the control treatment. Scores of subjects who received the trance-induction procedure were not significantly different from those of the subjects who received the control treatment. The results thus supported the new Cognitive-Behavioral Theory and contradicted the traditional Trance State Theory of hypnosis. Two recent experiments, by De Stefano and by Katz, confirmed the above experimental results and offered further support for the Cognitive-Behavioral Theory. In both recent experiments, subjects randomly assigned to a "Think-With Instructions" treatment were more responsive to test-suggestions than those randomly assigned to a traditional trance-induction treatment.

[0010]
Hypnosis from the standpoint of a contextualist
Ann N Y Acad Sci 1977 Oct 7;296:2-13 (ISSN: 0077-8923)
Coe WC; Sarbin TR

We set out to formulate a theory that makes counterexpectational conduct expectational. Our contextualist position has led us to the dramaturgical perspective. This perspective guided our examination of the hypnotic performance, and we noted that both the hypnotist and the subject are actors, both enmeshed in a dramatic plot, both striving to enhance their credibility. The dramaturgic concepts of actor and spectator helped us make sense of the contradictory self-reports in Hilgard's analgesia studies. We underscore the proposition (long overlooked) that the counterfactual statements in the hypnotist's induction are cues to the subject that a dramatistic plot is in the making. The subject may respond to the cues as an invitation to join in the miniature drama. If he accepts the invitation, he will employ whatever skills he possesses in order to enhance his credibility in enacting the role of hypnotized person. This proposition emphasizes the need for analyzing the implied social communications contained in any interaction.

[0011]
A physiological and subjective evaluation of meditation, hypnosis, and relaxation
Morse DR; Martin JS; Furst ML; Dubin LL

Ss were monitored for respiratory rate, pulse rate, blood pressure, skin resistance, EEG activity, and muscle activity. They were monitored during the alert state, meditation (TM or simple word type), hypnosis (relaxation and task types), and relaxation. Ss gave a verbal comparative evaluation of each state. The results showed significantly better relaxation responses for the relaxation states (relaxation, relaxation-hypnosis, meditation) than for the alert state. There were no significant differences between the relaxation states except for the measure "muscle activity" in which meditation was significantly better than the other relaxation states. Overall, there were significant differences between task-hypnosis and relaxation-hypnosis. No significant differences were found between TM and simple word meditation. For the subjective
measures, relaxation-hypnosis and meditation were significantly better than relaxation, but no significant differences were found between meditation and relaxation-hypnosis.

[0012] Hypnosis in a treatment programme for alcoholism
Med J Aust 1977 Apr 30;1(18):653-6 (ISSN: 0025-729X)
Gabrynowicz J

This is a report on a pilot study of the use of hypnosis in the treatment of alcoholism at an outpatient clinic. It describes the characteristic features of the sample of patients who seem to have responded to treatment and gives an account of the therapeutic programme.

[0013] Preliminary observations on an intervention program for heavy smokers
Shewchuk LA; Dubren R; Burton D; Forman M; Clark RR; Jaffin AR

Each of 571 smokers selected one of three methods of smoking cessation: group therapy, individual counseling, and hypnosis. One-year results suggest little difference between the three methods in producing ex-smokers. All methods produced an average success rate of approximately 20%. It should be noted, however, that with all types of verbal or verbally related therapy it is not known precisely how these techniques work or whether the outcomes are really a function of what is put into the therapy by the treatment agent and/or the recipient. It was generally found that younger, more educated smokers chose hypnosis; older, more educated smokers chose group therapy; and older, less-formally educated smokers chose individual counseling while the youngest and generally less educated smokers chose to become nonattenders and not take part in therapy. These results have important implications for designing optimal treatment programs which will be acceptable and effective for the greatest number of smokers.

[0014] Hypnosis and suggestion for fitting contact lenses
Barber J; Malin AH

Language is important in the creation of a painful or non-painful context for fitting contact lenses. This article discusses two types of language use and demonstrates the consequent experience each creates for the patient. The authors also emphasize the importance of acceptance and utilization of responses offered by the patient to further the goals of a comfortable fitting experience. Finally, this article provides an example of a reliable and successful technique for rapidly inducing hypnosis for the purpose of obtaining a comfortable lens fitting.

[0015] Dynamics of hypnotic analgesia: some new data
J Nerv Ment Dis 1977 Feb;164(2):88-96 (ISSN: 0022-3018)
Chertok L; Michaux D; Droin MC

Following two surgical operations under hypnotic anesthesia, it was possible, during subsequent recall under hypnosis, to elicit a representation of the past operative experience. It would seem that under hypnosis there is a persistence of the preception of nociceptive information and of its recognition as such by the subject. From an analysis of these two experiments in recall, it is possible to formulate several hypotheses concerning the psychological processes involved in hypnotic analgesia. In consequence of an affective relationship, in which the hypnotist's word assumes a special importance for the subject, the latter has recourse to two kinds of mechanism: a) internal (assimilation to an analogous sensation, not, however, registered as dangerous—rationalization); and b) external (total compliance with the interpretations proposed by the hypnotist), which lead to a qualitative transformation of nociceptive information, as also the inhibition of the behavioral manifestations normally associated with a painful stimulus.

[0016] [The classification of hypno-analgesics (author's transl)]
(Classification des hypno-analgesiques)
Kugler J; Doenicke A

Experience collected by routine E.E.G. studies of narcosis, in volunteers in good health, serves as a basis for a classification of anaesthetic agents. In order to obtain this, we established a correlation between the electroencephalographic effects on the one hand and psychological, motor, sensory and vegetative changes on the other hand. Arguments emerged in favour of the existence of different points of impact for different substances or groups of
substances. A distinction was made between holoencephalic hypno-analgesics (affecting the activity of practically all the neurone systems of the brain) and the neuroleptics, tranquilisers and analgesics which have only a limited effect on the telencephalon, neocortex and archicortex, the electroencephalographic actions of which also differ from the classical stages of narcosis. Using this classification based upon the principal points of action of these agents and their possible effects on other systems it is possible to explain the existence of adequate and inadequate associations of medications during so-called balanced anaesthesias.

A neurophysiological hypothesis for hypnosis is suggested. Frequently, a hypnotic state is considered close to sleep. Experiments show that it is closer to wakefulness, that attention is present and, at times, increased. Physiological changes under hypnosis, changes in suggestibility, conditionality, memory, visceral and endocrine changes, are outlined. Four large neuronal groups with diverse functions are described: wakefulness system, sleep system, that of conscious experience and the executive system; these last two, localized in the midbrain, pons and medulla, are considered the structural basis for the hypnotic state which arises from their increased or decreased functions. In the hypnotic state, through functional variations in these groups, modifications are seen in the spinal chord, in afferent fibers such as the optic ribbon and in complicated cortical functions such as memory.

Further studies of physiological concomitants of hypnosis: skin temperature, heart rate and skin resistance
Tebecis AK; Provins KA

Forehead skin temperature, heart rate and palmar skin resistance were recorded during passive hypnosis and compared with corresponding data obtained during the resting awake condition in a group of highly hypnotizable subjects experienced in self-hypnosis. Similar physiological measures were also monitored during experimental periods when subjects were experiencing suggested environmental conditions of cold and heat in hypnosis as compared with imagining the stress conditions. The data from these subjects were also compared with those obtained from a randomly selected group of people who were low in waking suggestibility and had never been hypnotized. The results indicate that the differences in mean physiological parameters were greatest between the two subject groups, although some notable differences were also apparent between hypnosis and the awake condition within the experimental group.

Hypnosis in surgery - why and when
Khalil GA

Hypnosis offers an excellent alternative to conventional anesthesia in certain selected or complicated cases. Ten different patients were selected from a group of 38 and were studied thoroughly. Good surgery and a smooth recovery were possible through hypnosis, alone or with conventional anesthesia.

Hypnotizability and phobic behavior
Arch Gen Psychiatry 1976 Oct;33(10):1259-61 (ISSN: 0003-990X)
Frankel FH; Orne MT

Hypnotizability ratings of 24 phobic patients interested in the therapeutic use of hypnosis were compared with those of an equal number of smokers keen to quit smoking through hypnosis. The mean Stanford Hypnotic Susceptibility Scale score of phobics was 8.08 on a 12-point scale. The mean of smokers was 6.08. The difference was significant beyond the .01 level (two-tailed). Thirty percent of smokers were essentially nonresponsive. No phobics were nonresponsive. Those with multiple phobias scored more highly than those with a single phobia. These findings are in accord with the view that among psychiatric patients whose hypnotizability is assessed in a treatment context, hysterics are most responsive. The implications both for theory and for a specific treatment strategy are discussed.

Hypnosis in pedicle graft surgery
Br J Plast Surg 1976 Jan;29(1):8-13 (ISSN: 0007-1226)
Scott DL
The use of hypnotherapy to modify the reactions of 13 patients undergoing pedicle flap operations is described. The morale and mental approach of these patients was improved. Premedication and hypnotic drug requirements were reduced to nil following hypnotic training. Analgesic medication was also reduced, not being required at all following nearly two-thirds of the operations.

[Hypnosis for monitoring intraoperative spinal cord function]
Crawford AH; Jones CW; Perisho JA; Herring JA

In such procedures as the Harrington operation for idiopathic scoliosis, evaluation of spinal cord function is advisable immediately after the back is straightened. The authors have used hypnosis for this procedure, as an adjunct to anesthetic management. Patients are awakened on the table, given lower extremity tests, and are then reanesthetized. The incidence of postoperative pain and other discomfort is also reduced by hypnosis.

[Human hypnosis and super-slow electrical activity of the brain]
Zh Nevropatol Psikhiatr Im S S Korsakova 1976;76(5):704-9 (ISSN: 0044-4588)
Aladzhalova NA; Rozhnov VE; Kamenetskij SL

The authors studied the transformation of infraslow oscillations of brain potentials in 15 patients with neuroses during 50 sessions of hypnosis. The results of such studies permitted to distinguish some important traits in the changes of infraslow oscillations of brain potentials in different stages of hypnosis. It is concluded that a study of these changes during hypnosis may establish some correlations between the physiological state of the brain and the unconscious mental processes.

[Hysteria, hypnosis, psychopathology. History and perspectives]
J Nerv Ment Dis 1975 Dec;161(6):367-78 (ISSN: 0022-3018)
Chertok L

A historical outline is given of the search for an explanation of the still elusive nature of hysteria and hypnosis, their mutual relationship, and that which they bear to psychopathology. Charcot regarded hypnosis as an artificially induced hysterical neurosis, and it was he who first introduced Freud to these two states. Freud was the first to see in hypnosis an experimental instrument for understanding psychopathological mechanisms. His subsequent conceptualization of psychoanalysis derived from these two phenomena at this decisive period. In 1895 Freud attempted to achieve a psychophysiological synthesis of the mental apparatus in his "Project for a Scientific Psychology", but then decided not to publish it. Whether or not recent advance in neurophysiology are sufficiently important to bring about this synthesis remains an open question. In recent years some psychoanalysts have become interested in hypnosis, which one of them described as a focus for psychophysiological and psychoanalytic investigations. Any theory of the psychical apparatus which does not account for such an obvious psychical phenomenon must necessarily be incomplete. Since Charcot, hysteria presents hardly any new openings for experimental work. It is suggested that the solution of psyche-soma interaction might be sought in the study of hypnosis. It is postulated that hypnosis is a "fourth organismic state," not as yet objectifiable (in contradistinction to the waking state, sleep, and dreaming): a kind of natural or inborn mechanism which acts as one of the regulators of man's relationships with the environment. The author discusses briefly the aims and methodology of future interdisciplinary research on hypnosis, and the study of the transition from one state of consciousness to another, and their potential application to a wide range of subjects, namely, wherever man's relations with the environment are involved.

[Hypnosis and moral doctrine]
Minerva Med 1975 Nov 7;66(75):3952-7 (ISSN: 0026-4806)
Perico G

Patients undergoing hypnosis are free subjects in the sense that they possess a particular dignity and entitlement to respect. They are, in fact, "not available" for examination except insofar as there is an expected or ausplicable improvement in their personal condition. This means that they are open to "experiment" solely to the extent that the following conditions are respected: certain control if situations involving risk to the person arise, "consent" of the patient (this may be only assumed in certain instances), the adoption of a "prudent" and "scientific" manner that avoids any suggestion of a spectacle or cheap publicity.
A personal bimanual antalgic manipulation on hypnotized parturient is proposed as a normal method of delivery assistance since it is quicker and takes less emotionally out of the physician than "delivery under hypnosis". The question of "childbirth without medical assistance" is also discussed, reference being made to an exceptional case of post-hypnotic control. This compared to all those cases of patients who deliver without the preparatory hypnotist being present.

The aetiology of labour pains remains obscure and it is not certain that improper conditioning is the cause. Fear of pain is innate, while other fears are acquired. The employment of hypnosis during labour is discussed and it is pointed out that the paucity of qualified hypnologists makes its systematic use problematical.

Hypnosis is defined as that branch of science which studies the application of controlled suggestion and hypnosis in stomatology. Its indications and usefulness at various stages of dental practice are examined. Emphasis is laid on the basic psychological and physiological advantages, and contraindications, including the impossibility of using hypnosis as a routine application, are discussed. A number of deontological problems connected with hypnosis are dealt with and the practical aspects discussed.

Hypnosis is able to induce a state of total psychological calm in very many subjects, including maintenance or even enhancement of their ability to cooperate. A smaller number of more receptive subjects may even achieve ocular anaesthesia, though this is not suitable for the performance of operations because the Dagnini-Aschner reflex persists and hypotonia is not attained. It is considered, therefore, that the association of hypnosis, retrobulbar pharmacological anaesthesia, and akinesia offers the best conditions for the performance of operations involving major opening of the eyeball, such as those associated with cataract, i.e. psychological tranquility with the ability to cooperate, anaesthesia with neurovegetative areflexia, hypotonia, and a postoperative course undisturbed by coughing and vomiting. The results of several years' experience have shown the complete suitability of the method and its wide possibilities of application.

After a review of the history of the subject, it is pointed out that Mason's deep trance hypnosis, were it employable in all cases and not just in 10-15% of them, would be the ideal anaesthetic. "Narco-hypnosis" is described as a method employable by the anaesthetist and advantageous in a certain number of operations. Present-day techniques of pharmacological anaesthesia have reached such a level of perfection, however, that hypnotic anaesthesia is really only indicated in certain well-defined situations: in obstetrics, in plastic surgery, in burn cases, in dentistry and in ophthalmology. Hypnosis is also useful in the postoperative course (as it re-establishes intestinal and vesical function and eases respiratory exercises), and in a number of painful conditions, especially long-standing ones.
The contribution that neurophysiological examination, subordinate to psychodynamic analysis, can bring to the investigation of facts and results in the therapeutic application of hypnosis is discussed. Phenomena with a suggestive background are analysed, particularly those of ideomotor transformation with reference to prereflective thought (Polanyi & Dyer). A special case is represented by phobic-obsessive disturbances. Here analysis of the process of ideative reinforcement must take account of the untranslatability of certain linguistico-syntactic connotations at this level. The part played by sensorimotor EEG biofeedback training in practical therapeutics is also examined.

Experimental psychology contributes to hypnology and vice versa and it is pointed out that this mutual relationship should be looked at as a function of the significance of methodology in psychology and of the way in which such methodology has been developing. After reviewing the distinguishing features of the experimental, clinico-social and statisitico-probabilistic approaches, the possibilities of using hypnosis as a technical tool for investigating general psychological problems or for throwing light on the diagnostic situation of a particular patient are investigated. The possibilities of using experimental psychological methodology for examining the hypnotic state in rigorous terms are then analysed and the need to systematize basic scientific research is stressed.

In Italy, the attitude displayed by psychosomatists towards hypnosis and A.T. is decidedly favourable, since they are considered as forms of short-term psychotherapy, this being primarily indicated in the management of psychosomatosis. While some reservations may be expressed with regard to the employment of hypnosis solely for the suppression of psychosomatic symptoms before their full significance is assessed, support may be given for the insertion of hypnosis in a wider psychotherapeutical context that is psychodynamically oriented. Psychogenesis may have different degrees of depth and not all forms of psychosomatosis are open to hypnotic attack, or even to short-term psychotherapy. Psychological therapy is only effective in cases where it releases the patient for his neurotic, infantile way of life and allows him to mature in a suitable manner. A result of this kind can hardly be reached in a short period of time. Hypnosis is, on the other hand, strongly indicated in a number of situations; these are listed.

The principal stages in the history of hypnosis are reviewed, from the forerunners of Mesmer to the founder of “animal magnetism” himself, to Braid, and the entire hypnological movement of the nineteenth century. The work of Freud and the then and later relationships between hypnosis and psychoanalysis are discussed. A personal interpretation is offered for the phenomenon of the ups and downs of the popularity of hypnosis and reasons given for why its application should never decline again. After a brief review of modern theories of hypnosis and hypnotic techniques, the importance of the subject, over and above its uses in medical treatment, is emphasized, for hypnosis can be used as an invaluable tool for investigating the extraordinary reconstructional and creative possibilities inherent in the outer reaches of the human psyche.

Hypnosis has a role in medical practice as an adjunct to many therapies. A brief review of the history, theory, induction procedures, phenomena and practice of hypnosis is given. The use of hypnosis in the therapy of anxiety is illustrated by a
report of a 44-year-old woman suffering from an aeroplane phobia.

Cognitive flexibility in hypnosis: response to change communication from the hypnotist
Sheehan PW; Bowman L

It was predicted that modification of response as it indexes cognitive flexibility in the hypnotic subject is related to susceptibility to hypnosis and the difficulty of the hypnotic task attempted. Experiment 1 isolated two distinct hypnotic tasks (easy and difficult); alternative forms of each item conveyed either clear or unclear structure concerning the response that was perceived as most appropriate. In Experiment 2, 101 subjects were administered hypnotic induction procedures and tested for modification of response on both items; for each subject, the hypnotist posed a conflict in communication by plausibly requesting an alteration in response from the behavior that the subject had chosen to indicate previously. Change data demonstrated that hypnotic subjects modified their behavior in hypnosis, but their cognitive flexibility was much more relevant to easy than to difficult tasks. Results highlight a further dimension of role enactment as well as the special role cognitive skills in play in our understanding of performance on hypnotic test items.

The use of hypnosis in the treatment of a case of multiple personality
Howland JS

The literature regarding the use of hypnosis in the therapy of multiple personality is reviewed. Cautions of other authors are noted which intend to protect the patient from further "splitting" of the personalities involved. A case of a 25-year-old woman is described in which, several months after leaving therapy abruptly, a second personality appeared and prompted her re-entry into treatment. Hypnosis was employed several weeks after restarting therapy on four separate occasions. Therapeutic outcome was favorable with coalescence of the personality into a new whole. A rationale for the use of hypnosis in this case is presented.

Hypnosis and eye movements
Tebecis AK; Provins KA

Eye movements (with closed lids) were studied in a group of highly hypnotizable experimental subjects experienced in self-hypnosis, and compared with a random sample of control subjects that had never been hypnotized and were low in waking suggestibility. Approximately half the experimental subjects rolled their eyes upwards to a greater extent when hypnosis was induced than during eye closure while awake. In some subjects eye flutter occurred during hypnosis, but not in the awake condition. During passive hypnosis the mean rates of rapid eye movements were lower, but those of slow eye movements were higher than during the resting awake condition of the same subjects or the random control subjects. The mean rates of horizontal eye movements during suggestions about begin in a train and watching passing telephone poles were higher for the experimental subjects in the hypnosis and 'imagination' sessions than that of the random control group in the imagination session. A proportion of the experimental subjects made more lateral eye movements during hypnosis than during the imagination session, but an equal proportion did not differ between the two conditions. The mean rates and durations of horizontal eye movements during dreaming about a tennis match were greater during hypnosis ('hypnotic' dream), than during the awake condition a few minutes later ('natural' dream), or the awake condition in the imagination session ('imagination' dream) of the same subjects or random controls. The performance and subjective involvement of the experimental subjects during the Barber suggestibility scale, 'nystagmus' suggestions and 'dreaming' did not differ significantly between the two hypnosis sessions, but in most cases were significantly greater during hypnosis than during the imagination session of the same group or the random control group.

Implications of the behavioral approach to hypnosis
Am J Psychother 1975 Jul;29(3):402-8 (ISSN: 0002-9564)
Starker S

The findings of behaviorally oriented research regarding the importance of cognitive-motivational variables in hypnosis are examined and some clinical and theoretical implications are explored. Hypnosis seems usefully conceptualized as a complex configuration or gestalt of interacting variables on several different levels, for example, cognitive, motivational, social, physiologic.

Hypnosis and the EEG. A quantitative investigation
A quantitative investigation of the EEG during hypnosis was made by analyzing the analogue power frequency spectrum of one group of subjects in the awake and hypnotized conditions, and another group (random sample) in the awake condition. Individuals of the first group were thoroughly experienced in self-hypnosis and highly hypnotizable, whereas those of the second group had never been hypnotized and were low in waking suggestibility. There were no statistically significant differences in mean power of the whole EEG spectrum between the awake and hypnotized conditions of the experimental group, although a trend toward increased theta (4 to 8 Hz) density during hypnosis was apparent. This group, however, exhibited significantly more theta activity during both the hypnotized and the awake conditions than the random sample of controls in the awake condition, irrespective of whether the eyes were closed or open. We suggest that this increased theta density in the EEG is related to frequent experience of self-hypnosis, high hypnotizability, or both.

[0041]
Involvement in everyday imaginative activities, attitudes toward hypnosis, and hypnotic suggestibility
Spanos NP; McPeake JD

One hundred male and 83 female subjects were assessed on absorption (i.e., involvement in everyday imaginative activities), attitudes toward hypnosis, and hypnotic suggestibility. Significant positive correlations were obtained for both sexes between absorption and attitudes and between each of these variables and hypnotic suggestibility. Multiple regression analyses indicated that most of the predicted variance in hypnotic suggestibility scores was accounted for in both sexes by the absorption variable.

[0042]
[Hypnosis: logic and cybernetics]
[Ipnosi: logica e cibernetica]
Hollanda L

Fundamental notions concerning cybernetics, as derived from the systematic application of logic to questions of communication and control, are illustrated. Particular attention is given to the concepts of "system" "structure" and "dynamics" and it is shown that these concepts ensure that better and more exact understanding and forecasting of reactions in organised beings can be obtained. Turning to hypnosis, it is made clear that a trance is the execution of a momentarily proposed programme; it is not the result of a generalised mechanical action, but is preordained and geared to various situations. The difficulty that the hypnotised subject finds in acting against his own interests, or against moral principles, can be seen, for example, as a consequence of pre-programming. Another result is given moment and a given type of person. Since cybernetics has proved useful in psychology, the hope is expressed that it can be included as a teaching subject for those who learn, practise and teach hypnotism.

[0043]
[Hypnosis: fundamentals of futuro-genesis]
[Ipnosi: fondamenti della futuro-genesi]
Minerva Med 1975 Jan 27;66(6):281-4 (ISSN: 0026-4806)
Hollanda L

The future lies continuously in the womb of the present. In every "today" one of the critical factors on which the configuration at any given conjuncture is the creativity of the intellectual and managerial elite. This creativity is to a great extent dependent on the fluidity of unconscious associative processes. These, in their turn, are decisively influenced by affective factors in the widest sense. Since, as will be shown later, hypnosis can be conceived in the manner of a "quid" identical with emotion, it inevitably follows that it must be treated as a basic element that is always present in and intimately bound up with the continuous process that, at every moment, are producing the future.

[0044]
[The role of hypnosis in present-day obstetrics]
[Il ruolo dell'ipnosi nell'ostetricia moderna]
Minerva Med 1975 Jan 27;66(6):276-80 (ISSN: 0026-4806)
Di Bernardo G

There is a present need for the insertion of psychology in teaching and medical practice so that full value and respect can be given to the patient's human side. Psychological assistance during pregnancy is reviewed and a brief account is given of early hypnotic techniques in the Soviet Union. Here, however, note is taken of the fact that attention was initially paid to symptoms alone and not their causes. As these techniques spread throughout Europe, they gradually lost touch with hypnosis and moved into the realm of teaching thus becoming completely ineffective. At present, more complete and
more advanced hypnotic techniques are used. These throw particular light on the psychological causes of tension in pregnancy and are suitably backed up by instruction relating to the various problems encountered during gestation.

[0045]
Auto-hypnosis in haemophilia
Haematologia (Budap) 1975;9(1-2):103-10 (ISSN: 0017-6559)
La Baw WL

A pilot study to determine the use of adjunctive trance therapy in the treatment of haemophiliacs has been carried out. Over a period of forty months, twenty randomly selected males were assigned to a control and an experimental group. All received due haematologic care. The ten patients in the experimental group utilized medical hypnosis as well, in group suggestive sessions to train and sustain them, but primarily in self-induced trance states (self-hypnosis). Results were compared at intervals on the basis of the amount of transfused blood and blood products. This provided an objective measure of the efficacy of trance therapy. Statistical analysis of the data confirmed the clinical observation of a greater improvement among patients in the experimental group.

[0046]
Hypnosis as a treatment method in psychosomatic medicine
Int J Psychiatry Med 1975;6(1-2):75-85 (ISSN: 0091-2174)
Frankel FH

Recent research findings are used to illustrate the areas of uncertainty and controversy in the understanding of hypnosis. Despite similarities, hypnosis is presented as more than and different from relaxation, suggestibility, and the placebo response. An overview of the clinical use of hypnosis includes the three main methods of application, namely: relaxation or mild hypnosis, symptom removal, and hypnotherapy. A few brief case reports are included. As a means of narrowing the gap between laboratory research and clinical experience, the author recommends the assessment of hypnotizability in all patients treated with hypnosis.

[0047]
Hypnotherapy in the treatment of oro-facial pain
Aust Dent J 1978 Dec;23(6):492-6 (ISSN: 0045-0421)
Gerschman J; Burrows G; Reade P

A continuing study at the Oro-Facial Pain Clinic. The Royal Dental Hospital of Melbourne has demonstrated that hypnotherapy is a useful tool in the management of previously resistant, chronic facial pain disorders, discomfort conditions and dental phobic illness.

[0048]
[Anti-smoking therapy (author's transl)]
[Raucherbehandlung.]
Fortschr Neurol Psychiatr Grenzgeb 1978 Nov;46(11):613-24 (ISSN: 0015-8194)
Buchkremer G

This is a comprehensive survey of the different anti-smoking therapies indicating the difficulty of comparing one method to another. It points out the minimum standard to be set for anti-smoking therapies. Reference is also made to advantages and disadvantages of the different kinds of treatment. The account of anti-smoking therapies includes hypnosis, aversion therapies, anti-smoking clinics, medical treatment, polyeclectrical and other methods of therapy. Detailed description is especially to be found of the behavior therapy. Eleven different techniques of the multimodal behavior treatment are presented. Finally consideration is given to the need of anti-smoking therapies, prevention from smoking as well as prophylaxis against relapse.

[0049]
The running meditation response: an adjunct to psychotherapy
Solomon EG; Bumpus AK

The physical technique of slow, long distance running and the mental centering devices of T. M. are combined, using hypnosis in some cases, to enhance a "peak experience," or altered state of consciousness. Indications and contraindications to this technique are described for various psychiatric, psychosomatic and somatic syndromes, and its use as an adjunct to formal individual and group psychotherapy is discussed.

[0050]
Hypnotherapy for the child with chronic eczema. A case report
Mirvish I

Chronic eczema in a child usually produces much discomfort and distress. Associated behaviour problems further complicate the issue. A comprehensive approach to treatment is therefore essential. Hypnotherapy may be a useful adjunct in the overall management. An illustrative case history is presented. Combining hypnotherapy with child guidance and medical treatment led to the relief of symptoms and improved behavioural pattern in a boy aged 10 years.

Some guidelines for uses of hypnotherapy in pediatrics
Olness K; Gardner GG

Hypnotherapy has many uses in pediatrics, and its value, not only as a adjunct but also as a primary therapy for certain conditions, justifies its inclusion in pediatric training programs. Suggestion and expectation have long been related to therapeutic outcomes in medicine, but not all physicians know how to apply them constructively and systematically in communication with patients. In pediatrics there is a tendency to overlook opportunities in which hypnosis might be the treatment of choice. Because children engage in imagination and fantasy easily without the cognitive inhibitions of adults, they are able to use hypnosis more readily than adults. More research into the imaginative skills of children may facilitate understanding of learning mechanisms and make it possible for professionals to prevent the loss of the natural imaginative capacities in children and, therefore, enhance the ability of mature members of society to use these skills. In addition to reduction of specific symptoms through hypnotherapy, children benefit by the sense of mastery which they acquire, a sense which is surely needed to overcome the feelings of hopelessness, loss of control, and depression induced by many diagnostic and therapeutic procedures in medicine.

The effects of mood upon imaginal thought
Blum GS; Green M

The effects of mood upon imaginal thought were explored with a highly trained undergraduate female hypnotic subject. She was hypnotically programmed to experience free-floating anxiety or pleasure in varying degrees just before the exposure of combinations of three Blacky Pictures, and to produce dreamlike imagery in response to the Blacky stimuli while under sway of the mood. Data from 98 dream trials, separated by amnesia, indicated that the affective states clearly influenced imaginal processes. Blind ratings by a psychoanalyst showed anxiety moods to be more closely associated with primary-process features characteristic of nocturnal dreams, whereas pleasure had a relatively higher incidence of daydreamlike ratings. Empirical analysis of themes yielded significant relationships of anxiety to physical injury to the self and verbal aggression toward others; pleasure was associated with circular movements and overt sex themes.

An investigation of the role of 'hypnosis', hypnotic susceptibility and hypnotic induction in the production of age regression
Fellows BJ; Creamer M

In response to criticisms of the methodology of Barber's (1969) experiments, a 2x2 factorial design, varying hypnotic susceptibility and hypnotic treatment, was used to study the role of 'hypnosis' in the production of age regression by suggestion. Twenty subjects of high hypnotic susceptibility and 20 subjects of low hypnotic susceptibility were randomly allocated to one of two treatment conditions: hypnotic induction procedure or motivational instructions. Both treatments were followed by suggestions to regress to the age of seven years. Two measures of age regression were taken: the Draw-A-Man-Test and a subjective rating of the reality of the experience. The results showed significant effects of both variables, with high susceptibility and induction treatment producing better regression on both measures than low susceptibility and motivation treatment. Hypnotic susceptibility was the stronger of the two variables. The ranking of the four conditions corresponded with predictions of hypnotic depth from the state theory of hypnosis, but the findings were not inconsistent with the non-state theory. The drawings of all regressed groups were more mature than the norms for the age of seven and the drawings of a group of seven year old children.

Hospital phobia: a rapid desensitization technique
Postgrad Med J 1978 May;54(631):328-30 (ISSN: 0032-5473)
Waxman D

The less disabling phobias do not normally present a problem in that the stimulus may be avoided. This would also apply to hospital phobia until an acute medical or surgical problem might arise, when avoidance could constitute a direct threat
to life. Although phobic illness is a common problem the small number of cases of hospital phobia recorded may
represent the tip of the iceberg beneath which could be many phobic patients who deny their symptoms and risk their
health because of their irrational fear. A case of hospital phobia in a pregnant patient with suspected disproportion was
treated by a rapid desensitization technique using hypnosis. After five sessions of 30 min each, the patient was symptom
free. This simple method of desensitization, if more widely known would considerably minimize the risk caused by
concealment of the phobic problem.

[0055]
A smoking satiation procedure with reduced medical risk
J Clin Psychol 1978 Apr;34(2):574-7 (ISSN: 0021-9762)
Tori CD

Tested the efficacy of a smoking satiation procedure with reduced medical risk. As predicted, experimental taste satiation
(holding smoke in the mouth with occasional inhalations) suppressed habitual smoking as effectively as rapid smoking
satiation. In view of the extensive relapse problems that follow the singular application of aversive conditioning
procedures, follow-up hypnosis and counseling treatments were applied in order to assist Ss in maintaining smoking
cessation. At the time of the 6-month follow-up contact, confirmed abstinence reports for 66% of all Ss who received
treatment were obtained.

[0056]
[Medicine-man practice. Ritual therapy and drugs used by the Digo in Tanzania]
[Medizinmann-Praxis. Ritual-Therapie und Heildrogen bei den Digo in Tansania.]
Naturwissenschaften 1978 Apr;65(4):188-93 (ISSN: 0028-1042)
Maler T

The strong activity of the patient is significant in traditional Digo ritual therapy. In contrast to Shamanism, he, and not the
healer, plays the main role. The Digo healer applies hypnosis, somatic exercises, stimulating music, and drugs in his
three-day ritual performed mainly for psychosomatic and chronic illness.

[0057]
Effects of cannabis intoxication on primary suggestibility
Psychopharmacology (Berl) 1978 Mar 1;56(2):217-9 (ISSN: 0033-3158)
Kelly SF; Fisher S; Kelly RJ

Thirty-five subjects of known hypnotizability were tested for primary suggestibility in the waking state with and without
marijuana intoxication. The drug caused an increase in suggestibility similar to that produced by the induction of hypnosis.
The effect did not persist when subjects were retested one week later in their normal waking state.

[0058]
Hypnotic elucidation of isolation and displacement following a sexual assault
Schneck JM

A 19 year old girl was physically beaten and her life endangered during an abortive sexual assault. The repressed
emotional components of the experience were retrieved during hypnosis 10 years later, and displacement of affect in
relation to the event was also clarified. The psychological issues involved in these circumstances were related to weight
reduction efforts by the patient and for which she was seeking help.

[0059]
An experimental study of compliance and post-hypnotic amnesia
Wagstaff GF

A procedure was devised to test the hypothesis that the traditional measure of post-hypnotic amnesia, which involves
determining the number of items recalled before and after a 'release' signal, may be significantly biased by compliance.
One group of subjects (group B) was given an opportunity to 'own-up' to compliant behaviour before being tested for post-
hypnotic amnesia. Another group (group A) was only given the opportunity to own-up after being tested for amnesia.
Results indicated a very strong compliance effect, group A showed significantly more post-hypnotic amnesia than group
B.

[0060]
[Hypnogenic action of a modulated electromagnetic field]
Behavioristic and electroencephalographic changes in rats under long-lasting modulated electromagnetic field (frequency of 40 MHz, modulation frequency 50 Hz, intensity 100-120 V/m) were studied. Some phasic disorders in the conditioned feeding and defense reactions were observed, including cataleptic state as a result of the action of modulated electromagnetic field. These behavioristic disorders are determined by the changes in the normal cortico-subcortical relationships.

The possibility of abolishing pain during operations by needling acupuncture points was detected in China 20 years ago. During the last years the Western World showed great interest in this method, which was tested in a great number of surgical operations. Acupuncture was successful, especially when it was introduced by a short conventional anesthesia. Of special importance seems the possible reduction of anesthetic agents. Though the mode of action of acupuncture cannot yet be explained completely, there exist three different hypotheses: Hypnosis and suggestion, neurophysiological and humoral mechanisms. An actual review on experiments concerning these theories is given.

The differential effects of role-played vs. hypnotically induced simulation of a paranoid syndrome on diagnostic and validity scales of the MMPI were tested with 30 female undergraduate Ss. Hypnotized Ss given the paranoid syndrome suggestion simulated the MMPI more accurately than did role-playing Ss. The F scale and Gough F-K index of dissimulation identified the role-playing group, but not the hypnosis with simulation suggestion group. It was concluded that further refinement of the validity scales of the MMPI is needed to improve their effectiveness in detecting deception on this test.

A typical case of autoerythrocyte sensitization or the Gardner-Diamond syndrome was reviewed with respect to personality factors, hypnotic influence in general, the effect of controlled hypnosis under two variable conditions, and the measurement of certain psychophysiological responses before and following hypnosis. In this case it was not possible to delineate a clear psychiatric syndrome and hypnotic suggestion induced the classical lesion only during the active phase of the disease. When the lesions were absent or quiescent, no changes in various psychophysiological measurements taken were observed.

Fifty cases of primary and secondary impotency are presented. A breakdown of the patients as to age shows that the problem is wide-spread from youth to middle-age; in this study there was a mean age of 29.40 years. All patients who remained in therapy were able to perform sexually at the time of their discharge. In follow-up of 66% of the patients, all stated they were doing well except for two. Hypnosis used as an uncovering modality is shown to be markedly effective. This, incorporated with ego-strengthening and new self-image suggestions, seems to be the treatment of choice for psychogenic impotence.

Treatment of polydrug abuse and addiction by covert sensitization: some contraindications

Fifty cases of primary and secondary impotency are presented. A breakdown of the patients as to age shows that the problem is wide-spread from youth to middle-age; in this study there was a mean age of 29.40 years. All patients who remained in therapy were able to perform sexually at the time of their discharge. In follow-up of 66% of the patients, all stated they were doing well except for two. Hypnosis used as an uncovering modality is shown to be markedly effective. This, incorporated with ego-strengthening and new self-image suggestions, seems to be the treatment of choice for psychogenic impotence.

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Three polydrug abusers undergoing treatment at a drug-free residential facility were administered covert sensitization as an alternative procedure to aversive counterconditioning with faradic stimulation. The clients were able to relax extremely well but experienced difficulties imagining aversive scenes subsequent to the first presentation. Hypnosis was induced and clients were able to imagine every presentation clearly and exhibited some behavioral reactions to suggestions. Two of the three clients remained drug-free for 1 1/2 years and 3 years; and the third relapsed after 1 1/2 years but returned for treatment and is now drug-free. It is suggested that covert sensitization with hypnosis may be a more effective procedure with such recalcitrant behavior disorders as polydrug abuse and addiction.

[Hypnotic susceptibility and personality: the consequences of diazepam and the sex of the subjects]
Gibson HB; Corcoran ME; Curran JD

It was suggested by Gibson & Curran (1974) that the rather complex relationships found to obtain between hypnotic susceptibility and the personality parameters of extraversion and neuroticism might be understood by considering neuroticism as a moderator variable (as had been suggested by Furneaux & Gibson, 1961). They made the hypothesis that if a tranquilizing drug were administered the operative level of neuroticism would be decreased, and as a consequence the level of susceptibility of neurotic extraverts would be raised, and that of neurotic introverts lowered. This study reports the test-retest data on a sample of 71 subjects on the Stanford Hypnotic Susceptibility Scales, half of whom were retested with diazepam and half with nicotinic acid. The hypothesis was confirmed and additional data are given on the drug/placebo effects on each item of the scale. The significance of drugs on different aspects of hypnotic susceptibility in relation to personality is discussed.

[Lateral eye movements, hypnotic susceptibility and field independence-dependence]
Percept Mot Skills 1976 Dec;43(3 Pt 2):1179-84 (ISSN: 0031-5125)
De Witt GW; Averill JR

Previous research indicates that lateral eye movements are associated with hemispheric activity in the brain. In the present study involving 48 female subjects, "left-gazing" (right-hemispheric activity) was positively related to field-dependence, as measured by the Embedded Figures Test and the Stroop test, and also to hypnotic susceptibility. It was concluded that field-dependence and hypnotic susceptibility are both mediated by processes associated with right-hemispheric activity.

[Immediate proprioceptive decrement with hypnotic anesthesia: a preliminary report]
Percept Mot Skills 1976 Jun;42(3):801-2 (ISSN: 0031-5125)
Wallace B

Hypnotic anesthesia induced in a subject's entire arm produced a decrement in proprioceptive abilities as assessed by the inability to locate the nose position with the forefinger of the anesthetized arm. The magnitude of the decrement was positively related to level of hypnotic susceptibility.

[A need for more psychophysiological research in australia]
Tebecis AK

Western communities are becoming increasingly more interested in altered states of consciousness such as hypnosis, meditation and other states associated with certain "brain wave" patterns. In the United States of America especially, psychophysiological research is beginning to lead to an understanding of some of the basic mechanisms underlying certain mental phenomena and their therapeutic uses. In Australia, on the other hand, experimental investigations in this area are negligible. It is important to begin intensive psychophysiological research now.

[Use of meditative state for hypnotic induction in the practice of endodontics]
Morse DR

Thirty-five patients who were referred for endodontic therapy were used in a study involving the use of a meditative state for hypnotic induction. Induction was by the use of relaxation, and the silent repetition of a simple word while the patient's eyes were closed. Deepening of hypnosis was by suggestion of whole-body numbness or "glove" anesthesia, orally
directed. Supplemental local anesthesia was used in some cases. The method proved to be rapid, easily learned, and well accepted. It was effective for varying degrees of analgesia as well as sedation, anti-anxiety, saliva control, and bleeding control. It also improved the patient’s image of dentistry in general and endodontics specifically.

[0071] Acupuncture for chronic shoulder pain. An experimental study with attention to the role of placebo and hypnotic susceptibility
Moore ME; Berk SN

One half of 42 subjects treated for painful shoulders received classic acupuncture, and one half received a placebo in which the needles did not penetrate the skin. Half of each of these groups was treated in a positive setting to encourage the subject, and half in a negative setting designed to keep encouragement at a minimum. All patients were independently rated for susceptibility to hypnosis. Although range of motion did not improve, the majority of patients reported significant improvement in shoulder discomfort to a blind evaluator after treatment; placebo and acupuncture groups did not differ in this respect, however. The positive and negative settings did not affect treatment outcome. In all groups, those who were not rated as highly susceptible to hypnosis tended to fail to achieve the highest levels of relief, but such differences were not statistically significant.

[0072] Complexity and measurement of hypnotic susceptibility: a comment on Coe and Sarbin's alternative interpretation
Tellegen A; Atkinson G

Coe and Sarbin's claim that a single role skill dimension accounts for individual differences in hypnotizability is not supported by an empirical analysis. We suggest that current measures of hypnotic susceptibility are not only factorially complex but contain a sizable nonhypnotic variance component. Implications for the assessment of "true" hypnotic susceptibility are discussed.

[0073] Eye movements during transcendental meditation
Folia Psychiatr Neurol Jpn 1976;30(4):487-93 (ISSN: 0015-5721)
Tebecis AK

Characteristic changes in eye movements occurred during meditation with closed eyes in a proportion of subjects experienced in TM. The most common changes were an increase in slow, large-amplitude, 'rolling' eye movements and a concomitant decrease in rapid, low-amplitude, 'jerky' eye movements. Much variation occurred between individuals, however, some subjects showing no differences between TM and non-meditation. Any changes that occurred were not necessarily constant for the whole recording period nor consistent between sessions. The physiological effects of TM are far more variable than previously publicized. In general, the main changes in eye movements during TM are similar to those during passive hypnosis.

[0074] Personality and differential susceptibility to hypnosis: further replication and sex differences
Gibson HB; Corcoran ME

Following the study of Gibson & Curran (1974), a further sample of 45 subjects were tested on the Eysenck Personality Inventory (EPI) and a slightly modified form of the Stanford Hypnotic Susceptibility Scale (SHSS) in precisely the same way. The results in this second sample were broadly the same as those obtained in the earlier study. Combining the two samples, it was found that the sex variable provided some interesting contrasts. The power of the lie scale of the EPI to predict hypnotic susceptibility observed earlier was found to be a significant effect only for males. While there was no significant difference between the sexes in terms of the means and S.D.S. of the extraversion (E) and neuroticism (N) scales, when the interaction of these scales was studied males and females differed significantly. The population from the two studies (n = 88) was analysed by means of polar coordinates in the manner suggested by Eysenck (1966) with regard to the E nad N scales. Eysenck's prediction as to hypnotic susceptibility was strikingly confirmed. These data are briefly discussed in terms of alternative approaches to hypnosis from the 'state' and the 'non-state' viewpoints.
A study was made of the changes in the bioelectrical activity of the muscles in the course of local static work up to "refusal" under the usual conditions and under condition of inhibition of the program-control function of the cortex (during the somnambulistic stage of hypnosis). Experimental results indicated that during the hypnotic state the time of persistence of the static effort doubled in comparison with control; the bioelectrical activity increased 1.5-2 times, and in individual experiments 3-4 times. In the light of the data obtained the mechanism of formation of "refusal" to work could be viewed as an active arrest of the activity of the central formations realizing the program-control functions.

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This study sought to obtain empirical data on the issue of whether susceptibility to hypnosis influences the outcome of an hypnotic therapy. At the first of two sessions, Ss had their susceptibility evaluated unobtrusively. At the second session, they learned Spiegel's self-hypnotic method to stop smoking. At the end of 3 months' follow-up 7 of 54 volunteers were completely abstinent (13%), while 31% had reduced smoking by 50% or more. Of the 7 totally abstaining Ss, 1 was high, 1 was low and 5 were medium susceptible, which is not unlike the distribution of hypnotic susceptibility in the general population. However, it was found that significantly more Ss of higher susceptibility reduced by 50% or more than did less susceptible Ss.

Hypnotic analgesia in some respects resembles opiate analgesia. We tested the hypothesis that some features of hypnotic analgesia are mediated through neuronal pathways activating specific opiate receptors in brain. The opiate antagonist naloxone had no effect on hypnotic analgesia in three subjects. Thus, the hypothesis was not confirmed.

The efficacy of hypnotherapy in aborting acute asthmatic attacks was studied in 17 children ranging in age from six to 17. All had as their primary diagnosis bronchial asthma. Prior to hypnotic induction pulmonary function was assessed, then monitored in the immediate post hypnotic period and at two intervals thereafter. The average improvement for all subjects was greater than 50% above the baseline measurement as documented by spirometry, monitored dyspnea, wheezing and subjective ratings by the subjects. It is suggested that hypnotherapy may be an important tool in ameliorating asthma, improving ventilatory capacity and promoting relaxation without recourse to pharmacologic agents. One explanation offered is that hypnosis affects an autonomic response, thereby diminishing bronchospasm.
yet have. That it cannot be employed, as in the preanalytic period, as a means of interpretation and psychological exploration is clear from what is said by Anna Freud. After discussion in deep analysis during wakefulness, and in the light of the psychodynamic concepts of psychoanalysis, of the what interpretation to be given to the dynamic process of the symptom, we can exactly repeat this interpretation in a hypnotic trance. It is vulnerable, like hypnoid states (emotion, fear, anxiety, anger, fatigue, surmenage, transition from wakefulness to sleep) in which a psychic pathological process may easily start due to "difference of level, blank in the consciousness" and absent "abreaction". This vulnerability and increased tendency to accept has been encountered in hypnoid states as in artificially induced trancees, and gives a much more rapid entree to the patient's integration process. The interpretation of the dynamics of his symptom, once accepted, becomes an active force, and produces effects that would, in any event, have been produced if the integration process had occurred normally, without the acceleration provided by hypnotism, leading to resolution of the symptom. What is involved, therefore, is acceleration of the psychoanalytic process.

[0081]
The use of hypnosis in hemophilia dental care
Ann N Y Acad Sci 1975 Jan 20;240:263-6 (ISSN: 0077-8923)
Lucas ON

The influence of emotional stress on the onset and control of bleeding episodes is a well-known fact. Oral surgical procedures are a common cause of severe states of anxiety in hemophiliaics. Anxiety has been shown to trigger and/or complicate an existing hemorrhagic episode in hemophiliaics. This is true in adults as well as children. Hypnosis, when applicable, has been found to be an excellent adjunct for the control of anxiety. It has been observed that in a relaxed and tranquil hemophiliaic, his hemorrhagic tendency during and after surgery is considerably decreased. Induction to a hypnotic state depends on each individual's susceptibility, and therefore different approaches are used depending on the patient's knowledge of hypnosis. In addition to the control of fear, salivary secretions, pain, and capillary bleeding can well be brought under control during surgery and postoperatively by means of posthypnotic suggestions. Good oral hygiene habits such as daily brushing and flossing, so important as preventive measures for the prevention of caries and periodontal disease, can be reinforced through hypnotic suggestions. Preventive dentistry in hemophiliaics is of paramount importance.

[0082]
Treatment of somnambulism in military trainees
Am J Psychother 1975 Jan;29(1):101-6 (ISSN: 0002-9564)
Reid WH

Of 12 otherwise health individuals facing honorable discharge from the military because of intractable sleepwalking, six chose to participate in a short-term treatment program involving hypnosis. Four of these reported total alleviation of symptoms. Therapeutic design and treatment implications are discussed and a brief review of the literature is presented.

[0083]
A controlled study of the EEG during transcendental meditation: comparison with hypnosis
Folia Psychiatr Neurol Jpn 1975;29(4):305-13 (ISSN: 0015-5721)
Tebecis AK

A controlled, quantitative investigation of the electroencephalogram (EEG) and transcendental meditation (TM) revealed that EEG changes during TM were rarely as pronounced or consistent as previous reports suggest. There was considerable variation between subjects, some displaying no EEG changes at all during TM compared with an equal period of non-meditation. Any changes that did occur in a particular individual were not necessarily repeated in a subsequent session. A comparison of mean EEG parameters of the experimental group revealed no consistent significant differences between meditation and non-meditation, although trends towards increased theta and decreased beta activity during meditation were apparent. The biggest differences in mean EEG parameters were between subject groups. In particular, the group of meditators exhibited significantly more theta activity (during both TM and non-meditation) than a randomly selected group of individuals that had never meditated or been hypnotized. The EEG characteristics of the group of meditators were similar to those of a group of subjects experienced in hypnosis. It is concluded that the most obvious EEG changes during meditation are long-term. In people who regularly practise TM (or self-hypnosis), the EEG characteristics of the group of meditators were similar to those of a group of subjects experienced in self-hypnosis. It is concluded that the most obvious EEG changes during meditation are long-term. In people who regularly practise TM (or self-hypnosis), the EEG gradually (over weeks or months) tends to "slow down." Such a "slowed down" EEG is apparent during both normal waking conditions and altered states of consciousness in these individuals.

[0084]
Hypno-analgesia and acupuncture analgesia: a neurophysiological reality?
Neuropsychobiology 1975;1(4):218-42 (ISSN: 0302-282X)
Saletu B; Saletu M; Brown M; Stern J; Sletten I; Ulett G

The effects of hypnosis, acupuncture and analgesic drugs on the subjective experience of pain and on objective neurophysiological parameters were investigated. Pain was produced by brief electric stimuli on the wrist. Pain challengers were: hypnosis (induced by two different video tapes), acupuncture (at specific and unspecific loci, with and without electrical stimulation of the needles), morphine and ketamine. Evaluation of clinical parameters included the subjective experience of pain intensity, blood pressure, pulse, temperature, psychosomatic symptoms and side effects. Neurophysiological parameters consisted of the quantitatively analyzed EEG and somatosensory evoked potential (SEP).
Pain was significantly reduced by hypnosis, morphine and ketamine, but not during the control session. Of the four acupuncture techniques, only electro-acupuncture at specific loci significantly decreased pain. The EEG changes during hypnosis were dependent on the wording of the suggestion and were characterized by an increase of slow and a decrease of fast waves. Acupuncture induced just the opposite changes, which were most significant when needles were inserted at traditional specific sites and stimulated electrically. The evoked potential findings suggested that ketamine attenuates pain in the thalamo-cortical pathways, while hypnosis, acupuncture and morphine induce analgesia at the later CNS stage of stimulus processing. Finally some clinical-neurophysiological correlations were explored.

[0085]
Hypnother, stimulus preference and autonomic response
Psychother Psychosom 1975;26(2):78-85 (ISSN: 0033-3190)
de Jong MA; van den Berg AW; de Jong AJ

We investigated whether stimuli consisting of beautiful and ugly colours as judged by human subjects elicit different autonomic response patterns. The autonomic functions recorded were heart rate (HR), respiration rate, skin conductance, number of GSFs (nGSR) and also eye movements, as an index of somatic activity. In order to obtain strong responses, i.e. to avoid inhibition of 'natural' responses by anxiety due to the laboratory setting, we made use of post-hypnotic suggestions regarding the nature of the stimuli the subjects were to expect. It appeared that for all but one autonomic function differences could be found between beautiful and ugly stimuli, in the sense that during the ugly stimuli more 'activation' occurred. The direction of HR change during the beautiful stimuli was opposite to those of the other functions. Effect of hypnosis on autonomic response could be substantiated for HR and nGSR. Apart from hypnosis it seems likely that the whole experimental set-up may have helped to reduce 'experimental anxiety'. One may conclude that response specificity for pleasant and unpleasant stimuli seems to exist.

[0086]
[Several aspects of the psychotherapy of neuroses (value of so-called rational psychotherapy)]
[Nekotorye aspektly psikhoterapii nevrozov (o znachenii tak nazyvaemoj ratsional'noj psikhoterapii)]
Zh Nevropatol Psikhiatr Im S S Korsakova 1977;77(12):1862-6 (ISSN: 0044-4588)
Lezhepekova LN; Pervov LG

The authors consider neurosis as a disturbed ability of an adequate perception and reaction which must be corrected by the use of psychotherapy. The method of the so called rational deep psychotherapy is taken as the main therapeutical influence. Other methods and measures are used in the complex with this method. The possibility of a patient's logical judgement in the use of the methods of suggestive therapy is pointed out. The new methods of psychotherapeutical influence are stated.

[0087]
Activating posthypnotic conflict: emergent uncovering psychopathology repression, and psychopathology
Burns B; Reyher J

An attempt was made to observe the process of repression and symptom formation. Emergent uncovering techniques were used to weaken a spontaneous repression that was produced by the posthypnotic activation of sexual impulses stemming from an implanted oedipa paramnesia. Twelve hypnotic and ten simulating subjects were used in a modified real-simulator design. Although it was not possible to 'lift' the spontaneous repression of derivatives of oedipal strivings in the course of uncovering via visual imagery, a wide variety of spontaneous symptoms were produced in the hypnotically conditioned subjects. The type of symptom was shown to be related to the degree of repression. Simulating subjects produced only a few symptoms. The manifestation of a symptom was concomitant with an increase in the GSR, but not the blatanity of drive representation. These findings were consistent with the phenomena observed using free imagery in emergent uncovering psychotherapy.

[0088]
Effect of bromazepam on gastric acid secretion related to hypnotically induced anxiety
Stacher G; Berner P; Naske R; Schuster P; Starker H; Schulze D

The effects of bromazepam (0.1 mg/kg b.w. i.v.) and of placebo on gastric acid secretion related to hypnotically induced anxiety were evaluated in a double blind study. 22 experiments were carried out on 4 healthy volunteers. Drugs were injected after one basal hour. Hypnosis was induced immediately thereafter, and a sequence of anxiety-charged situations out of the subjects past was recalled. After one hour, posthypnotic amnesia was suggested, the subjects awakened and observation continued for another hour. Acid output was measured by means of intragastric titration and a telemetering capsule. During hypnosis and recalling of anxiety in both series, acid output decreased. In the posthypnotic hour there was a significant increase of secretion in the placebo-series, while there was virtually no change in the the bromazepam-series. The pattern of acid output in the placebo-series seems to result from an activation of the sympathetic system under anxiety and a rebound vagal activation in the posthypnotic hour. By contrast, under the sedating effect of bromazepam, no anxiety could be evoked and no rebound vagal activation and thereby no increase of acid secretion resulted.
The correlation between the effects of acupuncture (A) and hypnosuggestion (H) on subjective pain perception was studied in normal volunteers using somatosensory evoked potentials technique. Both methods influenced identically the subjective pain perception and affected the evoked cortical responses similarly. In those subjects in whom analgesia was achieved, location of the A needles proved unimportant and the suppression of the cortical response elicited by A or H was identical. This could be explained by cortically induced inhibitory activity in descending control systems for both methods. A. analgesia thus appears to be a suggestive modality which depends on individual susceptibility. A specific cultural background also seems to be of importance.

There are two kinds of flashbacks: the self-programed or intra-individual variety and pre-programed or inter-individual flashbacks re-presenting mythical and narrative event structures which contribute to the survival of the species. Both types of experiences are arousal-state bound and stage (set and setting) or culture bound. Flashbackers may be characterized by (1) their variability (large SD) on perceptual-behavioural tasks pointing to their extensive cognitive or interpretive repertoire, (2) they are minimizers (or reducers) of sensory input (particularly at the peak of a hallucinogenic drug experience), (3) as a group they display high resting heart rates, (4) are hypnotizable and hence (5) prefer right cerebral hemispheric cognition, (6) displaying EEG-alpha dominance in the resting, waking state. Flashback and hypnotic recall differ only in the ways and means by which they are induced. Hypnotic induction, however, is not to be confused with the induced state that may be any ordinary or non-ordinary state of consciousness on the perception-hallucination-meditation continuum which the subject has a least once experienced before. If mind is an open system comprising the individual's mind and the minds of his total environment, i.e. his past and present sets and settings, then for many of us thoughts and actions are hypnotically induced, and memories are flashbacks of those experiences.

Using clinical psychoanalytic theory as a unifying concept, an attempt is made to observe, interpret, and integrate the therapeutic process in a wide variety of psychotherapies. All psychotherapy, regardless of specific form or technique, is viewed as an interpersonal or intrapersonal process, and should be understandable from a psychoanalytic perspective. Ten common factors are selected: structure of the therapeutic situation; the therapeutic relationship; management of anxiety; drives and their derivatives; mechanisms of defense; identification; regression; catharsis and abreaction; external reinforcement; structural change. The various psychotherapies are compared regarding each of the ten factors.

This review presents an analysis of the sensory and motor mechanisms that are now understood that cause the immobility reflex ("animal hypnosis"). Of the sensory systems that conceivably could trigger and sustain the IR, as commonly induced experimentally by inversion and manual restraint, evidence has been presented to eliminate some senses (vestibular, vision, sound, many visceral sensations, olfaction, taste, temperature), while incriminating tactile and proprioceptive influences. Of the motor systems which could cause the profound immobility during IR, neurosurgical and electrophysiological evidence identifies the locus of the inhibitory neurons in the brain stem and/or spinal cord. The evidence reviewed leads to a unified working hypothesis of IR mechanisms. IR is considered to be caused by a group of neurons in the brain stem which inhibit spinal motoneurons, either directly or indirectly, when those inhibitory neurons are activated by a specific pattern of tactile and proprioceptive input. Modulation of the IR control system appears to come from the limbic system, which under fear-producing conditions, potentiates the IR in part by release of epinephrine. Inhibition of the IR control system appears to come from the neocortex, as well as the brain stem reticulum, when it is activated by nonspecific, arousing somaesthetic sensations that produce generalized activation of the neocortex and skeletal muscle.

[Respiratory autogenic training in preparation for labor (RAT method)]
[Il training autogeno respiratorio nella preparazione al parto (metodo R.A.T.)]
Minerva Med 1975 Nov 7;66(75):3926-39 (ISSN: 0026-4806)
Piscicelli U
Preparation for childbirth with the R.A.T. method involves two therapeutic steps. The first concerns a conditioning relaxation technique derived from hypnosis. Schultz's T.A. and reflexology. There is a series of seven exercises, each of which is supplemented by a revision exercise. The central training exercises coincide with the achievement of sleep breathing, followed by physical deconditioning to external stimuli and semantic deconditioning to uterine contractions. The second step involves a form of analysis designed to examine the mechanism of emotions in a particular situation, marker by the loss of connection between the Ego, the body and the environment, as occurs during group autogenous relaxation.

[0094]
[Individual multistage psychofilm treatment in a group of chronic alcoholic patients]
[Psicofilmerapia multifasica individuale e di gruppo dell'alcoolismo cronico]
Minerva Med 1975 Nov 3;66(74):3884-8 (ISSN: 0026-4806)
Weibacher R; Rivardo M

A short account of chronic alcoholism as a social and individual disease, and of the difficulties associated with its treatment, particularly as far as disaddiction is concerned, is followed by the description of a new method of psychotherapy, using psychofilms for the application of group hypnosis therapy covering a wide spectrum, based on reflexological premisses associated with behaviour therapy, backed up by techniques leading to reinforcement of the Ego. The method thus enables a polycentric approach to be made to the disturbances of the diseases and certain aspects of the patients' personality. Four stages in psychofilm management are described: conscious awareness, hypnotic induction, reinforcement of the Ego, and behaviour therapy. It is shown that films enable constant intervention on the part of the hypnotist to be dispensed with. A wide range of patients can be dealt with by applying standard techniques that are effective against various aspects of the psychopathological state in chronic alcoholism.

[0095]
Guided fantasy as a treatment for childhood insomnia
Aust N Z J Psychiatry 1975 Sep;9(3):169-72 (ISSN: 0004-8674)
Porter J

A "guided fantasy" technique is described to relieve insomnia in children without the use of chemotherapy or the more conventional forms of hypnotherapy. In children at an age where fantasy is a spontaneous everyday response, relaxed sleep is induced through listening to a story from a tape that is created from the child's favourite fantasy figures and everyday likes and interests. The 'guided fantasy' is presented by the parents as a novel bedtime story rather than as a therapy procedure by the therapist. The child is allowed to feel he has a controlling influence in putting a favourite figure to sleep within the story, and so is gently led to accept sleep himself by choice. No active therapist is involved so there are no dangers of expected transference or abreaction.

[0096]
Psychotherapy in psychosomatic disorders
Arch Gen Psychiatry 1975 Aug;32(8):1021-8 (ISSN: 0003-990X)
Kellner R

Published controlled studies of various psychotherapeutic techniques in psychosomatic disorders with adequate designs have formed the basis for the following conclusions: Psychotherapeutic techniques are effective in some patients with psychosomatic disorders. Some psychosomatic disorders, for example, bronchial asthma, peptic ulcer, and migraine headaches are perhaps more amenable to psychotherapy than others, for example, hypertension and ulcerative colitis. There is evidence to suggest that there are differences between the effectiveness of various psychotherapeutic techniques; a few patients differ perhaps from the rest in that they are helped most by the technique that is less effective for the majority.

[0097]
Non-pharmacological approaches to the treatment of drug abuse
Am J Chin Med 1975 Jul;3(3):235-44 (ISSN: 0090-2942)
Bourne PG

As a result largely of dissatisfaction with existing treatment methods for narcotic addiction, there has been considerable recent interest in various non-pharmacological approaches to treatment. Acupuncture, transcendental meditation, electrosleep, biofeedback and hypnotism all have generated considerable interest and seem to be effective in a number of cases. Although apparently quite different, all of these approaches seek to induce a state of relaxation which in turn appears to exert specific neurophysiological changes in the brain. These treatment methods not only help for some addicts, but should contribute to our overall understanding of the addiction process.

[0098]
Sedation for local analgesia. Distraction and diazepam
Scott DL

An approach to the patient is described that is of value when operations are performed under local analgesia during
intravenous sedation with diazepam. The technique involves maintained distraction of the patient with some phantasy of his own choice. All mention of the different stages of the procedure is deliberately avoided.

Which asthmatic patients should be treated by hypnotherapy?
Collison DR

Certain patients with bronchial asthma can benefit, often greatly, from hypnotherapy. This report is based on a retrospective analysis of 121 asthmatic patients who were treated by hypnotherapy. Hypnotic techniques and treatment procedure are described. Of the total number, 21% had an excellent response to treatment, becoming completely free from asthma and requiring no drug therapy. A further 33% had a good response, with worthwhile decrease in frequency and severity of the attacks of asthma, or a decrease in drug requirements. About half of the 46% who had a poor response had a marked subjective improvement in general well-being. Statistical evaluation of the six variables (age, sex, result, trance depth, psychological factors and severity of the asthma) confirmed the clinical impression that the ability to go into a deep trance (closely associated with the youthfulness of the subject) gives the best possibility of improvement, especially if there are significant aetiological psychological factors present and the asthma is not severe. Subjective improvement in well-being and outlook is a potential outcome at all age levels, independent of severity of the illness or entranceability of the patient.

Hypnotic susceptibility and the Lamaze childbirth experience
Samko MR; Schoenfeld LS

This study explored the relationship between childbirth training and hypnotic susceptibility. A multiple linear regression analysis was performed on the various medical and attitudinal variables related to the subjects' Lamaze childbirth experience and these were tested against hypnotic susceptibility. The results of the analysis indicate that hypnotic susceptibility is not significantly related to Lamaze training, nor is it significantly related to the type of childbirth experience that a Lamaze-trained woman has.

Hypnotism is as much an intensive and intrapersonal relationship as a state of awareness. It is therefore necessary to know how to induce this state, so that the therapist can achieve the best results. Ways in which this can be done are described and particular hypotherapeutic methods that enable the technique to be managed with success are explained. Special attention is given to the concepts of relationship and suggestion. Purification and verbal catharsis under hypnosis are described, along with abreaction as a therapeutic instrument. Cases of free and selective association are presented, together with others illustrating strategic techniques for manipulation between subject and object. Personal methods are defined in the sense of suitable mechanisms enabling the hypnotist to establish what can be seen as a true state of equilibrium between himself and his patient.

The therapeutic role of A. T. in sexology and the differences characterising it in regard to the psychoanalysis and the hypnositherapy are explained. The A. T. continues a discussion about the tecnical variations of A. T. which are utilised moreover and especially on the method of RAT relaxation. A method like this demonstrate itself particularly useful to the analysis of many central, marginal and unspecific fantasies which accompany sexual manifestations. In the end the A. T. discusses about the utilisation of RAT relaxation in the group's dynamics.

Recent pain research advances show promise in their application to the relief of acute and chronic clinical dental pain. Regional electroanalgesia, or transcutaneous electrical stimulation, has been used successfully in the treatment of pain associated with peripheral nerve injuries. Electrical stimulation of teeth also may prove useful as a pain control technique during operative dentistry procedures. Another exciting research finding is the discovery of endogenous or natural pain-suppressing pathways in the brain. There are recent demonstrations that natural-occurring opiate-like compounds and
receptors exist in the brain. The elucidation of stimuli and behavioral responses which will activate these specific
descending pain control pathways may lead to exciting new methods of pain relief. Thus, both regional electroanalgesia
and the discovery of endogenous pain-suppressing pathways offer the possibility of the future expanded use of non-
pharmacological pain control techniques. The proper evaluation of new pain control techniques requires the development
of better methods of measuring and assessing the multidimensional aspects of the pain experience. Category scales
which scale the suprathreshold range of pain from threshold to tolerance levels can be used with both experimental and
clinical pain. Sensory Decision Theory has been applied to the analysis of categorical pain responses. This method
distinguishes between sensitivity to stimulus intensity and response bias, or the patient's willingness to report a given
intensity as painful. Another promising method for scaling pain is the use of ratio-scaling methods with verbal pain
descriptors. Verbal descriptors of pain may provide the best method of scaling different dimensions of the pain
experience. Reliable and objective descriptor scales have been developed which separate pain along two dimensions:
sensory intensity and affect, or unpleasantness. By using cross-modality matching procedures, specific numerical values
can be calculated for each verbal descriptor. These scales have been used to measure the intensity and unpleasantness
associated with tooth pulp evoked experimental and clinical pain, and should be extremely useful in the evaluation of
acute and chronic dental pain. They will be important experimental and clinical adjuncts in determining the efficacy of non-
pharmacological pain control methods such as regional electroanalgesia, biofeedback, relaxation-suggestion and
hypnosis.

[0104]
Psychological, physiological, and pharmacological management of pain
Joy ED; Barber J

It has been the intent of the authors to impress upon the clinician the multifaceted nature of the human pain experience.
We have sought to create an understanding of the emotional nature of pain. The treatment of pain as a pure sensation
without directing attention to its behavioral and psychological aspects will generally lead to failure in understanding and
ultimately in treating this ubiquitous problem in our profession. The use of drugs alone will have only a minor effect on the
treatment of pain. Knowledge of environmental control and an understanding and empathetic approach to the patient in
pain or in stress will carry the dentist a long way toward his goal of dental treatment without pain or emotional upset.

[0105]
Behavioral methods in the treatment of hypertension. A review of their clinical status
[author(s) unknown]

Behavioral methods to lower blood pressure include biofeedback, relaxation, psychotherapy, suggestion and placebo,
and environmental modification. Reported data for each method have been examined applying the clinical pharmacologic
format used to study other therapeutic agents. Most studies have been Phase I type, small numbers of subjects in acute
(short-term) treatment situations. Phase II studies, controlled trials with comparison with known effective agents, are
sparse, and Phase III studies are not yet appropriate. These Phase I studies indicate blood pressure effects that are
small, with minimal data about their duration and their relation to the use of pharmacologic agents. The methods are
adjunctive and not alternative, while the compliance problem is similar to that with pharmacologic agents. The major
differences between the methods are the ease with which they can be used. Widespread application of the
nonpharmacologic methods cannot currently be recommended, but further basic and clinical research into mechanisms
and outcomes is encouraged.

[0106]
[Psychoanalysis and suggestion]
[Psychoanalyse und Suggestion]
Thoma H

In the history of psychoanalysis the problem of suggestion has been a central one. At first it involved the necessity to
establish the psychoanalytic technique as independent scientific paradigm in contrast to persuasion and hypnosis.
However, it was not only the symptom-oriented suggestion that had to be given up for scientific reasons and reasons of
treatment technique. Since professional and human factors as well could have influenced the psychoanalytic situation to
revert to the traditional "suggestion", Freud has given some technical considerations (e.g. the mirror-analogy), that were
meant to counteract the confusion of the psychoanalytic technique with the persuasive one that had to come up to late.
The discovery of the transference phenomena has further complicated the problem. It became obvious that the capacity of
the analyst to exert an influence and to have impact, originated in very basic human categories and their specific
psychogenetic developments and distortions. This understanding contributed to the development of psychoanalytic
theories of suggestibility. Until the present day the discovery of the transference phenomena has determined the
discussions of psychoanalytic technique in term of the relationship between the special and general therapeutic factors
(i.e. interpretation versus relationship). The departure from the therapeutic mode of persuasive suggestion and the
introduction of psychoanalytic technique signaled the revolutionary paradigm of Sigmund Freud, i.e. the active
participation of the patient and the process of observation. Often scientific problems related to this pradigm and
suggestion are discussed concurrently.
Hypnosis and its effects on left and right hemisphere activity

Hypnosis and its effects on left and right hemisphere activity because of severe intractable vomiting. In addition to customary medical measures, they received three types of psychotherapy: (1) supportive psychotherapy (establishment of positive relationship, frequent reassuring conversations, and encouragement of expression of thoughts and feelings); (2) hypnotherapy (trance induction and suggestions of comfort in the gastrointestinal tract, desirability of feeling of substance in stomach, and ability to retain and digest food eaten); and (3) behavior modification (positive reinforcement for retaining food and gaining weight, through granting desirable considerations such as visitors, radio, television, and being up in or outside the room). Results were encouraging. Nine patients recovered and completed normal pregnancies, while one improved but later aborted due to other complications. When compared with a control group of routinely treated patients, recovery was more rapid.

Acupuncture applied as a method of analgesia for oral surgery with particular reference to dental operations

The purpose of the first, experimental part of this work was an attempt to elaborate a simple method of analgesia by means of acupuncture for oral surgical procedures in out-patients. The experiments were carried out on 60 volunteers using various points and types of stimulation. Analgesia was obtained in 78.3% of cases but only in very small areas which could make possible procedures on premolar and molar teeth or in the vicinity of palatine tonsils. Stimulation with rectangular, alternating-current impulses applied through the needles was found to be most effective. The volunteers were divided into two groups--those in group I were told in advance what the procedure would be, these in group II were not. Similar results obtained in both groups would rule out the effects of suggestion or hypnosis as the mechanism of acupuncture. In the 2nd part of this work the method was applied in 10 patients undergoing dental surgery and sufficient analgesia was achieved in 7 cases. The unreliability of the method, the length of time necessary for induction of analgesia and the very small area of analgesia make this method unsuitable for widespread use in outpatient practice.

Hypnosis in the investigation of aviation accidents

The efficacy of hypnotic inquiry techniques with ten witnesses to six recent Naval aircraft accidents was evaluated in this study. Eight witnesses had been directly involved in an accident, five as mishap pilots. Interviews were conducted under conservative standards of practice after regular interviews had been completed and all depositions taken. Naval officers who accompanied the witness(es) to the interviews and concomitantly assisted the accident investigation boards served as the evaluators. Important information concerning the accidents was gained in the majority of the interviews. Secondary survival information of importance was obtained in a number of cases as well. None of the witnesses experienced psychological or career problems as a result of the interviews, and the hypnosis seemed highly therapeutic in some cases. Results suggest that hypnotic interview techniques with witnesses may be of great value in the investigations of certain aircraft accidents.

Hypnotic susceptibility: a lateral predisposition and altered cerebral asymmetry under hypnosis

Psychophysiological and behavioural evidence is reported of altered cerebral asymmetry under hypnosis in favour of the right hemisphere. This occurred in Susceptible as distinct from Unsusceptible subjects. Measures included bilateral electrodermal responses to tones and bimanual processing times for sorting letters and numbers with eyes closed. Subjects listened to a tape recording of a procedure for inducing relaxation under hypnosis. Susceptible subjects, unlike Unsusceptibles, showed lateral asymmetries in baseline conditions in favour of the left hemisphere. Electrodermal responses were larger on the left than the right hand and haptic processing times were faster with the right than the left hand. Under hypnosis there was a reduction in electrodermal orienting responses coupled with faster habituation and a reversal in lateral asymmetries. Haptic processing revealed a slowing in right hand processing times whereas left hand times were reduced as was the case with bilateral processing times in both Unsusceptible subjects and controls who experienced no hypnosis. Unlike earlier reports left hemisphere dynamic processes were fundamental to the induction of hypnosis. A neuropsychological model is proposed whereby susceptibility is associated both with a left bias prior to hypnosis and left hemisphere inhibition under hypnosis. Unsusceptibles retain a right hemisphere orientation without undergoing left hemisphere inhibition. Thus hypnosis involves an inhibition of left-sided processes which permits the ascendency of the right hemisphere through the attenuation of left hemisphere control.

Hypnosis and its effects on left and right hemisphere activity
Recent research suggests a relationship between hypnosis and the right cerebral hemisphere in man. With several major modifications in the 1978 study of Frumkin, Ripley, and Cox, the following hypothesis was investigated: Hypnosis creates a shift towards relatively greater left ear accuracy, suggesting greater participation of the right hemisphere during a trance. Two studies were undertaken with 36 right-handed male volunteers in each; 12 of low susceptibility to hypnosis, 12 of medium susceptibility, and 12 of high susceptibility. Study 1 investigated the affect hypnosis had on the processing of musical stimuli while Study 2 investigated its affects on verbal stimuli. Study 1 found that the more susceptible an individual was to hypnosis the greater the shift towards the left ear. Study 2 found no such relationship. Possible differences in stimulus characteristics which might have caused these different results were discussed.

Case report of conversion catatonia: indication for hypnosis
Jensen PS

The author describes the successful hypnotic treatment of a patient with an acute catatonic reaction. Because conversion mechanisms may underlie some presentations of catatonia, hypnosis may assist clinicians in the differential diagnosis of acute catatonic conditions.

Changes in rectal and mean skin temperature in response to suggested heat during hypnosis in man
Physiol Behav 1984 Aug;33(2):221-6 (ISSN: 0031-9384)
Raynaud J; Michaux D; Bleirad G; Capderou A; Bordachar J; Durand J

Rectal temperature, mean skin temperature and heart rate were recorded in 7 subjects during hypnosis, induced either alone or while sensations of heat were suggested. During hypnosis alone, a fall in the heart rate of about 10 beat X min-1 was the only autonomic response observed; body temperatures were unaltered. In contrast, during hypnosis with suggestion of heat, the following changes occurred: (1) Mean rectal temperature decreased 0.20 degrees C (p less than 0.05) within 50 min. Its mean time course differed significantly from that for hypnosis alone (p less than 0.001). (2) Comparison of individual rectal temperature time sequences showed that in fact this temperature only declined in 4 subjects out of 7, and tended to form a plateau located 0.35 degrees C below the value of the preceding waking state. Despite reinforcement of heat suggestion, the plateau continued until the end of the hypnotic trance. (3) Mean skin temperature tended to rise. (4) When hypnosis with suggestion ceased, both rectal and skin temperatures very slowly returned to their levels during the preceding waking state.

Suggested guidelines for the use of forensic hypnosis techniques in police investigations
Timm HW

This article suggests standards and guidelines for the use of forensic hypnosis techniques in police investigations. Topics addressed include the type of procedures that should be used, intervention milieu considerations that need to be taken into account, the types of cases in which hypnosis should be avoided, and recommended qualifications for those performing the intervention. Each of these topics is discussed separately, commencing with a summary of the applicable policies established by selected law enforcement, professional, judicial, and governmental entities; a brief review of the pertinent theoretical and empirical literature; and commentary on the extent to which that information supports those policies. After laying this foundation, additional guidelines derived from the literature are presented for each section.

Hypnosis in the treatment of acute pain in the emergency department setting
Postgrad Med J 1984 Apr;60(702):263-6 (ISSN: 0032-5473)
Deltito JA

Emergency ward physicians are presented daily with patients in pain. Provisions of safe, quick pain control remains one of their major duties. Hypnosis can be used as an effective adjunct or substitute for analgesic medications when these drugs prove to be ineffective or contraindicated. Four such illustrative cases of attempted pain control are presented. The psychological foundations of pain and its assessment are discussed. The emergency ward physician can obtain facility in hypnotic techniques with only modest training. Hypnosis may then become a valuable tool in helping him provide safe and effective pain management.

Hysteria and hypnosis
J Nerv Ment Dis 1984 Apr;172(4):203-6 (ISSN: 0022-3018)
Bliss EL

Polysymptomatic female hysterics (Briquet's syndrome) are good or excellent hypnotic subjects with few exceptions, and
many have multiple personalities. Furthermore, female patients with major conversion symptoms are excellent hypnotic subjects. The evidence supports spontaneous self-hypnosis as the prime mechanism in many patients with severe hysterical neuroses.

Spontaneous self-hypnosis in multiple personality disorder
Bliss EL

The authors posit that the central mechanisms in cases of multiple personality appears to be spontaneous self-hypnosis. As the syndrome is a product of hypnosis and as excellent hypnotic subjects are potentially able to induce a variety of psychiatric symptoms, these patients report many symptoms referable to other major syndromes. This accounts for the many diagnoses attributable to them. The study of multiple personalities offers insights into the capabilities of hypnosis, the genesis of an unconscious, and the mechanism of repression.

Use of hypnosis in patients receiving hemodialysis for end stage renal disease
Gen Hosp Psychiatry 1984 Jan;6(1):31-5 (ISSN: 0163-8343)
Surman OS; Tolkoff-Rubin N

Dialysis patients experience considerable psychologic stress, but practical issues impede delivery of psychiatric care. The authors describe five cases in which the use of hypnosis for symptom reduction provided the basis for beneficial psychiatric intervention.

A randomized trial comparing smoking cessation programs utilizing behaviour modification, health education or hypnosis
Addict Behav 1984;9(2):157-73 (ISSN: 0306-4603)
Rabkin SW; Boyko E; Shane F; Kaufert J

The purpose of this study was to determine the efficacy of hypnosis, health education, and behaviour modification programs for cigarette smoking cessation. A randomized clinical trial comparing these three programs and a control group was conducted in 168 volunteers. Follow-up data three weeks after completion was available in 140 subjects. Each program showed significant reductions in reported cigarette consumption and serum thiocyanate levels, an indicator of long-term cigarette consumption, compared to entry and to the control group. However, there were no significant differences between the hypnosis, health education, or behaviour modification groups with respect to the proportion who reported quitting smoking, the number cigarettes smoked or change in serum thiocyanate levels. Reported cigarette consumption ascertained six months later again showed no significant differences between these three approaches. Factors such as subject age, age at starting cigarette smoking, educational level, marital status, spouse or partner smoking did not identify subgroups with differences between treatment responses. Thus, hypnosis, health education, and behaviour modification are each effective programs for changing cigarette smoking and each is equally effective in this regard.

The use of special diets appropriate for individual nervous diseases is felt to be a valuable adjunct to psychotherapy in general and hypnosis therapy in particular. Several of the main diets used are described, including the preliminary detoxification or liver-protective diet, the general balanced diet used in nervous diseases and specific diets for depression, anxiety and psychosomatic diseases of the digestive system. It is concluded that an association of diet and hypnosis therapy makes it easier to achieve satisfactory therapeutic results.

A three year experiment with group hypnosis therapy for the teaching of medical self-hypnosis is reported. The teaching was divided into 7 courses followed by a total of 142 pupil-patients. The self-hypnotic techniques employed maximised motivational and gratification factors. A special type of deep-breathing is also described. This at least partially solves the problem of inducing a sufficiently deep trance for the achievement of appreciable results. Its efficacy was confirmed in almost all the patients despite the number and diversity of their problems and varied motivation.
Research is presented into the psychosomatic etiology of bruxism with emphasis on the personality of the individual and his response to pain. An analysis of the various treatments proposed highlights the value of hypnosis as the ideal way to eliminate the psychological factors causing the onset of bruxism and to provide adequate relaxation while modifying pain perception.

Enhanced visual memory during hypnosis as mediated by hypnotic responsiveness and cognitive strategies

To investigate the hypothesis that hypnosis has an enhancing effect on imagery processing, as mediated by hypnotic responsiveness and cognitive strategies, four experiments compared performance of low and high, or low, medium, and high, hypnotically responsive subjects in waking and hypnosis conditions on a successive visual memory discrimination task that required detecting differences between successively presented picture pairs in which one member of the pair was slightly altered. Consistently, hypnotically responsive individuals showed enhanced performance during hypnosis, whereas nonresponsive ones did not. Hypnotic responsiveness correlated .52 (p less than .001) with enhanced performance during hypnosis, but it was uncorrelated with waking performance (Experiment 3). Reaction time was not affected by hypnosis, although high hypnotizables were faster than lows in their responses (Experiments 1 and 2). Subjects reported enhanced imagery vividness on the self-report Vividness of Visual Imagery Questionnaire during hypnosis. The differential effect between lows and highs was in the anticipated direction but not significant (Experiments 1 and 2). As anticipated, hypnosis had no significant effect on a discrimination task that required determining whether there were differences between pairs of simultaneously presented pictures. Two cognitive strategies that appeared to mediate visual memory performance were reported: (a) detail strategy, which involved the memorization and rehearsal of individual details for memory, and (b) holistic strategy, which involved looking at and remembering the whole picture with accompanying imagery. Both lows and highs reported similar predominantly detail-oriented strategies during waking; only highs shifted to a significantly more holistic strategy during hypnosis. These findings suggest that high hypnotizables have a greater capacity for cognitive flexibility (Batting, 1979) than do lows. Results are discussed in terms of several theoretical approaches: Paivio's (1971) dual-coding theory and Craik and Tulving's (1975) depth of processing theory. Additional discussion is given to the question of whether hypnosis involves a shift in cerebral dominance, as reflected by the cognitive strategy changes and enhanced imagery processing.
Hypnosis with medical/surgical patients
Gen Hosp Psychiatry 1983 Dec;5(4):265-77 (ISSN: 0163-8343)
Spiegel D

The role of hypnosis as a tool in the treatment of problems commonly encountered among medical and surgical patients is examined. Hypnosis is defined as a change in state of mind far more akin to intense concentration than sleep. Diagnostic implications of differences in hypnotic responsivity are explored, and scales suitable for use in the clinic are examined. Uses of hypnosis in treating anxiety, pain, childbirth, psychosomatic symptoms, seizure disorders, neuromuscular dysfunction, and habits are described and evaluated. The phenomenon of hypnosis is presented as a means of exploring the mind-body relationship in a controlled fashion, providing information of diagnostic importance while at the same time allowing hypnotizable patients to intensify their concentration and interpersonal receptivity in the service of a therapeutic goal.

Hypnotically created memory among highly hypnotizable subjects
Science 1983 Nov 4;222(4623):523-4 (ISSN: 0036-8075)
Laurence JR; Perry C

A pseudomemory of having been awakened by some loud noises during a night of the previous week was suggested to 27 highly hypnotizable subjects during hypnosis. Posthypnotically, 13 of them stated that the suggested event had actually occurred. This finding has implications for the investigative use of hypnosis in a legal context.

Hypnosis compared to relaxation in the outpatient management of chronic low back pain
Arch Phys Med Rehabil 1983 Nov;64(11):548-52 (ISSN: 0003-9993)
McCauley JD; Thelen MH; Frank RG; Willard RR; Callen KE

Chronic low back pain (CLBP) presents a problem of massive dimensions. While inpatient approaches have been evaluated, outpatient treatment programs have received relatively little examination. Hypnosis and relaxation are two powerful techniques amenable to outpatient use. Seventeen outpatient subjects suffering from CLBP were assigned to either Self-Hypnosis (n = 9) or Relaxation (n = 8) treatments. Following pretreatment assessment, all subjects attended a single placebo session in which they received minimal EMG feedback. One week later the subjects began eight individual weekly treatment sessions. Subjects were assessed on a number of dependent variables at pretreatment, following the placebo phase, one week after the completion of treatment, and three months after treatment ended. Subjects in both groups showed significant decrements in such measures as average pain rating, pain as measured by derivations from the McGill Pain Questionnaire, level of depression, and length of pain analog line. Self-Hypnosis subjects reported less time to sleep onset, and physicians rated their use of medication as less problematic after treatment. While both treatments were effective, neither proved superior to the other. The placebo treatment produced nonsignificant improvement.

The use of hypnosis to enhance recall
Science 1983 Oct 14;222(4620):184-5 (ISSN: 0036-8075)
Dywan J; Bowers K

The forensic use of hypnosis is increasing. A hypermnesic procedure was used in an experiment that calls this practice into question. Subjects tried for a week to recall 60 previously presented pictures. They were then either hypnotized or not and encouraged to recall even more pictures. Most of the newly recalled material was incorrect, especially for highly hypnotizable subjects in the hypnosis condition. Such errors in recall can have profound implications for forensic investigations.

[Hypnotic suggestion in anesthesia. A clinical case]
Minerva Med 1983 Sep 29;74(37):2157-8 (ISSN: 0026-4806)
Tubere G

The successful application of hypnosis for subjecting a psychologically refractory child to indirect laryngoscopy is described. A special technique applicable to children is presented and discussed. In this case hypnosis may be replaced by general anaesthetic with gas.

[Hypnosis and cancer: a working hypothesis. Initial notes]
Minerva Med 1983 Sep 29;74(37):2153-5 (ISSN: 0026-4806)
Costanzo S; Del Tetto F; Tirone G
Hypnosis has been used to resolve stress and anxiety following profound psychological-behavioural changes occurring in the cancer sufferer from the moment of diagnosis. It is stated that hypnosis is useful in improving sick persons’ quality of life through the control of stress reactions, simplification of treatment and facilitation of rehabilitation, both within the family and socially. Through deep seated psychosomatic interconnections, psychological attitude can affect organic reaction to all disease, cancer included.

On the basis of his "cognitive behavioural alternative" viewpoint Barber has attempted to deny the hypnotic state as a psychophysical dimension necessary for the creation of recognised hypnotic behaviour. After an analysis of the definitions presented by those who believe hypnosis to be a "psychophysical state" and the contrary views of Barber, it is pointed out that both agree on its function, namely (hypnotic behaviour) = f (ideoplasty monoideism). The concept of hypnosis as "a special participatory state" (as defined in 1975), as a psychophysical state of being and acting in which focalised mental activity permits behaviour and experiences impossible in other conditions is therefore thought to be valuable.

After reviewing the main concepts underlying Frankl's logotherapy, the difficulty of application in cases of melancholy and obsessive-phobia is reported. However, use of the treatment in psychoneuroses is considered to be effective. Since the logotherapy procedure is long, it has been associated with hypnosis: in this state logotherapeutic directions are suggested by means of conviction, persuasion, discussion and not by suggestion or controls which could impede the maturation of the Id if not correctly given. Under hypnosis, when consciousness is reduced but the mind is intensely active, the above procedures are not only feasible but an enormous aid to therapy. Integration between hypnosis therapy and logotherapy could come about at the level of the so-called Franklin "dereflexia" since hypnotic "deconditioning" could break independent associative links by bringing to light the symptom which usually gives rise to anxiety within the psychic and somatic calm of the trance. It is considered that this deconstructualising procedure is more useful than rational and ridiculing psychotherapy. Although logotherapy and hypnotherapy are different procedures with different applications, they may be combined in some cases.

We report a 48-year-old woman with venereal warts; hypnosis was used to treat her condition. After four weekly treatment sessions, her warts were eliminated.

The purpose of this study is to reveal the nature of regressive state in hypnosis by means of word-association-test (WAT). Stimulus words for WAT, pronounced without intonation, was presented to hypnotic, control, and distraction groups. At the first test, all groups were under awoken state, and at the second test, hypnotic group was under hypnosis, distraction group was under distraction. (1) Under hypnosis, more visual images (signifie-images) and clang associations (significant-images) were imagined. The hypnosis was supposed to be a partial, controlled "regression in the service of the ego", and in this state the lexical meaning was not dissolved, but the unity among person, symbol, and referential object in Werner & Kaplan's sense was restored by the images. (2) The results suggest that hypnosis is different from distraction state, and is a state of specific concentration. (3) Since the signifie-image was contrary to the significant-image, these two were regarded as two aspects of regressive state in hypnosis. These two aspects are manifestation of emotional problems and restoration of body-mind unity.

Memories of events which are unremarkable may pass unrecorded or may fade with the passage of time. In any situation
of stress, anxiety may cloud the memory of the incident and in the case of some intensely frightening or humiliating experience such material may not be subject to voluntary conscious recall and may be repressed. A technique for uncovering certain 'forgotten' or repressed memories with the use of hypnosis is described. A similar method has been used in order to retrieve such memories in the investigation of witnesses and victims of serious crime. Nevertheless, various aspects of the overall validity of such a procedure have been called into question and for this reason the results of numerous experiments and the conclusions arrived at in many papers are discussed. It is emphasized that a rigid code of conduct be followed if hypnosis is to be used as an investigatory tool.

Kellerman J; Zeltzer L; Ellenberg L; Dash J

Eighteen adolescents with cancer were trained in hypnosis to ameliorate the discomfort and anxiety associated with bone marrow aspirations, lumbar punctures, and chemotherapeutic injections. Two patients rejected hypnosis. The remaining 16 adolescents achieved significant reductions in multiple measures of distress after hypnosis training. Preintervention data showed no pattern of spontaneous remission or habituation, and, in fact, an increasing anticipatory anxiety was observed before hypnotic treatment. Group reductions in pain and anxiety were significant at levels ranging from p less than 0.02 to p less than 0.002 (two-tailed t-tests). Significant reductions were also found in Trait Anxiety. A non-significant trend toward greater self-esteem was present. The predicted changes in the Locus of Control and General Illness Impact were not found. Comparisons between hypnosis rejectors and successful users unusually showed higher levels of pretreatment anxiety in the former. The pragmatic nature of hypnosis as part of comprehensive medical care in oncology is noted.

Zeltzer L; Kellerman J; Ellenberg L; Dash J

Vomiting is often a major source of distress for adolescent oncology patients. This study evaluates the effectiveness of hypnosis in reducing the vomiting associated with chemotherapy and disease in 12 adolescents with cancer. Eight patients receiving chemotherapy demonstrated significant reductions in the frequency (p less than 0.01) and intensity (p less than 0.05) of emesis. Six of the eight patients also demonstrated a shortened duration of emesis. The ninth patient, whose vomiting was secondary to her brain tumor, showed a gradual but steady reduction in vomiting with eventual total elimination following hypnosis intervention. Three patients rejected hypnosis. Trait anxiety scores for the group were significantly lower at retest 6 months following hypnosis intervention (p less than 0.05). Significant changes in scores of health locus of control, impact of illness, or self-esteem were not found. These data support the efficacy of hypnosis for reducing vomiting when used in the context of a comprehensive clinical approach to the cancer patient.

Schubert DK

Because of the methodological deficiencies in this area of research, it is impossible to make any valid conclusions about whether hypnosis itself is effective in the treatment of cigarette habituation. In this study, 87 volunteers who wanted to quit cigarette smoking were assigned randomly to the experimental hypnosis group, the comparison relaxation group, and the waiting list control group. Ss in the treatment groups had four weekly 50-minute, individual sessions. Four months after the completion of treatment, Ss were administered a questionnaire and a hypnotic susceptibility scale. Ss in the hypnosis group were in the upper two-thirds of the group in terms of hypnotic susceptibility reduced their cigarette consumption substantially more than Ss in the relaxation group who were in the upper two-thirds of the group in terms of hypnotic susceptibility. Therefore, the hypnotic state appears to be therapeutic for individuals who can enter medium or deep states of hypnosis.

Savitz SA

Chronic pain can be treated by combining hypnosis with brief psychotherapy. Hypnosis alone, though useful for acute pain, is seldom effective in relieving chronic pain because it does not address the significant psychologic components in the patient's illness. Treatment using self-hypnosis in conjunction with brief psychotherapy, however, can enable the patient to recognize these components, to change from a passive to an active role in achieving relief, and to modify his attitude toward the pain. This procedure can both reduce suffering and lead the patient to de-emphasize pain in his life.

[0141] Naloxone fails to reverse hypnotic alleviation of chronic pain Psychopharmacology (Berl) 1983;81(2):140-3 (ISSN: 0033-3158)
Spiegel D; Albert LH

The hypothesis that the alleviation of chronic pain with hypnosis is mediated by endorphins was tested. Six patients with chronic pain secondary to peripheral nerve irritation were taught to control the pain utilizing self-hypnosis. Each subject was tested at 5-min intervals during four 1-h sessions for the amount of reduction of pain sensation and suffering associated with hypnosis while being given, in a random double-blind crossover fashion, an IV injection of either 10 mg naloxone or a saline placebo through an indwelling catheter. The patients demonstrated significant alleviation of the pain with hypnosis, but this effect was not significantly diminished in the naloxone condition. These findings contradict the hypothesis that endorphins are involved in hypnotic analgesia.

[0142]
Controlled trial of hypnotherapy in the treatment of severe refractory irritable-bowel syndrome
Lancet 1984 Dec 1;2(8414):1232-4 (ISSN: 0140-6736)
Whorwell PJ; Prior A; Faragher EB

30 patients with severe refractory irritable-bowel syndrome were randomly allocated to treatment with either hypnotherapy or psychotherapy and placebo. The psychotherapy patients showed a small but significant improvement in abdominal pain, abdominal distension, and general well-being but not in bowel habit. The hypnotherapy patients showed a dramatic improvement in all features, the difference between the two groups being highly significant. In the hypnotherapy group no relapses were recorded during the 3-month follow-up period, and no substitution symptoms were observed.

[0143]
The effects of a cognitive-behavioral treatment program on temporo-mandibular pain and dysfunction syndrome
Psychosom Med 1984 Nov-Dec;46(6):534-45 (ISSN: 0033-3174)
Stam HJ; McGrath PA; Brooke RI

Sixty-one patients clearly diagnosed as suffering from Temporo-Mandibular Pain and Dysfunction Syndrome (TMPDS) were randomly assigned to one of three groups, 1) hypnosis and cognitive coping skills, 2) relaxation and cognitive coping skills, or 3) a no-treatment control group. All patients were evaluated with a standard hypnotic susceptibility scale before treatment. The two treatment groups received four weekly sessions of their respective treatments. Patients in the hypnosis and relaxation groups reported equivalent decrements in pain, abnormal sounds in the temporomandibular joint, and limitations of jaw mobility. Hypnotic susceptibility was significantly correlated with reductions in reported pain for the treatment groups. Patients' age and the duration of pain before treatment were not related to treatment outcome. Patients who dropped out of treatment had fewer limitations in jaw movement but did not differ in any other variable from patients who remained in treatment. These findings are discussed in relation to the hypothesis that Temporo-Mandibular Pain and Dysfunction Syndrome is stress-related muscular pain and dysfunction.

[0144]
A brief technique of hypnoanaesthesia for children in a casualty ward
Hopayian K

Hypnoanaesthesia has been used in the past for the treatment of minor trauma in both adults and children. It is of particular value in the latter. However, the time required limits its application in the Accident and Emergency Department. A brief technique for hypnoanaesthesia particularly for children is described, offering a practical solution. A case is reported to illustrate its usefulness.

[0145]
Personality, hypnotic susceptibility and EEG responses: preliminary study
De Pascalis V; Imperiali MG

22 men and women, students in psychology, were given the Eysenck Personality Questionnaire, also percent theta, alpha and beta EEG spectral powers were evaluated during an hypnotic induction induced according to Barber's method. The EEG performance was compared with two baseline eyes-open, eyes-closed conditions and with a neutral control situation of listening to a weather report. No relation was found between Extraversion-Introversion scores and scores on the Barber Suggestibility Scale. The difference in EEG powers was nonsignificant for groups high and low in suggestibility, while a significant interaction was found for eyes open or closed X suggestibility groups when extreme scores of Extraversion-Introversion and Neuroticism were considered according to Eysenck's (1966) method. The right theta power of the stable extraverts and neurotic introverts, high in suggestibility in eyes-open condition was higher than the neurotic extraverts, and stable introverts who were low in suggestibility to hypnosis. The right theta power of the neurotic extraverts and stable introverts who were low in suggestibility to hypnosis showed a tendency to increase in eyes-closed conditions, while an opposite observation was made for the stable extraverts and neurotic introverts, subjects who were high in suggestibility. It is interesting to notice, according to Galbraith, et al. (1970) that it was the eyes-open condition which yielded the best EEG predictor of hypnotic susceptibility.

[0146]
The implications of bilingualism in the study and treatment of psychiatric disorders: a review
This review of the data on bilinguals in relation to hypnosis, psychotherapy and psychotic disorders presents evidence for the bilateral representation of language in the cerebral hemispheres of bilinguals, and outlines possible links between the neuropsychology of psychotic disorders and the lateralization of language in these patients. The relationship between affective states and the retrieval of memories and language is also explored.

[0147]
On the centenary of Charcot: hysteria, suggestibility and hypnosis
Chertok L

In studying hysteria by means of hypnosis, Charcot placed emphasis on the psychological aetiology of the neuroses. Among his pupils, Freud alone grasped this epistemological turning-point, from which he made his great discoveries. But hysteria and hypnosis still remain today largely unknown. We have not yet elucidated the 'mysterious leap' between the psychological and the somatic for the former, and between the relational and the instrumental for the latter. While psychoanalysts have constantly concerned themselves with hysteria, they have shown a lack of interest in hypnosis after Freud abandoned its practice. According to Freud, thanks to transference, affect would be controlled by cognition, a viewpoint eminently suited to satisfy his rationalistic outlook. Affect, however, remains an unknown realm. The affective relationship has, at all events, acquired an ever-increasing importance in psychoanalysis during the last few years, with the emphasis on the early mother-child relationship. The 'affective locus' remains the basic, as well as the most obscure, element in the hypno-suggestive relationship. The behaviourist approach, which quantifies the 'vertical' dimension in depth, is a limited one. The study of the 'horizontal' dimension of subjective experience represents a new line of research, which may make it possible to distinguish different forms of hypnosis. The understanding of hypno-suggestion may throw light on psychoanalysis, psychotherapy, and the human sciences in general.

[0148]
The effectiveness of behavioral intervention for reduction of nausea and vomiting in children and adolescents receiving chemotherapy
J Clin Oncol 1984 Jun;2(6):683-90 (ISSN: 0732-183X)
Zeltzer L; Le Baron S; Zeltzer PM

Fifty-one children 6-17 years of age rated the severity of nausea, vomiting, and the extent to which chemotherapy bothered them during each course of chemotherapy. Sixteen patients had no symptoms and the doses administered to 16 others were not constant so that matched courses could not be assessed. After baseline measurement of two matched courses, the remaining 19 patients were randomized to receive hypnosis or supportive counseling during two more matched courses. An additional course with no intervention was assessed in half of the patients. No significant reduction of symptoms was demonstrated prior to intervention. However, intervention with both hypnosis and supportive counseling was associated with significant reductions in nausea, vomiting, and the extent to which these symptoms bothered patients (all p < 0.001). Also, after termination of intervention, symptom ratings remained significantly lower than baseline. The data indicate that chemotherapy-related nausea and emesis in children can be reduced with behavioral intervention and that reductions are maintained after intervention has been discontinued.

[0149]
Hypnosis and suggestion in a century of psychotherapy: an epistemological assessment
Chertok L

From 1892 to 1982, a century of psychotherapy passed. Its inception was marked by the rehabilitation of hypnosis in the work of Charcot at the Salpetriere, and in the Nancy School (Liebeault and Bernheim). The young Freud became acquainted with this work in the course of his visits to France at this same period. It was thus that he was put on the track leading to the discovery of psychoanalysis. With the concept of transference, Freud thought he was reabsorbing suggestion and placing affect under the control of cognition. But today it is realized that suggestion (direct and indirect) is ever-present in psychoanalysis, as in other psychotherapies, which indeed do not cease to proliferate. This common element might be an important constituent of the curative process. Under these circumstances, it seems highly desirable that suggestion and hypnosis, those "crossroad" concepts which still remain so mysterious, become the subject of basic research, notwithstanding the prejudices that are still very much alive. The results of such research would prove beneficial to psychotherapy, as well as to the other human sciences.

[0150]
Learned aversions to chemotherapy treatment
Health Educ Q 1984 Spring;10 Suppl:57-66 (ISSN: 0195-8402)
Redd WH; Hendler CS

Recent advances in behavioral psychology and its application in medical settings have yielded effective methods for reducing distress in patients undergoing cancer treatment. This article focuses on the control of anticipatory nausea and vomiting in patients receiving chemotherapy. Four behavioral methods (i.e., hypnosis used with guided imagery,
progressive muscle relaxation training with imagery, biofeedback with imagery, and systematic desensitization) are evaluated. Clinical issues and the relevance of behavioral medicine to health education are addressed.

[0151] Treatment of multiple personality disorder. A study of 33 cases
Kluft RP

This article describes treatment results in 33 patients with multiple personality disorder with respect to the major identifying characteristic of the condition: the presence of separate personalities within a single individual. The author discusses responsiveness to treatment, apparent and stable fusion, follow-up, and reassessment.

[0152] The use of relaxation-mental imagery (self-hypnosis) in the management of 505 pediatric behavioral encounters
Kohen DP; Olness KN; Colwell SO; Heimel A

This report assessed outcomes of hypnotherapeutic interventions for 505 children and adolescents seen by four pediatricians over a period of one year and followed from four months to two years. Presenting problems included enuresis, acute pain, chronic pain, asthma, habit disorders, obesity, encopresis, and anxiety. Using strict criteria for determination of problem resolution (e.g., all beds dry) and recognizing that some conditions were intrinsically chronic, the authors found that 51% of these children and adolescents achieved complete resolution of the presenting problem; an additional 32% achieved significant improvement, 9% showed initial or some improvement; and 7% demonstrated no apparent change or improvement. Children as young as three years of age effectively applied self-hypnosis techniques. In general, facility in self-hypnosis increased with age. There was an inverse correlation (p less than 0.001) between clinical success and number of visits, suggesting that prediction of responsivity is possible after four visits or less.

[0153] Emotions and asthma II
Eur J Respir Dis Suppl 1984;136:131-7 (ISSN: 0106-4347)
Tunsater A

Factors such as the patient's coping mechanisms and their prognostic value are discussed. Different psychotherapeutic methods as a complement to conservative treatment are reviewed, especially hypnosis. The author stresses the multifactorial etiology of asthma. He points out the need for controlled studies of psychotherapeutic methods of treatment and objective verification of their efficacy.

[0154] [Hypotheses on the psychodynamics of the hypnotized]
[Ipotesi sulla psicodinamica dell'ipnotizzato]
Minerva Med 1983 Dec 30;74(51-52):2979-83 (ISSN: 0026-4806)
Paladino M

The hypnotic process starts when the ties between subject and object (perceptions) are sufficiently slackened. The psychodynamics of hypnosis in the hypnotized are reviewed, highlighting the mental machinery set in motion from the start of the process to its conclusion.

[0155] Structure of communication and reports of involuntariness by hypnotic and nonhypnotic subjects
Percept Mot Skills 1983 Dec;57(3 Pt 2):1179-86 (ISSN: 0031-5125)
Spanos NP; De Groh M

We hypothesized that phrasing a communication to move the arm as either a suggestion, a directive, or an instruction would differentially affect subjects' interpretations of the movement. 45 hypnotic and 45 nonhypnotic subjects who responded positively to a suggestion tended to describe the movement as involuntary both on open-ended questionnaires and later on an explicit involuntariness scale. Subjects given a directive to move the arm, or an instruction to reach for a pencil, rarely described their experience as involuntary on the open-ended questionnaires but sometimes rated it as involuntary on the scale. The ratings of involuntariness by subjects given suggestions seem likely to reflect interpretations made concurrently with the movement suggested. However, such ratings by subjects given directives or instructions are likely to reflect retrospective interpretations cued by the instrument used to assess subjects' experiences.

[0156] Physiological characteristics of pressure immobility. Effects of morphine, naloxone and pain
Behav Brain Res 1984 Apr;12(1):55-63 (ISSN: 0166-4328)
Carli G; Farabollini F; Fontani G; Grazzi F

This study is an attempt to detect the most important modifications of physiological parameters occurring during pressure immobility in rabbits and to compare them with those recorded during animal hypnosis. Like the latter, pressure immobility
is characterized by the development of high voltage slow waves in the EEG, reduction in frequency and amount of rhythmic slow activity in the hippocampus (RSA) and depression of spinal polysynaptic reflexes. Systolic and diastolic blood pressures are not modified. Duration of two types of immobility is positively correlated within individuals. Treatment by a single dose of morphine (1 mg/kg) potentiates the duration and this effect is antagonized by naloxone (1 mg/kg). Repeated morphine injection up to tolerance reduces duration. Pressure immobility may also be produced under persistent noxious stimulation and is characterized by the development of high voltage slow waves in the EEG, as is typical in the absence of pain. Naloxone, (5 mg/kg) injected in a condition of persistent noxious stimulation, reduces immobility duration. In contrast to animal hypnosis, the duration of pressure immobility is neither potentiated by pain nor reduced by naloxone (1,5 or 20 mg/kg). It is suggested that the two immobilities are controlled by several mechanisms, some similar, some different.

[0157]
A symptom profile of patients with multiple personalities, including MMPI results
J Nerv Ment Dis 1984 Apr;172(4):197-202 (ISSN: 0022-3018)
Bliss EL

Patients with multiple personalities are excellent hypnotic subjects, a capability demonstrated both clinically and on a standard hypnotizability test. They tend to experience a plethora of symptoms associated with anxiety states, hysteria, obsessional neuroses, phobic states, depression and mania, schizophrenia, alcoholism, sociopathy, and hyperactivity--although there are exceptions to this profile. Both males and females suffer from this disability, and an MMPI profile for female multiples is described.

[0158]
The treatment of temporomandibular joint syndrome through control of anxiety
Stam HJ; McGrath PA; Brooke RI

Following a negative experience with general anesthesia, a 20-yr-old woman developed anxiety and an inability to relax concomitant with temporomandibular joint dysfunction and pain syndrome. Systematic countering of anxiety by relaxation successfully removed her anxiety and led to a complete resolution of her symptoms. Follow-up at 16 months indicated maintenance of treatment gains and no recurrence of the symptoms during the previous 12 months.

[0159]
Multiple personality in childhood
Kluft RP

Case vignettes illustrate examples of childhood multiple personality disorder, and treatment modalities are described. Guidelines for possible prevention through early diagnosis are offered, as well as two predictor lists for diagnosis--one written by the author and one developed by Dr. Putnam.

[0160]
Multiple personality as a post-traumatic stress disorder
Spiegel D

This article examines multiple or dissociative personality syndrome as a multiple post-traumatic stress disorder, discussing these patient's developmental histories, their high hypnotizability, and their profound capacity to dissociate spontaneously to protect themselves from emotional and physical pain.

[0161]
Responses to acute pain and the nursing implications
Wells N

Management of acute pain offers many techniques--peripherally, to reduce the sensory input from the nociceptors and ascending fibres, and centrally by altering cognition, evaluation and emotional arousal to the sensory input. Scientifically-based nursing intervention is imperative. Therefore, nurses needed a better understanding of recent research regarding pain. As well, recognition that all individuals express and cope with pain in different ways, and therefore exhibit different pain behaviours, is necessary if effective nursing care is to be given. Finally, with all the interacting variables and methods of intervention available, pain medication should never be the only intervention used for the patient with pain.

[0162]
Physiological and psychological explanations for the mechanism of acupuncture as a treatment for chronic pain
Lewith GT; Kenyon JN

Many suggestions have been made about the possible mechanism of acupuncture as an analgesic therapy. This review
provides a comprehensive account of the neurological, neurohumoral and psychologically-based hypotheses put forward. Although the exact mechanism of this treatment remains unclear, it is apparent that reproducible neurological and chemical changes occur in response to acupuncture, and that these changes almost certainly modify the response to, and perception, of pain. The mechanism of chronic pain is completely understood, but within this framework we understand acupuncture as completely as most other types of analgesic treatment.

[0163]
[Nerotic disorders in epilepsy and their treatment by technics of psychotherapy and reflexotherapy]
[Nevroticskie rasstrojstva pri epilepsii i ikh lechenie metodami psikhoterapii i refleksoterapii]
Zh Nevropatol Psikhiatr Im S S Korsakova 1984;84(9):1381-5 (ISSN: 0044-4588)
Sviridova EI; Oleijnikov NI

The paper reports on observations of the onset and development of neurotic states in patients (n = 51) suffering from various forms of epilepsy at different stages of the disease. The clinical features of the principal types of neuroses such as neurasthenia, hysteria or nervousness of obsessive states proceeding in the presence of epilepsy are considered and clinical examples are adduced. Recommendations are given on the treatment of such patients using psychotherapy (including hypnotherapy) and acupuncture combined with basic anticonvulsion treatment. Peculiar phenomena resulting from the application of these methods and their therapeutic value are described.

[0164]
Psychological preparation of patients for surgical procedures
Cochran TM

Techniques developed over the last 30 years for preparing patients for surgical procedures include supplying information, cognitive coping strategies, relaxation and hypnosis, reassurance and support, and rehearsal. Intending to provide a practical guide for health-care practitioners, the author reviews research on the efficacy of these methods and on comparisons between methods and makes recommendations for further studies.

[0165]
Integrated psychiatric treatment of a dying patient
Kramer PD

The following case presents a 22-year-old woman with relapsing polychondritis and depression treated in liaison, consultation, and outpatient settings by one psychiatrist using a variety of techniques. The discussion focuses on the implications of the case for integrated medical model and psychotherapeutic care, and for technical aspects of the treatment of the dying patient.

[0166]
Relaxation techniques in general practice
Stone P

Many common disorders which present in general practice may be treated successfully when patients learn techniques of relaxation. Tension headache, migraine, chronic nervous diarrhoea, pre examination tension and some phobias have a high success rate. The technique is a lifelong asset for both patient and doctor.

[0167]
Mechanisms of hypnotic and nonhypnotic forgetting
Geiselman RE; MacKinnon DP; Fishman DL; Jaenicke C; Lamer BR; Schoenberg S; Swartz S

Subjects participated in two experimental sessions designed to study laboratory-induced amnesia, one using a standard hypnosis paradigm and one using a non-hypnotic directed-forgetting paradigm. Two independent sources of variation were derived from the hypnotic amnesia data: retrieval inhibition and inhibition release. In the nonhypnotic directed-forgetting procedure, some items were cued to be forgotten shortly after presentation and some were cued to be remembered. At test, the subjects were asked to recall both the to-be-remembered and the to-be-forgotten items. Over 39% of the variance in the recall of the to-be-forgotten items could be accounted for by the inhibition and release constructs obtained with hypnosis. These relations between the two procedures were not mediated by verbal ability or cognitive style (field independence). We concluded that the mechanisms of forgetting involved in laboratory demonstrations of hypnotic and nonhypnotic amnesia are related, and the implication is that some of them are the same, namely, retrieval inhibition and inhibition release. We also argued that the possible demand characteristics that accompany the hypnosis procedure are not apparent with the nonhypnotic procedure. Therefore, the relationships observed in the present results were taken as evidence that hypnotically induced amnesia is not entirely the result of subjects' reactions to demand.

[0168]
Practical hypnotic suggestion in ophthalmic surgery
John ME; Parrino JP

To determine the effectiveness of hypnotic suggestion in eliminating unnecessary movement by the patient during surgery and to reduce postoperative discomfort, we assigned 59 patients undergoing radial keratotomy for the first time (32 men and 27 women ranging in age from 20 to 56 years; mean age, 30 years) to one of two groups. The first group (No. = 34) listened to a four-minute script designed to relax them just before undergoing surgery; the control group (No. = 25) received the same medications but did not hear the script. The two groups did not differ significantly in their behavior during surgery, the amount of pain experienced during surgery and postoperatively, or their awareness of the procedure. They did differ significantly in their descriptions of how they felt the day after surgery: 13 of 34 patients in the hypnosis group said they felt wonderful; only one of 24 patients in the control group expressed this opinion.

EEG alpha-hypnotizability correlations are not simple covariates of subject self-selection
Barabasz AF

An earlier study (Dumas, 1977) summarized EEG alpha-hypnotizability studies and concluded that: (1) 'Correlations between alpha indices and hypnotizability are found only in studies using non-naive volunteers as subjects.' (2) 'Correlations are not found in studies using invited subjects.' Contrary to these conclusions the present paper demonstrates an inconsistent mix of significant and non-significant correlations between alpha density and hypnotizability in studies using drafted and volunteer subjects. It appears that alpha-hypnotizability correlations are not simple covariates of subject self-selection. Assumptions about alpha production and relaxation are also questioned.

Neuropsychological test performance and hypnotic susceptibility
J Clin Psychol 1983 Sep;39(5):804-6 (ISSN: 0021-9762)
Query WT; Carlson K; Dreyer S

Treated 70 patients for alcohol dependency. Various degrees of cortical dysfunctioning were represented as measured by the Halstead-Reitan Neuropsychological Battery. The study's purpose was to determine whether there was a relationship between brain-behavior and hypnotic susceptibility as measured by the Stanford Hypnotic Susceptibility Scale and its Fromm-Weingarten modification. It was found that the two scales were interchangeable insofar as they measured the same ability. Results indicate that hypnotic susceptibility is related to cognitive ability independent of lateralization. Further studies that use the same instruments with more precisely neurologically impaired patients are needed.

Group therapy and hypnosis reduce metastatic breast carcinoma pain
Psychosom Med 1983 Aug;45(4):333-9 (ISSN: 0033-3174)
Spiegel D; Bloom JR

The pain and mood disturbance of 54 women with metastatic carcinoma of the breast were studied over the course of one year. A random sample was offered weekly group therapy during the year, with or without self-hypnosis training directed toward enhancing their competence at mastering pain and stress related to cancer. Both treatment groups demonstrated significantly less self-rated pain sensation (t = 2.5 p less than 0.02) and suffering (t = 2.17, p less than 0.03) than the control sample. Those who were offered the self-hypnosis training as well as group therapy fared best in controlling the pain sensation (F = 3.1, p less than 0.05). Pain frequency and duration were not affected. Changes in pain measures were significantly correlated with changes in self-rated total mood disturbance on the Profile of Mood States and with its anxiety, depression, and fatigue subscales. Possible mechanisms for the effectiveness of these interventions are discussed.

Young doctors' views on alternative medicine
Reilly DT

A survey was undertaken to explore attitudes to alternative medicine among 100 general practitioner trainees. A positive attitude emerged from the 86 respondents, with 18 doctors using at least one alternative method themselves and 70 wanting to train in one or more. A total of 31 trainees had referred patients for such treatments; 12 of these doctors made referrals to non-medically qualified practitioners. The most commonly used alternative treatments were hypnosis, manipulation, homoeopathy, and acupuncture. A total of 22 doctors had been treated, or had treated themselves, by an alternative treatment, and this personal experience was linked to a greater professional use. These findings indicate that alternative methods of treatment are currently being used to complement orthodox medicine and an expansion in their use appears imminent.

Modification of irrational ideas and test anxiety through rational stage directed hypnotherapy [RSDH]
Examined the effects of four treatment conditions on the modification of Irrational Ideas and test anxiety in female nursing students. The treatments were Rational Stage Directed Hypnotherapy, a cognitive behavioral approach that utilized hypnosis and vivid-emotive-imagery, a hypnosis-only treatment, a placebo condition, and a no-treatment control. The 48 Ss were assigned randomly to one of these treatment groups, which met for 1 hour per week for 6 consecutive weeks with in-vivo homework assignments also utilized. Statistically significant treatment effects on cognitive, affective, behavioral, and physiological measures were noted for both the RSDH and hypnosis group at the posttest and at a 2-month follow-up. Post-hoc analyses revealed the RSDH treatment group to be significantly more effective than the hypnosis only group on both the post- and follow-up tests. The placebo and control groups showed no significant effects either at post-treatment or at follow-up.

[0174]
Relationship between hypnotic susceptibility and thermal regulation: new directions for research
Percept Mot Skills 1983 Apr;56(2):627-31 (ISSN: 0031-5125)
Piedmont RL

This study examined the relationship between hypnotic susceptibility and thermal regulation using biofeedback. 30 subjects were given the Stanford Hypnotic Susceptibility Scale, Form C. Immediately after the susceptibility score was determined, all subjects were given instructions to lower the peripheral skin temperature on the right middle finger. Subjects remained under hypnosis while they performed this task. A significant negative correlation (r = -0.38) was found, indicating that higher susceptibility subjects maintained a lower mean temperature over trials. A 2 X 6 analysis of variance for low and high susceptibility with repeated measures yielded a significant main effect for subjects and a significant interaction of group X trials; highly susceptible subjects maintained a lower mean temperature over trials than subjects of low susceptibility. Issues for future research concerning the role of susceptibility in research on hypnosis are outlined.

[0175]
Effects of suggestibility and hypnosis on accurate and distorted retrieval from memory
Sheehan PW; Tilden J

Research investigated the hypothesis inferred from the theorizing of Loftus that suggestibility is related to the tendency to incorporate incorrect information into memory when this information has been subtly introduced after the-to-be-remembered events have occurred. Specifically, it was predicted that if level of suggestibility is theoretically relevant to subjects' acceptance of misleading information, then more subjects who are highly hypnotically suggestible than those with a low level of hypnotic suggestibility will incorporate the incorrect information into memory. Hypnotic as compared with waking instruction should enhance this distortion effect by providing a context of testing in which subjects are readily prone to respond positively to suggestions. Eight independent groups of 12 subjects were tested. Separate groups of subjects of high and low suggestibility were presented with misleading or neutral information about a wallet-snatching incident and tested for memory under either waking or hypnotic instruction. Analysis of subjects' memory distortions indicated that suggestibility plays a somewhat different role than has been argued previously. The magnitude of distortion that was observed varied according to the stimulus features that were studied, but hypnotic suggestibility was not associated with the distortion effect. Despite the fact that hypnosis did not enhance recall in any way, subjects were frequently confident that distorted memories recovered under hypnosis were accurate.

[0176]
Hypnosis and lateral cerebral function as assessed by dichotic listening
Crawford HJ; Crawford K; Koperski BJ

In a replication of Frumkin et al. we investigated the hypothesis that hypnosis may facilitate a shift in brain hemispheric dominance, as assessed by right-ear dominance shifts in a dichotic listening paradigm. Eight low, 13 medium, and 8 high hypnotizables, as assessed by the Stanford Hypnotic Susceptibility Scale, Form C, were given the Berlin et al. dichotic tape during two waking conditions and following an alert hypnotic induction. Results contradicted Frumkin et al. In contrast, low hypnotizables showed a significant reduction in right-ear dominance, suggestive of greater participation of the right cerebral hemisphere following hypnotic induction. Highs and mediums did not change. Discussion centers around procedural differences between the two studies (particularly type of hypnotic induction and instructions to attend to one or both ears) and the possible influence of relaxation/anxiety levels upon lateral shifts in cerebral function.

[0177]
Effects of early hypnosis on the cardiovascular and renal physiology of burn patients
May SR; De Clement FA

Sixteen patients with body surface area (BSA) burns of 4 per cent to 83 per cent, with whom single hypnotherapeutic interventions were attempted 5.3 +/- 3.4 h post burn, were compared to 16 matched controls. Ten physiological
parameters related to fluid volume and haemodynamics were recorded on the first two post burn days. The only significant difference discovered was elevated urine output 0-48 h postburn in successfully hypnotized patients (P = 0.01). This difference was inversely related (r = -0.94, P = 0.009) to burn size from a 10 per cent BSA burn (3.9 litres/48 h) to a 35 per cent BSA burn (1.6 litres/48 h). A statistically suggestive (P = 0.13) increase in urine output occurred in patients in whom hypnotic trance induction was unsuccessfully attempted. Patients with BSA burn sizes greater than or equal to 50 per cent, who presented with significant physiological stress and hypovolemia, were found not to be susceptible to hypnotic trance induction, and derived no physiological benefit. Attempted hypnotherapeutic intervention per se, with its psychotherapeutic component, may act only to reduce affective or psychological stress and anxiety. This psychological stress reduction apparently facilitates the loss of retained fluid in patients with small burns by a mechanism which is overwhelmed by the physiological stress of a major burn injury.

[0178]
The hidden observer as an experimental creation
Spanos NP

Laurence, Perry, and Kihlstrom appear to have misunderstood the theoretical positions advanced both by Hilgard and by Spanos and Hewitt. All of their criticisms of Spanos and Hewitt's "hidden observer" experiment are shown to be either misleading or invalid. The available data provide no support for a dissociation hypothesis of the hidden observer phenomenon. On the other hand, these data indicate strongly that this phenomenon is an experimental creation.

[0179]
"Hidden observer" phenomena in hypnosis: an experimental creation?
Laurence JR; Perry C; Kihlstrom J

Spanos and Hewitt (1980) have recently argued, on the basis of an experiment they report, that Hilgard's "hidden observer" phenomenon is pure laboratory artifact. This report reviews their claim and concludes on the following grounds that their experiment does not warrant so sweeping a conclusion: (a) Spanos and Hewitt have posed the issue as fact versus fiction and do not appear to be aware of a third alternative, namely, that the hidden observer effect is a phenomenon encountered in hypnosis that may be influenced both by demand characteristics and by the social-psychological context. (b) They appear to obtain the effect 100% of the time, unlike Hilgard, who has emphasized the phenomenon's differential incidence. (c) In contrast to Hilgard, who furnishes abundant verbal reports of his subjects' phenomenal experience as buttressing evidence for the "genuineness" of the effect in subjects who report having it, Spanos and Hewitt do not. (d) Two major procedural aspects of their experiment are discussed. Either or both may have inadvertently influenced the outcome of their experiment in the direction of their hypothesis that the responses of subjects are entirely the product of experimenter-induced expectations.

[0180]
Management of pain in sickle cell disease using biofeedback therapy: a preliminary study
Biofeedback Self Regul 1984 Dec;9(4):413-20 (ISSN: 0363-3586)
Thomas JE; Koshy M; Patterson L; Dorn L; Thomas K

Fifteen patients with a history of painful episodes of sickle cell disease were given training in progressive relaxation, thermal biofeedback, cognitive strategies, and self-hypnosis to help them develop self-management skills to relieve pain. Results show a 38.5% reduction in the number of emergency room visits, a 31% reduction in the number of hospitalizations, and a 50% reduction in the inpatient stay during the 6 months since the beginning of therapy compared to 6 months prior to therapy. Analgesic intake was reduced by 29% for those who were using it regularly. This is a preliminary study, and the results are considered only as suggestive of the potential use of biofeedback therapy and behavioral management in alleviating painful episodes in sickle cell disease.

[0181]
Nonpharmacologic pain management in arthritis
Johnson JA; Repp EC

This article has presented the critical elements of arthritic pain, the role of nonpharmacologic pain management, and a selection of techniques for therapeutic pain management. The author believes that these techniques are particularly suited to nursing intervention. Nursing is concerned with the total person and nonpharmacological techniques involve the total person in developing self-help coping strategies. The nurse interested in pursuing nonpharmacologic pain management techniques will find the outline, with explanation of "Skill Training: Summary of Training for Role Playing" to be particularly helpful. Further reading will enable the nurse to become familiar with and to pursue interventions of particular interest.

[0182]
Spontaneous hypnotic age regression: case report
J Clin Psychiatry 1984 Dec;45(12):522-4 (ISSN: 0160-6689)
Spiegel D; Rosenfeld A
Age regression—reliving the past as though it were occurring in the present, with age appropriate vocabulary, mental content, and affect—can occur with instruction in highly hypnotizable individuals, but has rarely been reported to occur spontaneously, especially as a primary symptom. The psychiatric presentation and treatment of a 16-year-old girl with spontaneous age regressions accessible and controllable with hypnosis and psychotherapy are described. Areas of overlap and divergence between this patient's symptoms and those found in patients with hysterical fugue and multiple personality syndrome are also discussed.

[0183]
Hypnotic amnesia as a strategic enactment: breaching amnesia in highly susceptible subjects
Spanos NP; Radtke HL; Bertrand LD

Hypnotically amnesic subjects frequently maintain their amnesia in the face of strong and repeated exhortations to recall honestly and to try their best to recall. Some investigators have argued that these subjects lose control over memory processes and, consequently, are unable to recall the material for which amnesia had been suggested. We propose instead that amnesic subjects maintain control over their memory processes. They often fail to breach amnesia because to do so would conflict with their self-presentation as deeply hypnotized. In two interrelated experiments we demonstrated that highly susceptible hypnotically amnesic subjects could be easily induced to recall all of the "forgotten" target items by defining successful recall as supportive of rather than as inconsistent with a self-presentation as deeply hypnotized. In the first part of Experiment 1, all subjects showed amnesia despite repeated demands to recall honestly. In the second part of this experiment, subjects were led to believe that they possessed a "hidden part" to their mind that remained aware of the target items covered by the amnesia suggestion. Each subject recalled all of the forgotten items when the experimenter contacted their hidden part. In Experiment 2 we replicated this effect and also demonstrated that the characteristics of subjects' hidden reports were a function of the instructions they received and did not reflect the operation of a dissociated cognitive subsystem that subconsciously held the forgotten items. These findings are inconsistent with traditional theorizing about hypnosis, but offer strong support for the hypothesis that hypnotic amnesia is a strategic enactment under the subject's voluntary control.

[0184]
Fantasized companions and suicidal depressions: two case reports
Am J Psychother 1984 Oct;38(4):541-57 (ISSN: 0002-9564)
Seeman K; Widrow L; Yesavage J

Two acutely suicidal adult patients with fantasized companions integral to the formation of suicide intent are presented. The phenomenon of the fantasized companion is reviewed, differentiated from true hallucinatory or psychotic phenomena, and related to other fantasy and dissociative states, such as daydreaming and multiple personalities. In this regard, the concept of hysterical psychosis is discussed. The functions served by the fantasized companions and their involvement in the successful treatment of the patients are described.

[0185]
Ergogenic aids
Coyle EF

The catabolism of bodily fuels provides the energy for muscular work. Work output can be limited by the size of fuel reserves, the rate of their catabolism, the build-up of by-products, or the neurologic activation of muscle. A substance that favorably affects a step that is normally limiting, and thus increases work output, can be considered an ergogenic aid. The maximal amount of muscular force generated during brief contractions can be acutely increased during hypnosis and with the ingestion of a placebo or psychomotor stimulant. This effect is most obvious in subjects under laboratory conditions and is less evident in athletes who are highly motivated prior to competition. Fatigue is associated with acidosis in the working musculature when attempts are made to maximize work output during a 4 to 15-minute period. Sodium bicarbonate ingestion may act to buffer the acid produced, provided that blood flow to the muscle is adequate. Prolonged intense exercise can be maintained for approximately two hours before carbohydrate stores become depleted. Carbohydrate feedings delay fatigue during prolonged exercise, especially in subjects who display a decline in blood glucose during exercise in the fasting state. Caffeine ingestion prior to an endurance bout has been reported to allow an individual to exercise somewhat more intensely than he or she would otherwise. Its effect may be mediated by augmenting fat metabolism or by altering the perception of effort. Amphetamines may act in a similar manner. Water ingestion during prolonged exercise that results in dehydration and hyperthermia can offset fluid losses and allow an individual to better maintain work output while substantially reducing the risk of heat-related injuries.

[0186]
Etiological theories and treatments for chronic back pain. II. Psychological models and interventions
Turk DC; Flor H

This is the second part of an extended review of the etiology and treatment of chronic back pain (CBP). The first paper dealt with somatic factors and interventions, this paper will examine psychological theories on the etiology of CBP and
psychological treatments for CBP. Finally common problems of both the somatic and the psychological approaches will be discussed and suggestions for treatment and research will be made.

[0187] Factors contributing to amplitude variability of the steady-state visual evoked response
Fagan JE; Allen RG; Yolton RL

Ten steady-state visual evoked responses (VER's) were recorded from each of 47 normal, adult subjects. For each subject, the mean and SD for the 10 VER amplitudes were calculated and used to determine amplitude variability. Although some subjects produced extremely reliable VER's, data from the majority showed a considerable degree of variability. A number of factors including trend (the tendency of the VER amplitudes to increase or decrease with repeated measurements), noise, attention, binocularity, accommodation, eye movements, artifacts, and electrode placement were evaluated to determine their relative contributions to this variability. Noise and trend factors produced a large proportion of the variability (75%) whereas the other factors were found to be relatively insignificant.

[0188] Hypnotic susceptibility and performance on various attention-specific cognitive tasks
Wallace B; Patterson SL

We conducted two experiments to investigate cognitive performance as related to level of hypnotic susceptibility. In Experiment 1 time-to-location of a target in a visual search task was assessed. For this task the letter Z was embedded either within straight-form or round-form letters. Results indicated that high-hypnotic-susceptibility subjects (highs) were significantly faster than low-susceptibility subjects (lows) in locating the embedded letter. Experiment 2 investigated performance on single- and double-digit arithmetic (addition) problems as a function of hypnotic susceptibility level. Subjects were presented with arithmetic problems and were asked to complete them within a 60-s time period. Highs completed a significantly greater number of double-digit problems but not single-digit problems within this time frame than did lows. The results of the two experiments are explained in terms of the application of differing strategies or operations by highs and lows in the performance of cognitive tasks.

[0189] The psychological effectiveness of pain management procedures in the context of behavioral medicine and medical psychology
Genet Psychol Monogr 1984 May;109(2D Half):251-78 (ISSN: 0016-6677)
Trifiletti RJ

The application of operant, biofeedback, and cognitive-behavioral approaches to the management of chronic pain is reviewed. A conceptual and methodological overview of treatment studies is provided from the perspective of recent psychological and multidimensional viewpoints concerning the chronic pain experience. Difficulties in interpreting the clinical efficacy of pain management procedures are highlighted and the need for further controlled outcome studies is recommended, particularly in demonstrating the effectiveness of cognitive-behavioral procedures. Lastly, implications for further research investigating the relationships between individual coping styles and chronic pain are discussed.

[0190] Physiological characteristics of pressure immobility. Effects of morphine, naloxone and pain
Behav Brain Res 1984 Apr;12(1):55-63 (ISSN: 0166-4328)
Carli G; Farabollini F; Fontani G; Grazzi F

This study is an attempt to detect the most important modifications of physiological parameters occurring during pressure immobility in rabbits and to compare them with those recorded during animal hypnosis. Like the latter, pressure immobility is characterized by the development of high voltage slow waves in the EEG, reduction in frequency and amount of rhythmic slow activity in the hippocampus (RSA) and depression of spinal polysynaptic reflexes. Systolic and diastolic blood pressures are not modified. Duration of two types of immobility is positively correlated within individuals. Treatment by a single dose of morphine (1 mg/kg) potentiates the duration and this effect is antagonized by naloxone (1 mg/kg). Repeated morphine injection up to tolerance reduces duration. Pressure immobility may also be produced under persistent nociceptive stimulation and is characterized by the development of high voltage slow waves in the EEG, as is typical in the absence of pain. Naloxone, (5 mg/kg) injected in a condition of persistent noxious stimulation, reduces immobility duration. In contrast to animal hypnosis, the duration of pressure immobility is neither potentiated by pain nor reduced by naloxone (1,5 or 20 mg/kg). It is suggested that the two immobilities are controlled by several mechanisms, some similar, some different [Note: this article is the same as 0156, and is here because of an error].

[0191] A symptom profile of patients with multiple personalities, including MMPI results
J Nerv Ment Dis 1984 Apr;172(4):197-202 (ISSN: 0022-3018)
Bliss EL

Patients with multiple personalities are excellent hypnotic subjects, a capability demonstrated both clinically and on a
standard hypnotizability test. They tend to experience a plethora of symptoms associated with anxiety states, hysteria, obsessive neuroses, phobic states, depression and mania, schizophrenia, alcoholism, sociopathy, and hyperactivity--although there are exceptions to this profile. Both males and females suffer from this disability, and an MMPI profile for female multiples is described [Note: this article is the same as 0157, and is here because of an error].

[0192]
Hysteria: the history of an idea
Merskey H

Hysteria has long been recognized as a condition involving multiple somatic symptoms and resulting from a state of the emotions. By the time of Charcot, it became possible to attribute a hysterical symptom to an idea. It appears that the first detailed statement to this effect was made by Russell Reynolds (1) and it was adopted by Charcot (2), particularly because of his experience that hypnosis could be used to suggest hysterical symptoms. These concepts provided the starting point for Freud's theories.

[0193]
Management of post-operative pain: current concepts and methods of management
Famewo CE

This paper discusses the aetiology, incidence and severity of post-operative pain including factors that influence post-operative pain. Current concepts and the need for effective control of post-operative pain are discussed. A review of the various methods available for post-operative pain management is presented with special reference to practice in a developing country.

[0194]
An acute anxiety state in an adolescent precipitated by viewing a horror movie
J Adolesc 1983 Jun;6(2):197-200 (ISSN: 0140-1971)
Mathai J

There have been reports of psychological distress in adults after viewing horror films. I report on the presentation and treatment of a 12-year-old boy after having viewed a horror film.

[0195]
The gagging problem in prosthodontic treatment. Part II: Patient management
J Prosthet Dent 1983 Jun;49(6):757-61 (ISSN: 0022-3913)
Conny DJ; Tedesco LA

The most serious problem associated with the patient with an overactive gag reflex is the strong potential for compromised treatment. A complete oral examination, medical history, and conversation with the patient are important sources of information that assist with the management of gagging problems. Many techniques are available for controlling the exaggerated gag reflex, and no single technique will solve each patient's problem. The technique or techniques used should be dictated by the cause or causes involved. If organic disturbances, anatomic anomalies, or biomechanical inadequacies of existing prostheses are not key causes, the services of trained specialists are needed to help with behavioral management of the problem.

[0196]
Psychological preparation for invasive medical and dental procedures
Anderson KO; Masur FT

Psychological preparation for invasive medical and dental procedures has been based on the rationale that high levels of preprocedural fear are detrimental to patients' subsequent adaptation. After a brief survey of the theoretical and empirical evidence pertaining to this rationale, the major psychological approaches designed to alleviate preprocedural concern and enhance recovery are discussed. Outcome studies that have employed informative, psychotherapeutic, modeling, behavioral, cognitive-behavioral, and/or hypnotic techniques are summarized and evaluated. Although the research suggests that each of these approaches can be effective, such serious methodological problems as heterogeneity of sample characteristics, limited range of outcome measures, and lack of manipulation checks prevent definitive conclusions. Legal-ethical concerns and the issue of cost effectiveness are also considered. Suggestions are made for future research and theory development.

[0197]
Instructed forgetting: hypnotic and nonhypnotic
Kihlstrom JF

In a commentary on an article by Geiselman, Bjork, and Fishman (1983), directed forgetting observed in the normal
waking state is compared with amnesia as induced by hypnotic suggestion. The two paradigms typically differ with respect to the role of incidental or intentional learning, the amount of study devoted to the items, the temporal location of the cue to forget, the retention interval involved, and the measure of memory that is of interest. Depending on the directed-forgetting paradigm used, they also differ with respect to the actual inaccessibility of the to-be-forgotten items, the reversibility of the forgetting, and the extent of interference of the items targeted by the forget cue on other items. However, these comparisons are vitiated somewhat by the methodological differences between the two paradigms. Theoretically, the three mechanisms typically used to account for directed forgetting—selective rehearsal, list segregation, and selective search—do not appear to account for the amnesia observed in hypnosis. However, the two phenomena do appear to share a fourth mechanism, retrieval inhibition. Final acceptance of this conclusion, however, awaits comparison of the two types of instructed forgetting within a common experimental paradigm.

[Hysterical seizures or pseudoseizures]
J Neurosurg Nurs 1983 Feb;15(1):22-6 (ISSN: 0047-2603)
Konikow NS

With proper diagnosis and management, the frequency of pseudoseizures can be reduced or eliminated. Emotional factors, whether internal or external, can precipitate pseudoseizures. The goals of therapy are to identify pseudoseizures and resolve the conflicts that manifest them; both psychiatric intervention and hypnosis have produced good results in the treatment of pseudoseizures. Nurses are involved in all aspects of care from observation of seizure activity to assessment and implementation of an appropriate plan of care. The care plan should include helping the patient and his family understand the meaning of the patient's pseudoseizures, recognizing the effect of stigma on the patient and his family, assessing the coping skills of the patient and his family, and setting realistic expectations for the patient regarding prognosis and treatment.

[Psychological factors involved in impotence. A review of the literature]
J Androl 1983 Jan-Feb;4(1):59-66 (ISSN: 0196-3635)
Turnbull JM; Weinberg PC

Recent developments in the treatment of impotence and studies on the results of psychological methods for its treatment seem to indicate that the number of individuals who suffer from impotence of purely psychogenic origin is less than was reported in literature of the last decade. It is undoubtedly true, however, that psychological factors play an important role in the pathogenesis of this disorder. This review looks at psychological factors involved in impotence from three perspectives. Beginning with a historical review, those theoretical bases which formed the premise for psychological therapies are described. Second, diagnostic issues are explored in some detail. Finally, the variety of treatment modalities which have been used, with varying degrees of success, is described. It appears that whatever psychological treatment method is used, the patients who have the best prognosis are those in whom the disorder has lasted for less than two years, who have a strong motivation for psychotherapy, persisting sexual desire, and who are without significant psychopathology.

[Auditory hallucinations and schizophrenia]
J Nerv Ment Dis 1983 Jan;171(1):30-3 (ISSN: 0022-3018)
Bliss EL; Larson EM; Nakashima SR

Forty-five patients with auditory hallucinations were studied. Sixty per cent proved to be excellent hypnotic subjects with multiple personalities. These latter patients received 11 different diagnoses by clinicians, predominantly those related to schizophrenia or an affective illness. Because patients with multiple personalities frequently have hallucinations, delusions, paranoid ideas and bizarre behaviors, they may be misdiagnosed as some form of schizophrenia.

["Simple-minded" personality variant among chronic alcoholic patients]
Zh Nevropatol Psikhiatr Im S S Korsakova 1983;83(2):233-7 (ISSN: 0044-4588)
Burno ME

The author describes a frequently encountered variant of alcoholic patients' personality with non-psychopathic premorbid features (phlegmatic kind-heartedness, faultlessness, cordiality, conscientiousness, vulnerability). The "pivot" of these features is "simple-mindedness". The peculiarities of alcoholism hypnotic states ("obliterated" somnambulism) and treatment in these patients according to their individual protective-psychological mechanisms are shown. The clinical material covers 1315 cases.

[Freud's Irma dream and the origins of psychoanalysis]
Psychoanal Rev 1984 Dec;71(4):591-617 (ISSN: 0033-2836)
Langs R
This paper investigates Freud's Irma dream as a response, in part, to the publication of Studies on Hysteria (Breuer & Freud, 1893-1895). As such, Freud's dream and associations reveal a great deal regarding the origins of psychoanalysis. The preamble to the dream reflects Freud's concern with the ground rules and boundaries of the psychotherapeutic technique that he was in the process of developing. This paper cites evidence for Freud's concerns regarding the consequences of alterations in these basic tenets. The Irma dream and Freud's associations also convey a deep and apparently unconscious concern within Freud in respect to the concept of transference, which he may have realized on some level had been used to defensively deny disturbing inputs by the therapist into the treatment situation and patient. The dream may be understood also as reflecting a deep sense of concern regarding unrecognized harmful effects of psychoanalytic psychotherapy and Freud's concern that the treatment process might be more destructive than helpful. The curative aspects of psychotherapy are viewed in terms of action-discharge rather than insight. In all, this reanalysis of the Irma dream focuses on Freud's unconscious conflicts, fantasies, and anxieties at a time when he, along with Breuer, presented a burgeoning psychoanalytic treatment modality to the professional world.

[0203] Psychotherapy with the hysterical personality: an interpersonal approach
Psychiatry 1984 Aug;47(3):211-32 (ISSN: 0033-2747)
Andrews JD

Personality disturbances are increasingly being defined in terms of person-environment interactions. Puzzling individual behavior may take on fresh significance when viewed within a broader system of forces (Andrews 1966, 1974; Carson 1969; Coyne 1976; Watzlawick et al. 1967). Psychotherapy, in particular, can usefully be viewed as a dyadic system in which both partners endeavor to define the relationship. The purpose of the present paper is to explore the interaction patterns associated with the hysterical personality from this perspective; and to identify relationships between these patterns and the therapeutic tactics which have proven most fruitful with hysterical patients. Since the bulk of clinical literature on hysteria is psychoanalytically based, the main emphasis of this paper will be on psychodynamic therapy. The smaller but growing body of material dealing with behavior therapy provides a fruitful basis for comparison and contrast. New case material will also be introduced to illustrate the main therapeutic principles discussed.

[0204] Immobility reactions: a modified classification
Reese WG; Angel C; Newton JE

This theoretical paper sets the stage for subsequent experimental reports on mobility and immobility in the Arkansas Line of Nervous Pointer dogs as contrasted with kennel mates of the normal line. Exactly opposite to the normal animals, the nervous dogs show marked inhibition of heart rate and musculoskeletal responses to man, including reduced ambulation and durable immobility following inversion and brief manual restraint in an open sling. The sling immobility of the nervous dogs (which may not differ basically from their freezing in upright position) might be designated as "tonic immobility" (TI). We hypothesize that such immobility, common in laboratory and natural conditions in many species, should be divided into two classes: hypotonic (cataleptic) and hypertonic (catatonic). We provide examples of such behaviors, particularly in man and dog, and cursorily review TI studies of other species. Neurophysiologic and neurochemical studies which bear on possible immobility mechanisms are briefly noted. We suggest that inconsistencies in reported concommitants of TI might result from failure to discriminate between types of behavioral responses.

[0205] Suffering for science: the effects of implicit social demands on response to experimentally induced pain
J Pers Soc Psychol 1984 May;46(5):1162-72 (ISSN: 0022-3514)
Spanos NP; Hodgins DC; Stam HJ; Gwynn M

In two experiments subjects rated their pain during baseline trials of cold pressor and finger pressure pain. After various instructional treatments, they were posttested with these same stimuli. As in previous studies, we found in both experiments that coping suggestions significantly reduced reported pain. Experiment 1, however, demonstrated that subjects often refrained from using available cognitive coping strategies to reduce pain unless they had been given explicit permission to do so. Experiment 2 replicated this finding and also showed that explicit permission to "do whatever you can to reduce pain" was as effective as a coping suggestion in decreasing reported pain. These findings indicate that subjects' interpretation of what is appropriate responding in the test situation determines how they choose to cope with the painful stimulation. Thus standard experimental procedures for assessing baseline levels of pain implicitly lead subjects to refrain from coping and thereby tend to underestimate their ability to control pain. Moreover, suggestions and other instructional techniques for coping with pain may produce much of their effect not by teaching subjects new coping skills but instead by giving them permission to use already available coping strategies.

[0206] [Therapy of hyperhidrosis]
[Therapie der Hyperhidrosis]
Holze E

In the treatment of hyperhidrosis stabilization of psychovegetative functions is certainly desirable. However, autogenic
exercise, hypnosis, psychotherapy as well as the administration of sedatives and tranquilizers serve only as adjuvant therapeutic measures. Systemic antihistamines, like sage or camphor, proved ineffective; anticholinergics pose the risk of side effects. For topical therapy aldehydes, organic acids, and especially metallic salts are favorable. Tanning agents are of limited effect. Topical anticholinergics suppress sweating but provoke systemic side effects, if resorbed in larger quantities. Surgical treatment includes sympathectomy, excision or curettage of eccrine glands, and cryotherapy or application of sclerosing agents. Concerning efficacy and risks of therapy only excision of axillary skin fields can be advocated. Among physical measures X-ray therapy is rendered obsolete. However, tap water iontophoresis is gaining increasing significance as an effective and safe treatment in palmar and plantar hyperhidrosis. In hyperhidrosis axillaris, palmaris, or plantaris topical application of aluminum chloride solution is emphasized as an efficacious treatment modality. If it fails, axillary skin fields can be excised and hyperhidrosis of palms or soles can be treated with tap water iontophoresis.

[0207]
Pavlov's position toward American behaviorism
Windholz G

Pavlov's development of the conditional reflex theory coincided with the rise of American behaviorism. Substituting an objective physiology for a subjective psychology, Pavlov saw in the rise of American behaviorism a clear confirmation of his method and theory. But in the early 1930s, Lashley attacked Pavlov's theory of specific cerebral localization of function, proposing instead the concept of an internal cerebral organization; Guthrie objected to Pavlov's centralist interpretation of conditioning, proposing instead a peripheralist interpretation; while Hull challenged Pavlov's theory of sleep and hypnosis as the manifestations of inhibition. Pavlov replied with critiques of Lashley's, Guthrie's, and Hull's views, and, convinced that Lashley and Guthrie misunderstood his position, repeated his method's and theory's basic propositions. Yet, Pavlov never gave up the expectation that American behaviorism would accept his conditional reflex theory and saw in Hunter's 1932 statements a support of his assumptions.

[0208]
A comprehensive psychological approach to obesity
Psychiat Med 1983 Sep;1(3):257-73 (ISSN: 0732-0868)
Fawzy FJ; Pasnau RO; Wellisch DK; Ellsworth RG; Dornfeld L; Maxwell M

Many different treatments for obesity have proven somewhat successful, with none emerging as clearly superior to the others. Surgical approaches, although usually successful at achieving and maintaining weight loss, are accompanied by varied and often harmful side effects. Unless new, safer procedures are developed, treatment may continue to be as hazardous as the obesity itself. Because medical treatment alone has not achieved beneficial, lasting results, research aimed at finding new procedures should be encouraged. Our five-year experience in working with obese patients has led us to the following conclusions: 1. The management of obesity must be a joint venture between psychiatry and medicine. Because of the complex nature of this illness, neither discipline alone can successfully and safely achieve significant initial weight loss coupled with successful long-term maintenance. The use of adjunctive psychological programs in a medical setting can be a successful alternative. 2. Fasting, weight loss, and realimentation must be accompanied by an effort at lifestyle change. Otherwise, patients will continue their self-destructive habits, which will ultimately lead to failure in yet another attempt at sustained weight reduction. The behavioral approach has provided a fairly effective treatment of obesity, sometimes with immediate results. Recent studies support the maintenance effect of behavioral treatments. However, longer studies with follow-ups are needed to better assess the overall effectiveness of these treatments. 3. Despite much false optimism that weight loss is a simple road to happiness, most patients experience some very real problems during the fasting part of the program. Crisis intervention can prove very helpful in terms of reducing stress and preventing dropouts. Group therapy, individual therapy, family therapy, and hypnosis have attained some very limited positive results when used alone; greater success has been reported from combining therapies. Patients generally became more socially effective, physically active, and mentally proficient when exposed to individual therapy together with group and family therapies. 4. Family environment appears to significantly affect compliance and completion. A conflict-laden family environment hampers the patient's ability to deal with the psychological changes encountered in weight loss programs. 5. Many obese patients lack a fundamental knowledge of nutrition, exercise, and health. In addition, most are poorly socialized and require assistance in learning assertiveness and other interpersonal skills. A behaviorally oriented component is very effective in providing these skills. (ABSTRACT TRUNCATED AT 400 WORDS).

[0209]
Disrupted retrieval in directed forgetting: a link with posthypnotic amnesia
Geiselman RE; Bjork RA; Fishman DL

Certain reliable findings from research on directed forgetting seem difficult to accommodate in terms of the theoretical processes, such as selective rehearsal or storage differentiation, that have been put forward to account for directed-forgetting phenomena. Some kind of “missing mechanism” appears to be involved. In order to circumvent the methodological constraints that have limited the conclusions investigators could draw from past experiments, a new paradigm is introduced herein that includes a mixture of intentional and incidental learning. With this paradigm, a midlist instruction to forget the first half of a list was found to reduce later recall of the items learned incidentally as well as those learned intentionally. This result suggests that a cue to forget can lead to a disruption of retrieval processes as well as to
the alteration of encoding processes postulated in prior theories. The results also provide a link between intentional forgetting and the literature on posthypnotic amnesia, in which disrupted retrieval has been implicated. With each of these procedures, the information that can be remembered is typically recalled out of order and often with limited recollection for when the information had been presented. It therefore was concluded here that retrieval inhibition plays a significant role in nonhypnotic as well as in hypnotic instances of directed forgetting. The usefulness of retrieval inhibition as a mechanism for memory updating was also discussed.

[0210]
The general hospital psychiatrist as "compleat" therapist
Saravay SM; Steinberg M; Rousseau M; Barnard W; Feldman SP

Four case histories have been presented to illustrate the range of therapeutic modalities which the liaison and consultation psychiatrist may be called upon to employ in the routine treatment of patients in the general hospital. These include analytically oriented insight and supportive psychotherapy, intervention with the family, collaboration with the medical and nursing staff, resolution of staff countertransference difficulties, pharmacotherapy, the turning of hospital and community resources to therapeutic account, and follow-up treatment and referral. Other more specialized modalities such as hypnosis (Frankel, 1978), amytal interview (Naples and Hackett, 1978) electroconvulsive therapy (Glaser, 1953), biofeedback and behavior therapy (Fordyce, 1978), and group therapy (Rahe, O'Neil, Hagan, and Ransom, 1975) have also proven useful. The synthesis of these skills into an individualized, coherent treatment approach is the challenge posed to the consultant by the 20 to 60 percent (Lipowski, 1967) of patients admitted to the general hospital with treatable emotional disorders. Because the vast majority of these disorders relate directly to the illness for which the patient was admitted and to the treatment rendered (Torem, Saravay, and Steinberg, 1979) they comprise a unique spectrum of psychiatric illnesses which often demand timely intervention (Solomon, Saravay, and Steinberg, 1980) before complete information is available. To effectively meet these challenges, the general hospital psychiatrist strives toward the ideal of the "compleat" therapist--creatively synthesizing an individualized approach from a varied therapeutic repertoire for each of the patients he is called upon to treat.

[0211]
The use of hypnosis in the management of preoperative anxiety and postoperative pain in a patient undergoing laminectomy
Bull Hosp Jt Dis Orthop Inst 1985 Fall;45(2):143-9 (ISSN: 0883-9344)
Snow BR

Patients undergoing laminectomy face a variety of concerns both pre- and postoperatively which may affect their emotional state and increase surgical risk. A case study of a laminectomy patient who was taught hypnosis for the control of preoperative anxiety and postoperative pain is presented. The benefits of such hypnotic intervention, as well as the long-term effects of hypnotic intervention on a patient who is in a crisis period are discussed.

[0212]
Sexual criminality and hypnotizability
J Nerv Ment Dis 1985 Sep;173(9):522-6 (ISSN: 0022-3018)
Bliss EL; Larson EM

Thirty-three sexual offenders, 18 of whom had been convicted of rape, nine of pedophilia, and six of incest, were studied. Two thirds of the subjects had histories of "spontaneous self-hypnotic" experiences (dissociations); seven of these were DSM-III multiples and six were probable multiples. This group had very high hypnotizability scores. The other one third without histories of "spontaneous self-hypnosis" had normal scores. It was concluded that spontaneous self-hypnosis contributed to the perpetration of the crimes in many of these cases, although other factors also directed the antisocial behaviors.

[0213]
Lesions of the dorsal spinal cord decrease the duration of contact defensive immobility (animal hypnosis) in the rabbit
Behav Neurosci 1985 Aug;99(4):778-83 (ISSN: 0735-7044)
Woodruff ML; Baisden RH

Rabbits received either bilateral dorsal or unilateral dorsolateral spinal cord lesions. The duration and incidence of contact defensive immobility (CDI; animal hypnosis) were tested in these rabbits and in intact controls. Neither of the spinal cord lesions affected the number of CDI inductions, but rabbits with lesions of the dorsal spinal cord exhibited significantly shorter durations of CDI than either of the other groups which did not differ from each other. These results are interpreted to indicate that the somesthetic systems that ascend in the dorsal spinal cord are important for the maintenance, but not the initiation, of CDI.

[0214]
The use of hypnosis as a tool in plastic surgery
Plast Reconstr Surg 1985 Jul;76(1):140-6 (ISSN: 0032-1052)
Tucker KR; Virnelli FR
Clinical hypnosis can be a valuable tool for the plastic surgeon. Techniques can be rapidly learned at workshops that are held frequently at convenient locations throughout the country. Once misconceptions are dispelled, use of hypnosis is appropriate, safe, and effective.

[0215]
Scientific status of refreshing recollection by the use of hypnosis. Council on Scientific Affairs
JAMA 1985 Apr 5;253(13):1918-23 (ISSN: 0098-7484)
[author(s) unknown]

The Council finds that recollections obtained during hypnosis can involve confabulations and pseudomemories and not only fail to be more accurate, but actually appear to be less reliable than nonhypnotic recall. The use of hypnosis with witnesses and victims may have serious consequences for the legal process when testimony is based on material that is elicited from a witness who has been hypnotized for the purposes of refreshing recollection.

[0216]
Dreaming and hypnotic susceptibility: a pilot study
Percept Mot Skills 1985 Apr;60(2):387-94 (ISSN: 0031-5125)
Gibson HB

Previous experimental work has indicated that certain stable personality characteristics are reliably associated with differential susceptibility to hypnosis. It is suggested that people who are more susceptible will be characterized by an awareness of dreaming more frequently, vividly and creatively. This study describes the construction of a Dream Questionnaire and the relations of the scores obtained on it to scores previously obtained on the Harvard Group Scale of Hypnotic Susceptibility. Sex differences were noted in response to the questionnaire. For women, a global score was derived from the questionnaire, and this was positively and significantly associated with hypnotic susceptibility. Men responded rather differently to the questionnaire and as hypnotic susceptibility scores were available for only a more limited number, further analysis was postponed until more data from men may become available. Some suggestions for research are discussed, and the relations between sleep research and hypnosis research are briefly considered.

[0217]
Teaching hypnosis within a family practice residency program
Fam Med 1985 Mar-Apr;17(2):77-8 (ISSN: 0742-3225)
Herbert CP
Department of Family Practice, University of British Columbia, Vancouver, Canada

As a result of increasing interest in medical hypnosis, a curriculum has been developed for teaching clinical hypnosis to family practice residents within a Canadian two-year training program. History and theories, demonstrations of techniques, practice of inductions, and clinical applications are presented to all second-year residents within a course titled "Behavioral Medicine in Family Practice." Individual supervision is offered within the family practice teaching unit as well as a one-month elective in behavioral medicine. Residents are encouraged to attend workshops offered by the Canadian Society of Clinical Hypnosis and invited to attend an autogenic training group for patients. Evaluation of continuing use of learned skills in practice settings is in process.

[0218]
A conceptual framework and treatment strategy for the alcoholic urge to drink utilizing hypnosis
Schoen M

The present paper proposes a theoretical framework and a treatment strategy for dealing with the urges to drink that alcoholics experience during recovery. Two models are proposed: the Defense Model and the Conditioning Model. Each model covers a specific period of time during recovery in which the urges to drink occur. The Defense Model describes the urges that result in the initial recovery period, while the Conditioning Model is invoked to explain urges that materialize in the later phases of recovery. Next, a treatment strategy is delineated that incorporates these models and employs the use of hypnosis. The treatment strategy is divided into three phases, with the first and second phases dealing with the alcoholic's unconscious and the third phase being directed at the alcoholic's conscious.

[0219]
Hypnosis as adjuvant antiemetic therapy in childhood cancer
Hockenberry MJ; Cotanch PH

Hypnosis, as a relaxation technique to reduce anxiety and drug-related nausea and vomiting in children with cancer, is an effective treatment modality. Its benefit as a self-relaxation technique is now being realized.

[0220]
Use of hypnosis for improving medication compliance in psychiatric patients
Forman BD
Factors involved in failure to comply with medication regimens may be divided into four categories: patient characteristics, physician-patient relationship, psychosocial environment, and treatment regimen features. Although several methods aimed at improving medication compliance have been described in the literature, hypnosis was not among them. Three cases in which hypnosis was effective for improving compliance are presented, suggesting that hypnotherapy for compliance problems has potential clinical applications.

Biofeedback and hypnosis in weaning from mechanical ventilators
Chest 1985 Feb;87(2):267-9 (ISSN: 0012-3692)
La Riccia PJ; Katz RH; Peters JW; Atkinson GW; Weiss T

Weaning patients from mechanical ventilation can be hindered by both physical and psychologic factors. Biofeedback has been used successfully as an adjunct in difficult weaning problems. We have used a combination of hypnosis and biofeedback to wean a patient with neurologic disease who previously failed weaning by standard procedures. A 30-year-old woman with respiratory failure secondary to multiple sclerosis with transverse myelitis was given eight sessions of biofeedback over 12 days in which the movements of her chest wall, as monitored by magnetometers, were displayed on an oscilloscope. The patient was praised for targeted respiratory rate, amplitude, and rhythm. These sessions included hypnosis in which the patient was given suggestions of well-being and that she could breathe as she had five years earlier. In this manner the patient was successfully weaned. Respiratory biofeedback and hypnosis appear to be useful adjuncts in weaning patients from ventilators.

Deep cerebral electrical activity during the hypnotic state in man: neurologic considerations in hypnosis
[Attivita elettrica cerebrale profonda durante lo stato ipnotico nell'uomo: considerazioni neurofisiologiche sull'ipnosi]
Riv Neurol 1985 Jan-Feb;55(1):1-16 (ISSN: 0035-6344)
De Benedittis G; Sironi VA

To the authors' knowledge hypnosis has never been induced in epileptic patients during depth EEG study. This neurosurgical diagnostic procedure (that has been routinely used in medically resistant epileptic patients for the preoperative exact delimitation of the epileptogenic lesion) offers a unique opportunity of obtaining fundamental information on the possible neurophysiological mechanisms implied in human hypnosis. Observations were carried out on 3 consecutive patients affected by medically resistant partial seizures with elementary and/or complex symptomatology. A chronic deep electrode study explored rhinencephalic structures as well as specific target areas of the cerebral cortex. Background electrical activity during the hypnotic state showed a significant decrease of slow waves and an increase of alpha and beta rhythms, with constant increase of amplitude, as compared with the nonhypnotic state. Focal ictal abnormalities were dramatically reduced by hypnotic trance. Moreover, depth EEG study during sleep in one patient indicated that the EEG patterns during hypnosis and sleep are basically different, confirming that there is no convincing evidence of physiological similarities between the 2 states.

Hypnotic age regression and moral reasoning
J Psychol 1985 Jan;119(1):71-80 (ISSN: 0022-3980)
Page RA

Moral reasoning was assessed with two dilemmas from the Kohlberg Moral Judgment Interview (1976) in 7 adults who were hypnotically age regressed to four ages: 15, 12, 9, and 6 years. Seven adults in a control group under task-motivation instructions were age regressed to the same ages and administered the dilemmas. Age-regressed moral maturity scores for both groups were compared to pretest scores, to data for actual 15-, 12-, 9-, and 6-year-olds from other studies, and to each other. Both groups were able to lower their moral reasoning scores when given age-regression instructions; however, hypnosis subjects not only scored lower than task-motivation subjects but also more closely resembled the levels of reasoning used by children at these ages. The results provide some support for a distinction between age regression through hypnosis and age regression through task-motivation instructions.

Effectiveness of hypnosis as an adjunct to behavioral weight management
Bolocofsky DN; Spinler D; Couthard-Morris L

This study examined the effect of adding hypnosis to a behavioral weight-management program on short- and long-term weight change. One hundred nine subjects, who ranged in age from 17 to 67, completed a behavioral treatment either with or without the addition of hypnosis. At the end of the 9-week program, both interventions resulted in significant weight reduction. However, at the 8-month and 2-year follow-ups, the hypnosis clients showed significant additional weight loss, while those in the behavioral treatment exhibited little further change. More of the subjects who used hypnosis also achieved and maintained their personal weight goals. The utility of employing hypnosis as an adjunct to a behavioral weight-management program is discussed.

[0224]
Following the discussion of various hypnosis theories and taking into account physiological, psychological, and behavioral-sociological theory on the basis of five cases, the question of inability of intent in the sense of Paragraph 179 of the Penal Code is discussed, and resistance incapability is rejected.

Psychophysiological evidence for a state theory of hypnosis and susceptibility
J Psychosom Res 1985;29(3):287-302 (ISSN: 0022-3999)
Gruzelier JH; Brow TD

Psychophysiological evidence is presented of altered cerebral organisation under hypnosis. Bilateral electrodertmal activity was examined to tones presented simultaneously with the induction of hypnosis. Susceptibility was monitored throughout. Two control conditions were devised, one for division of attention and another for relaxation. In addition there was a familiarisation session which permitted groups to be equated for rates of habituation. Both faster and slower habituation were found under hypnosis but the direction of change related to susceptibility; Susceptible subjects showed a reduction in orienting responses and Unsusceptible subjects an increase in responses. Susceptible subjects also had lower tonic levels of activity and fewer nonspecific responses during the induction prior to the tones. Neither relaxation nor listening to a story altered habituation systematically. Under hypnosis there was a reversal in lateral asymmetries in orienting response amplitudes in Susceptible subjects suggesting a shift in hemispheric influences from left to right.

Hypnotizability in patients with anorexia nervosa and bulimia
Arch Gen Psychiatry 1985 Oct;42(10):1014-6 (ISSN: 0003-990X)
Pettinati HM; Horne RL; Staats JM

Hypnotizability was assessed with the use of three standardised hypnotic scales in 86 patients with eating disorders. All diagnoses were made according to DSM-III criteria. Sixty-five patients had anorexia nervosa and 21 had bulimia. The anorectic patients were divided into subgroups of 19 abstainers and 46 vomiters and purgers. Bulimic patients were highly hypnotizable, significantly more so than the patients with anorexia nervosa and age-matched populations. There was also a trend for the purging subgroup of anorectics to have higher hypnotic capacity than abstaining anorectics.

Hypnotic susceptibility, inhibitory control, and orgasmic consistency
Arch Sex Behav 1985 Aug;14(4):373-6 (ISSN: 0004-0002)
Bridges CF; Critelli JW; Loos VE

Willingness to relinquish control, as evidenced by hypnotic susceptibility, enjoyment of alcohol, and inability to control thoughts and movements near the end of coitus, was found in this study to be predictive of the consistency with which females reported experiencing orgasm during sexual intercourse.

Failing to resist hypnotic test suggestions: a strategy for self-presenting as deeply hypnotized
Psychiatry 1985 Aug;48(3):282-92 (ISSN: 0033-2747)
Spanos NP; Cobb PC; Gorassini DR

Traditionally, hypnotizability has been associated with the idea that highly hypnotizable subjects lose voluntary control over their responses and become incapable of resisting suggestions. We contend instead that even excellent hypnotic subjects...
retain control over their responses. These subjects are invested in presenting themselves as "deeply hypnotized," and to this end employ relevant contextual information to guide their hypnotic enactments. Contextual demands in the hypnotic test situation usually reinforce the idea that hypnotic behavior is involuntary. Therefore, the enactments of highly hypnotizable subjects are typically designed to convey the impression that responses to suggestions are involuntary happenings that cannot be successfully resisted. This formulation implies that highly hypnotizable subjects will present themselves as unable to resist suggestions or, alternatively, as able to easily resist suggestions, depending upon which of these self-presentations they associate with "deep hypnosis". We tested this and related hypotheses by varying the demands associated with "deep hypnosis" and noting the effects on the tendencies of highly hypnotizable subjects to resist suggestions and to describe their responses as involuntary happenings over which they had lost control.

[0231]
Dissociation and psychotic symptoms
Am J Psychiatry 1985 Aug;142(8):953-5 (ISSN: 0002-953X)
Steingard S; Frankel FH

The literature on hysterical or brief reactive psychosis reflects great diversity both in clinical description and theoretical formulation. The authors describe the case of a 17-year-old girl who presented with a diagnosis of bipolar affective disorder, rapid cycling type, but who, in fact, was experiencing dissociative episodes manifested as psychotic states. The patient's successful treatment with hypnosis is described, along with the clinical and theoretical implications of the case.

[0232]
Hypnotic susceptibility, interference, and alternation frequency to the Necker cube illusion
J Gen Psychol 1985 Jul;112(3):271-7 (ISSN: 0022-1309)
Wallace B; Priebe FA

Two experiments (N = 60) were conducted to determine the effects of hypnotic susceptibility and interference on frequency of Necker cube apparent reversals (ARs). Interference was induced in Experiment 1 by having subjects respond to orally administered double-digit arithmetic (addition) problems while observing the Necker cube. In Experiment 2, counting backward by 3s served as interference. In both experiments, interference reduced ARs. Hypnotic susceptibility level also influenced ARs, with those scoring high on this attribute reporting more ARs than those scoring low. Attentional factors may have played a major role in producing the reported results.

[0233]
Hypnoanesthesia in the morbidly obese
JAMA 1985 Jun 14;253(22):3292-4 (ISSN: 0098-7484)
Morris DM; Nathan RG; Goebel RA; Blass NH

The advent of chemical anesthesia relegated hypnosis to an adjunctive role in patients requiring major operations. Anesthesia can be utilized with acceptable risk in the great majority of patients encountered in modern practice. But an occasional patient will present—such as one with morbid obesity—who needs a surgical procedure and who cannot be safely managed by conventional anesthetic techniques. This report describes our experience with such a patient and illustrates some of the advantages and disadvantages of hypnoanesthesia. The greatest disadvantage is that it is unpredictable. Close cooperation between the patient, hypnotist, anesthesiologist, and surgeon is critical. However, the technique may be utilized to remove very large lesions in selected patients. Hypnoanesthesia is an important alternative for some patients who cannot and should not be managed with conventional anesthetic techniques.

[0234]
Posttraumatic stress disorder, hypnotizability, and imagery
Am J Psychiatry 1985 Jun;142(6):741-3 (ISSN: 0002-953X)
Stutman RK; Bliss EL

Twenty-six Vietnam veterans were studied to determine the relationship between posttraumatic stress disorder and hypnotizability. The intensity of their posttraumatic stress disorder was measured by a self-report. Their hypnotizability scores, vividness of imagery scores, and symptomatic profiles were also ascertained. Veterans with low or no posttraumatic stress disorder scores had normal hypnotizability scores and normal imagery scores, whereas those with high posttraumatic stress disorder scores had high hypnotizability scores and high imagery scores. The authors conclude that either combat traumas enhanced hypnotic potential in some veterans or that veterans with excellent hypnotic potential to begin with were more susceptible to posttraumatic stress.

[0235]
Hypnotic regression and reframing in the treatment of insect phobias
Am J Psychother 1985 Apr;39(2):206-14 (ISSN: 0002-9564)
Domangue BB

Two cases of insect phobia are presented in which constructs and strategies from psychodynamic, cognitive, and behavioral approaches were combined with hypnotic interventions. Flexibility and integration of approaches may be advantageous and hypnosis, including regression and reframing, may be especially powerful in the treatment of phobics.
Volitional experiences associated with breaching posthypnotic amnesia
Coe WC; Yashinski E

Highly responsive hypnotic subjects classified as having control over remembering (voluntaries) or not having control over remembering (involuntaries) during posthypnotic amnesia were compared during posthypnotic recall. Subjects rated their voluntariness after the experiment. Two contextual conditions were employed (2 X 2 design): a lie detector condition meant to create pressure to breach amnesia and a relax control condition. In contrast to earlier findings, the recall data showed that both voluntary and involuntary subjects breached under the lie detector condition compared with their counterparts in the relax condition; however, the degree of breaching was not great in any condition. The results are discussed as they relate to studies attempting to breach posthypnotic amnesia and characteristics of the voluntary-involuntary dimension.

Enhancement of military pilot reliability by hypnosis and psychophysiological monitoring: preliminary inflight and simulator data
Aviat Space Environ Med 1985 Mar;56(3):248-50 (ISSN: 0095-6562)
Barabasz AF

Subjects were Royal New Zealand Air Force pilots and this investigator (N = 8). Skin conductance response (SCR) was measured during a localizer approach for both inflight and simulator phases of the study. SCR's were noted following all ground controller altitude and heading change instructions and for all pilot-initiated heading and altitude changes employed to comply with the localizer approach plate. Inflight SCR's following ground controller instructions were substantially greater than those related to pilot initiated responses to cockpit information. In the flight simulator phase, posthypnotic suggestions for increased vigilance performance were administered with counterbalancing for hypnosis-no-hypnosis order conditions. Cockpit instrument data was video taped. Posthypnotic instructions for enhanced vigilance performance were found to dramatically increase SCR's to cockpit based information and to significantly reduce heading and altitude error correction time.

A controlled trial of hypnotherapy in tinnitus
Clin Otolaryngol 1985 Feb;10(1):43-6 (ISSN: 0307-7772)
Marks NJ; Karl H; Onisiphorou C

A group of 14 patients with unilateral tinnitus were selected because of the constant nature of their tinnitus, and its resistance to all other forms of therapy. They were subjected to hypnosis in three forms in random order. The induction of a trance state alone formed the control arm of the trial. Compared to this were the effects of 'ego boosting' and active suppression of tinnitus whilst in a trance state. One of the 14 patients showed a highly significant response to the latter treatment as judged by visual analogue scales. Five of the 14 patients (36%) found the induction of a hypnotic state of value. This seemed to help them tolerate their tinnitus better, although its loudness and quality were unaltered.

Hypnotic change in combat dreams of two veterans with posttraumatic stress disorder
Am J Psychiatry 1985 Jan;142(1):112-4 (ISSN: 0002-953X)
Eichelman B

The recurrent nocturnal traumatic dreams of two veterans were dispelled with hypnosis. Dream substitutions were rehearsed in hypnotic trance and subsequently dreamed at night, and afterward the original traumatic dreams ceased.

Hiccups: causes and cures
J Clin Gastroenterol 1985 Dec;7(6):539-52 (ISSN: 0192-0790)
Lewis JH

Hiccups result from a wide variety of conditions that act on the supraspinal hiccups center or that stimulate or disinhibit the limbs of its reflex arc. While scores of hiccups remedies have been reported over the centuries, no single "cure" stands out as being the most effective. Measures that stimulate the uvula or pharynx or disrupt diaphragmatic (respiratory) rhythm are simple to use and often help to speed the end of a bout of otherwise benign, self-limited hiccups. Such maneuvers may also terminate persistent hiccups. Drug therapy usually becomes necessary for more intractable hiccups; chlorpromazine and metoclopramide being two of the most widely employed agents for this purpose. Physical disruption of the phrenic nerve, hypnosis, and acupuncture are other modes of therapy that have been used in severe cases. Because so many reports of hiccups "cures" are based on anecdotal experience rather than controlled clinical studies, I review the available treatments to provide a rational approach for the management of hiccups.

Psychological aspects of irritable bowel syndrome
Aust N Z J Psychiatry 1985 Sep;19(3):218-26 (ISSN: 0004-8674)
Langeluddecke PM

The literature on psychological aspects of Irritable Bowel Syndrome (IBS) is reviewed. Psychiatric and/or psychometric assessment of IBS samples has consistently revealed a high prevalence of psychological symptoms by comparison with non-psychiatric patient and healthy control groups. Various psychological factors have been implicated in the aetiology of IBS and in the decision to seek medical help, including psychoneurotic personality traits, abnormal illness behaviour and life event stress. Controlled studies of psychological intervention for IBS, while scarce, suggest that supportive psychotherapy and hypnotherapy may be helpful. The long-term efficacy of such treatments remains to be demonstrated.

[0242]
Freud's psychology and its organic foundation: sexuality and mind-body interactionism
Psychoanal Rev 1985 Summer;72(2):203-28 (ISSN: 0033-2836)
Silverstein B

Although Freud's neurological education had a great impact on his thinking, a review of Freud's early writings reveals that: (1) Freud adhered to a mind-body interactionist position that was not in accord with the mechanistic neurology of his medical school education; (2) Freud saw psychical processes as intentional, not completely determined by mechanical brain processes—but interactive with them; (3) Freud made functional and psychological interpretations freely without accepting a need to "neurologize" his psychological insights by providing specific neuroanatomical or neurophysiological correlates for such interpretations; and (4) Freud sought the organic base for his evolving psychology in sexual physiology, not neuroanatomy or neurophysiology.

[0243]
Non-pharmacologic management of pain in the person with cancer
Mayer DK

Management of pain in the person with cancer is a high priority in nursing. Although the actual incidence and severity is not well documented, pain may be experienced at some point by the majority of persons with cancer. Pharmacologic management, by itself, is often not adequate. Nurses must become familiar with non-pharmacologic interventions, to be used alone or in combination with analgesics, for the successful management of cancer pain. This paper discusses various non-pharmacologic options and includes a nursing protocol. More research is warranted to better define those most likely to benefit from these interventions.

[0244]
Biochemical correlates of hypnoanalgesia in arthritic pain patients
Domangue BB; Margolis CG; Lieberman D; Kaji H

Self-reported levels of pain, anxiety, and depression, and plasma levels of beta-endorphin, epinephrine, norepinephrine, dopamine, and serotonin were measured in 19 arthritic pain patients before and after hypnosis designed to produce pain reduction. Correlations were found between levels of pain, anxiety, and depression. Anxiety and depression were negatively related to plasma norepinephrine levels. Dopamine levels were positively correlated with both depression and epinephrine levels and negatively correlated with levels of serotonin. Serotonin levels were positively correlated with levels of beta-endorphin and negatively correlated to epinephrine. Following hypnotherapy, there were clinically and statistically significant decreases in pain, anxiety, and depression and increases in beta-endorphin-like immunoreactive material.

[0245]
Non-verbal response to intraoperative conversation
Br J Anaesth 1985 Feb;57(2):174-9 (ISSN: 0007-0912)
Bennett HL; Davis HS; Giannini JA

In a double-blind study, 33 patients (herniorrhaphy, cholecystectomy and orthopaedic) were randomly assigned to either suggestion or control groups. Under known clinical levels of nitrous oxide and enflurane or halothane anaesthesia, suggestion patients were exposed to statements of the importance of touching their ear during a postoperative interview. Compared with controls, suggestion patients did touch their ear (tetrachoric correlation 0.61, P less than 0.001) and they did so more frequently (Mann-Whitney U test, P less than 0.02). All suggestion patients were completely amnesic for the intraoperative spoken suggestion, despite inquiries which included hypnotic regression to the operation.

[0246]
Prevalence of multiple personality among inpatients and outpatients
Am J Psychiatry 1985 Feb;142(2):250-1 (ISSN: 0002-953X)
Bliss EL; Jeppsen EA

A survey of psychiatric inpatients (N = 50) and outpatients (N = 100) indicated that about 10% had multiple personality and an additional 5%-20% had amnesia for early traumatic experiences.
Individual differences in phenomenological experience: states of consciousness as a function of absorption
Pekala RJ; Wenger CF; Levine RL

State manifestations of the trait of absorption—a trait associated with differential responsivity to hypnosis, meditation, marijuana intoxication, and electromyograph (EMG) biofeedback—were assessed to determine (a) if absorption correlates with various (sub)dimensions of phenomenological experience, and (b) if individuals of differing absorption ability experience different states of consciousness. In two experiments 249 and 304 participants completed Tellegen's absorption scale and experienced several stimulus conditions. Each condition's phenomenological state was assessed by means of a retrospective self-report questionnaire and quantified in terms of intensity and pattern parameters. The results indicated that absorption correlated with increased and more vivid imagery, inward and absorbed attention, and positive affect; decreased self-awareness; and increased alterations in state of consciousness and various aspects of subjective experience. In addition, individuals of high absorption ability, relative to lows, experienced a different state of consciousness during ordinary, waking consciousness that became an altered state with eye closure and an hypnoticlike induction. The usefulness of the results for understanding altered-state induced procedures such as hypnosis is discussed.

Hypnotherapy as a treatment for enuresis
Edwards SD; van der Spuy HI

The main objective of this study was to provide an adequately controlled experimental and clinical study to assess the efficacy of hypnotherapy in the treatment of nocturnal enuresis. Subjects were 48 nocturnal enuretic boys, aged 8-13 yr. Treatment consisted of six standardized sessions, one hourly session per subject per week. Results indicated that hypnotherapy was significantly effective over 6 months in decreasing nocturnal enuresis, compared with both pretreatment baseline enuresis frequency and no-treatment controls. It also suggested that trance induction was not a necessary prerequisite for success. Comparison with other methods of treatment provided evidence that hypnotherapy was an effective alternative or adjunctive form of treatment for enuresis.

Psychosomatic reactions to the experience of near death. A state of affective dissociation
Z Psychosom Med Psychoanal 1985;31(3):215-25 (ISSN: 0340-5613)
Stumpfe KD

The feelings of persons who had encountered life-threatening danger were analysed and compared with the feelings of persons, who are in hypnosis or trained in autogenic training. The symptoms are widely alike. The result of the comparison is, that there exists a state of affective dissociation, which can be caused by conscious or unconscious actions.

Psychosocial mediators of abstinence, relapse, and continued smoking: a one-year follow-up of a minimal intervention
Addict Behav 1985;10(1):29-39 (ISSN: 0306-4603)
Horwitz MB; Hindi-Alexander M; Wagner TJ

This study investigates the relationship of health locus of control, health beliefs, social support, use of nonsmoking areas, and objecting to another person's smoking to long-term abstinence and relapse following a minimal intervention for smoking cessation. Subjects participated in a single session group hypnosis treatment for smoking cessation. Questionnaires were completed by participants pretreatment and at a 1-year follow-up. Ex-smoker, recidivist, and continuing smoker groups were defined using follow-up data from 219 participants (70 males and 149 females). The data were analyzed using univariate and multiple discriminant analysis techniques. The results show that the three smoking status groups could be discriminated. Ex-smokers actively coped with smokers in their environment, avoided other smokers in public places, and received considerable support from spouses and friends. In contrast, recidivists prior to treatment had been unable to quit smoking for extended periods of time and placed greater responsibility on powerful others for their health. Following treatment, recidivists did not actively cope with smokers, were more likely to participate in additional hypnosis, and placed less responsibility on either powerful others or themselves for their own health. It was concluded that posttreatment factors appear to be more important for long-term maintenance of nonsmoking than entry characteristics of participants. Recommendations include incorporation of coping skills training into cessation programs and restrictions on smoking in the ex-smokers' environments to prevent relapse.

Clinical picture and treatment of nocturnal enuresis in children
Zh Nevropatol Psikhiatr Im S S Korsakova 1985;85(3):427-30 (ISSN: 0044-4588)
Krupanova MS
The article presents the results of the treatment of 275 cases of nocturnal enuresis which are subdivided by the author into 3 forms according to the nature of the pathogenesis: neurotic, organic and familial. The neurotic form of enuresis showed the best response to a combination of hypnotherapy with tranquilizers and antidepressants, the organic form was most responsive to nootropic agents, antidepressants and anticonvulsants. Antidepressants were effective for the treatment of familial enuresis in its pure form.

[0252]
Eligibility requirements in hypnotic trials
Sleep 1985;8(1):34-9 (ISSN: 0161-8105)
Roehrs T; Vogel G; Vogel F; Wittig R; Zorick F; Paxton C; Lamphere J; Roth T

Forty-eight patients complaining of insomnia were studied at two sleep laboratories using an identical protocol to evaluate hypnotic efficacy. All met the screening requirement of a mean sleep latency of 30 min or greater on 3 laboratory nights following an adaptation night. Of these patients 34 still complaining of insomnia were screened a second time 2 to 6 months later. Sixteen of the 34 failed the second screen. Sleep parameters for the 34 on screen 1 compared with screen 2 were the same except for sleep latency (the eligibility criteria), which was significantly shorter. There was no evidence of a systematic difference between laboratories, a change in procedure from screen 1 to 2, or a systematic loss of patients from screen 1 to 2. The data show that the statistical phenomenon of regression toward the mean must be considered in designing hypnotic efficacy studies.

[0253]
Psychogenic factors and exercise metabolism: a review
Morgan WP

It has been recognized for many years that factors of a psychogenic nature can influence resting as well as exercise metabolism, and the primary purpose of the present review was to summarize existing evidence dealing with this topic. The review is focused primarily upon experimental evidence involving the hypnotic manipulation of metabolism, since most of the relevant literature has relied upon utilization of the hypnotic tool. Several investigations involving non-hypnotic manipulations are directly related to the general research theme, and these reports are also included in the review. Following a general overview, research involving the influence of cognition and affect on heart rate, cardiac output, forearm blood flow, respiration rate, ventilatory minute volume, and oxygen consumption at rest is considered. The following section deals with the influence of cognition and affect, as well as perception on these same physiological parameters during exercise. It is concluded that psychogenic factors representing the cognitive, affective, and perceptual domains can significantly influence resting as well as exercise metabolism.

[0254]
Are patients who use alternative medicine dissatisfied with orthodox medicine?
Med J Aust 1985 May 13;142(10):539-41 (ISSN: 0025-729X)
Donnelly WJ; Spykerboer JE; Thong YH

Approximately 45% of asthmatic families and 47% of non-asthmatic families had consulted an alternative-medicine practitioner at some time. The most popular form of alternative medicine was chiropractic (21.1% and 26.4%, respectively), followed by homoeopathy/naturopathy (18.8% and 12.7%, respectively), acupuncture (9.4% and 10.9%, respectively), and herbal medicine (4.7% and 6.4%, respectively), while the remainder (20.3% and 11.8% respectively) was distributed among iridology, osteopathy, hypnosis, faith healing and megavitamin therapy. More families were satisfied with orthodox medicine (87.1% and 93.6%, respectively) than with alternative medicine (84.2% and 75.1%, respectively). Crosstabulation analysis of pooled data both from asthma and from non-asthma groups showed that 76.4% were satisfied both with orthodox and with alternative medicine, and 16.4% were satisfied with orthodox, but not with alternative, medicine. In contrast, only 2.7% were dissatisfied with orthodox medicine and satisfied with alternative medicine (chi2 = 9.33; P less than 0.01). These findings do not support the view that patients who use alternative medicine are those who are disgruntled with orthodox medicine.

[0255]
Pain and pain control in children
Schechter NL

Focused research on pain and pain control in children has developed primarily in the last 10 years and even now is woefully inadequate in relation to the magnitude of the problem. The available research, inferences from the adult literature, and anecdotal information all indicate the elusive nature of pain. Pain is not solely a fixed neurophysiologic response to a noxious stimulus but a product of the interaction of many variables such as age, cognitive set, personality, ethnic background, and emotional state. These factors exert a tremendous influence on the suffering which surrounds the pain message. Technology exists at present to eliminate or substantially reduce pain in almost all cases. There remains, however, a tendency, which is even more pronounced with respect to children, to underestimate or ignore pain. In an overall approach to pain in children, the following points should be considered: A high index of suspicion is necessary to determine if children are experiencing pain since they may have difficulty verbalizing their discomfort. In infants, physiologic variables should be considered (increased heart rate, palmar sweating, increased respiratory rate), and in
preschoolers, time should be taken to ascertain that the child actually understands the word "pain" if it is used in questioning them. Some method of continuous monitoring, such as a visual analogue scan, should be considered as part of the treatment plan. Adequate analgesia should be provided. The appropriate dose should be administered at the appropriate pharmacokinetic time. Too little medication may cause obsessive attention to medication-related issues. Too much medication may cause sedation and lack of mental clarity, which is often anxiety-producing for both the parents and the child. The usefulness of p.r.n. medication has been seriously questioned and a time-contingent as opposed to pain-contingent strategy should be applied. Fears of addiction are generally unwarranted. Adjunctive medication may increase the value of offered narcotics and counteract some of their side effects. Although this monograph has focused more attention on pharmacologic than on nonpharmacologic approaches to pain, this is merely a reflection of available data and not necessarily of relative importance. The importance of distraction from pain by nursing, medical, or child life personnel using play techniques cannot be overestimated. Every attempt should be made to relax the child by using creative strategies. Preparation of the child for procedures is often helpful as some of the fear of the unknown is eliminated.(ABSTRACT TRUNCATED AT 400 WORDS).

[0256]
Psychiatric aspects of cigarette smoking
Adv Psychosom Med 1985;14:48-63 (ISSN: 0065-3268)
Levine DJ; Johnson RW

Smoking has been viewed in divergent ways throughout history. While for some cultures it has been considered a crime, for others it has been invested with magical powers and even medicinal potential. In our century, society has come to realize the health risks associated with smoking. This has led to controversies between government and the tobacco industry as well as between physician and patient. In spite of their knowledge of its deadly consequences, many individuals are unable to stop smoking. The tenacity of this habit can be explained in terms of the various psychological motivations for smoking in combination with the physiologic addiction to nicotine. While some people are able to stop the habit, many relapse in spite of a variety of quitting methods. These range from the doctor's advice to stop, education programs, group and individual psychotherapies, behavioral techniques, hypnosis, and the use of nicotine gum. With a growing understanding of what distinguishes categories of smokers and with a new appreciation for the role of nicotine in addiction to smoking, more effective antismoking strategies can be fashioned to meet the specific needs of the potential quitter.

[0257]
Elevated incidence of a sensed presence and sexual arousal during partial sensory deprivation and sensitivity to hypnosis: implications for hemisphericity and gender differences.
Percept Mot Skills 1994 Dec;79(3 Pt 2):1527-31 (ISSN: 0031-5125)
Tiller SG; Persinger MA
Department of Psychology, Laurentian University, Sudbury, Ontario, Canada

As predicted by the vectorial cerebral hemisphericity hypothesis, 24 normal young women reported significantly more experiences of a "presence" than did 24 normal young men within a setting that emphasized hypnosis and partial sensory deprivation. The incidence of these experiences was positively correlated with scores on Spiegel's Hypnosis Induction Profile, while the attribution of the chamber experiences to ego-alien sources was correlated with the magnitude of (Vingiano's) right hemisphericity for the women only. Both sexes exhibited a significant association between the experience of a presence and sexual arousal.

[0258]
[Hypnosis: alert or non-alert]
[Hipnoza: ruch czy bezruch]
Psychiatr Pol 1994 Nov-Dec;28(6):729-37 (ISSN: 0033-2674)
Svoboda M
Uniwersytetu Masaryka, Brnie, Republika Czeska

The article includes a review of literature and own studies about hypnosis considered from the point of view of the subject's alertness or non-alertness, his activity or passivity in the hypnotic state. Activity is considered as a construct describing behavioral and experiential dynamics. This includes the general reactivity and the level of spontaneousness and initiative. The author's studies refer to the influence of hypnotic behavior on the dimension alert-non alert. The following factors were found to be important: subject's precondition of hypnosis, the kind of hypnotic procedure used, subject's hypnotic susceptibility, subject's personality traits, implicite demand characteristics of particular suggestions, specific explicit suggestions and subject's training.

[0259]
Hypnosis in sport: an Isomorphic Model
Robazza C; Bortoli L
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Hypnosis in sport can be applied according to an Isomorphic Model. Active-alert hypnosis is induced before or during practice whereas traditional hypnosis is induced after practice to establish connections between the two experiences. The
fundamental goals are to (a) develop mental skills important to both motor and hypnotic performance, (b) supply a wide range of motor and hypnotic bodily experiences important to performance, and (c) induce alert hypnosis before or during performance. The model is based on the assumption that hypnosis and motor performance share common skills modifiable through training. Similarities between hypnosis and peak performance in the model are also considered. Some predictions are important from theoretical and practical points of view.

[0260] Hypnosis and conversion of the breech to the vertex presentation
Arch Fam Med 1994 Oct;3(10):881-7 (ISSN: 1063-3987)
Mehl LE
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OBJECTIVE: To evaluate the effectiveness of hypnosis to convert a breech presentation to a vertex presentation. DESIGN: Prospective case series compared with historical, matched comparison group. SUBJECTS: One hundred pregnant women whose fetuses were in breech position at 37 to 40 weeks' gestation and a matched comparison group of women with similar obstetrical and sociodemographic parameters derived from databases for other studies from the same time period and geographical areas. INTERVENTION: The intervention group received hypnosis with suggestions for general relaxation with release of fear and anxiety. While in the hypnotic state women were asked for the reasons why their baby was in the breech presentation. As much hypnosis was provided as was convenient and possible for the women until they were delivered of the baby or the baby converted to the vertex position. MAIN OUTCOME VARIABLES: A successful conversion for the intervention group was scored when the baby spontaneously converted to the vertex position before delivery or successful external cephalic version. The conversion rate of the intervention group was compared with the comparison group who received standard obstetrical care without the opportunity for hypnosis. DATA ANALYSIS: Parametric testing of statistically significant differences in the rate of conversion between the two groups. RESULTS: Eighty-one percent of the fetuses in the intervention group converted to vertex presentation compared with 48% of those in the comparison group. This difference was statistically significant. CONCLUSIONS: Motivated subjects can be influenced by a skilled hypnotherapist in such a manner that their fetuses have a higher incidence of conversion from breech to vertex presentation. Psychophysiological factors may influence the breech presentation and may explain this increased frequency of conversion to vertex presentation.

[0261] Clinical hypnosis as a nondeceptive placebo: empirically derived techniques
Kirsch I
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Many psychological problems are maintained, in part, by dysfunctional response expectancies, and changing those expectations is an essential part of treatment. Hypnotic inductions alter response expectancies and have been shown empirically to substantially enhance the effects of psychotherapy. Therefore, hypnosis can be used therapeutically as a nondeceptive placebo. Expectancy plays a major role in hypnotic inductions and their effects. Clinical procedures suggested by these data are explored.

[0262] Idiographic approaches to hypnosis research (or how therapeutic practice can inform science)
Nadon R; Laurence JR
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We argue that both nomothetic and idiographic research strategies can advance scientific knowledge of therapeutic hypnosis. In particular, practitioners can make idiographic contributions to the scientific literature in a manner that will be received positively by a growing number of behavioral scientists. Broad methodological issues and concerns specific to hypnosis research are discussed.

[0263] Recent advances in the application of hypnosis to pain management
Chaves JF
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In this paper I examine the clinical use of hypnosis for pain management from a cognitive-behavioral perspective. This perspective emphasizes the multifaceted nature of hypnotic interventions and the importance of patients' attitudes, expectations, and beliefs in modulating the pain experience. Special attention is given to identifying ways of combining cognitive and contextual variables to maximize clinical outcomes. Since this approach does not pivot around the concept of a hypnotic trance state, we look elsewhere in our quest to understand the nature of pain modulation in the hypnotic context. Freedom from a theoretical commitment to the hypnotic trance state is seen as opening new avenues for the development of effective clinical interventions.

[0264]
Hypnotic hypermnesia: the empty set of hypermnesia
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Although a long tradition exists suggesting that hypnosis can enhance memory (hypnotic hypermnesia), the experimental literature is quite mixed. When, however, laboratory studies are classified according to the type of stimulus and memory tests employed, a remarkable orderness of outcomes emerges: Recall tests for high-sense stimuli (e.g., poetry, meaningful pictures) almost always produce hypermnesia, but not recognition tests for low-sense stimuli (e.g., nonsense syllables, word lists). An important methodological issue is whether the recall increments for high-sense stimuli constitute enhanced memory or enhanced reporting (laxer response criteria). Recent laboratory literatures show that, beyond response criterion effects, true memory enhancement (hypermnesia) exists. Experiments conducted over the past decade, however, demonstrate that it is repeated retrieval effort and not hypnosis that is responsible for hypermnesia: Repeated testing without hypnosis yields as much hypermnesia as with hypnosis.

Pseudomemories without hypnosis
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Hypnosis is often colloquially associated with "the power of suggestion"; however, some cognitive memory researchers believe that suggestions have power even without hypnosis. A well-known phenomenon in cognitive psychology is the "misinformation effect," in which subjects who are misled about previously witnessed events often integrate that inaccurate postevent information into their accounts of the event. In the present article, we review the misinformation literature in four major rounds according to the nature of the memory distortion. The first three rounds are studies of memory suggestibility for observed events; by contrast, the fourth (and newest) one deals with personal or autobiographical memory. Considered collectively, these four rounds of research provide compelling evidence that it is not hard at all to make people truly believe they have seen or experienced something they have not-without any hypnosis at all. Finally, we discuss the tragic implications for the unquestioned acceptance of all recovered memories.

Hypnosis, delayed recall, and the principles of memory
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This article reviews the seven principles of memory function that set limits on the degree to which any attempt to recover a long-forgotten memory can succeed: encoding, organization, time dependency, cue dependency, encoding specificity, schematic processing, and reconstruction. In the absence of independent corroboration, there is no "litmus test" that can reliably distinguish true from false memories, or memories that are based on perception from those that are based on imagination. Practicing clinicians should exercise great caution when using hypnosis or any other technique to facilitate delayed recall.

A history of medical hypnosis
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From the origins of mysticism and theatrics, trivialized by stage performers, psychics, and charlatans, modern medical hypnosis has struggled to achieve and maintain a sense of professional integrity. Many of the principles of dynamic psychiatry are deeply rooted in the work of the early healers. Yet hypnosis as a clinical entity continues to fall in and out of favor over the years; again it is now being pushed beyond the limits of that which is reasonable and valid.

Solution oriented hypnosis. An effective approach in medical practice
Aust Fam Physician 1994 Sep;23(9):1744-6 (ISSN: 0300-8495)
McNeilly R
Centre of Effective Therapy, Melbourne, Victoria

Hypnosis provides a powerful tool to facilitate change in individuals, couples, and families troubled by anxiety, depression, and stress. It can also be used for pain relief and performance enhancement; and for changing habits such as smoking and eating. Solution oriented hypnosis accesses the patients' abilities and resources in overcoming their limitations that were causing their problems.

Hypnosis in the prevention of chemotherapy-related nausea and vomiting in children: a prospective study
To study the effectiveness of hypnosis for decreasing antiemetic medication usage and treatment of chemotherapy-related nausea and vomiting in children with cancer, we conducted a prospective, randomized, and controlled single-blind trial in 20 patients receiving chemotherapy for treatment of cancer. Patients were randomized to either hypnosis or standard treatment. The hypnosis group used hypnosis as primary treatment for nausea and vomiting, using antiemetic medication on a supplemental (p.r.n.) basis only, whereas the control group received a standardized antiemetic medication regimen. Nausea, vomiting, and p.r.n. antiemetic medication usage were measured during the first two courses of chemotherapy. Anticipatory nausea and vomiting were assessed at 1 to 2 and 4 to 6 months postdiagnosis. Patients in the hypnosis group used less p.r.n antiemetic medication than control subjects during both the first (p < .04) and second course of chemotherapy (p < .02). The two groups did not differ in severity of nausea and vomiting. The hypnosis group experienced less anticipatory nausea than the control group at 1 to 2 months postdiagnosis (p < .02). Results suggest self-hypnosis is effective for decreasing antiemetic medication usage and for reducing anticipatory nausea during chemotherapy.

Immediate-type hypersensitivity reactions and hypnosis: problems in methodology
Laidlaw TM; Richardson DH; Booth RJ; Large RG
Department of Psychiatry and Behavioural Science, University of Auckland, New Zealand

Hypnosis has been used to ameliorate skin test reactivity in studies dating back to the 1930s. This study using modern methodology and statistical analyses sets out to test the hypothesis that it was possible to decrease reactions to histamine by hypnotic suggestion. Five subjects, all asthmatic and untrained in hypnosis, were given three hypnotic sessions where they were asked to control their reactions to histamine administered by the Pepys technique to forearm skin. These sessions were to be compared with three non-hypnotic sessions. The flare sizes but not wheal sizes were found to be significantly reduced after the hypnosis sessions, compared to sessions without hypnosis. Skin temperature was correlated with the size of reactions. The day upon which the sessions took place contributed significant amounts of the remaining unexplained variance, giving rise to questions about what could cause these day to day changes.

Hypnosis as an adjunct to the administration of local anesthetic in pediatric patients
Gokli MA; Wood AJ; Mourino AP; Farrington FH; Best AM
Department of Pediatric Dentistry, Medical College of Virginia-Virginia Commonwealth University

This study investigates the acceptance of local anesthetic injection, utilizing hypnosis in twenty-nine children, ages four to thirteen years. Each subject was evaluated twice, once utilizing hypnosis before injection, and once without. A double blind research design was used to avoid effects of expectancy. Subjects in the study were videotaped during the procedure. Their behavior was rated independently by two pediatric dentists, using the North Carolina Behavior Rating Scale (NBRs). Transcutaneous pulse oximetry data were also recorded for each subject. The resulting data were evaluated for statistically significant differences between the two methods and for interrater reliability. Results showed no statistically significant differences in oxygen saturation due to hypnosis condition, order of treatment, sex, race, or age. Statistically significant differences were found in pulse rate and behavior, attributable to hypnosis condition and age, but not to sex, race, or order of treatment. Pulse rate decreased with hypnosis, as did crying. The hypnosis condition seemed to be more successful with younger children (four to six years old).

The first use of self-hypnosis: Mesmer mesmerizes Mesmer
Gravitz MA
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Self-hypnosis is an important modern therapeutic method. This article traces its initial use in either 1778 or 1779 by Franz Anton Mesmer, the founder of animal magnetism, which, in turn, led to the present modality of hypnosis. According to a contemporary account written by a colleague, Mesmer successfully treated himself for a condition described as a blockage in the lower part of his body. He may have also taught the method of self-magnetization to others in his clinic.

Brain dynamics and hypnosis: attentional and disattentional processes
Int J Clin Exp Hypn 1994 Jul;42(3):204-32 (ISSN: 0020-7144)
Crawford HJ
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This article reviews recent research findings, expanding an evolving neuropsychophysiological model of hypnosis
(Crawford, 1989; Crawford & Gruzelier, 1992), that support the view that highly hypnotizable persons (highs) possess stronger attentional filtering abilities than do low hypnotizable persons, and that these differences are reflected in underlying brain dynamics. Behavioral, cognitive, and neurophysiological evidence is reviewed that suggests that highs can both better focus and sustain their attention as well as better ignore irrelevant stimuli in the environment. It is proposed that hypnosis is a state of enhanced attention that activates an interplay between cortical and subcortical brain dynamics during hypnotic phenomena, such as both attentional and disattentional processes, among others, are important in the experiencing of hypnosis and hypnotic phenomena. Findings from studies of electrocortical activity, event-related potentials, and regional cerebral blood flow during waking and hypnosis are presented to suggest that these attentional differences are reflected in underlying neurophysiological differences in the far fronto-limbic attentional system.

[0274]
Clinical guidelines in using hypnosis in uncovering memories of sexual abuse: a master class commentary
Bloom PB
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These clinical guidelines are suggested to enhance the safe practice of the psychotherapy of increasing numbers of patients seeking help in uncovering memories of sexual abuse. However, it is ultimately the clinician's own judgment with each patient/client that determines the best path to follow. When therapeutic impasse occurs, consideration of these guidelines will, it is hoped, be beneficial to both therapist and patient.

[0275]
[A coherent EEG analysis in the trace processes of "animal hypnosis" in rabbits]
[Kogerentnyij analiz EEG pri sledovykh protsessakh "zhivotnogo gipnoza" u krolikov]
Zh Vyssh Nerv Deiat Im I P Pavlova 1994 May-Jun;44(3):541-7 (ISSN: 0044-4677)
Rusinova EV

Dynamics of structural changes of coherent relations between electrical activity of sensorimotor and premotor cortical areas of both cerebral hemispheres during and after "animal hypnosis" was studied by spectral-correlative analysis in rabbits. It was shown that "animal hypnosis" had very long-lasting trace processes, i.e., hypnotic structure of coherent relations of electrical activity in the cerebral cortex was maintained during several days. During and after a hypnotic episode interhemispheric asymmetry of electrical activity arose being more expressed in the delta-range in the left hemisphere. "Centers of animal hypnosis" were able to sum not only the effects of repeated hypnotic episodes but also excitation induced by sound stimuli immediately after hypnotic period and in the following days. Focus of stable activity with dominant properties was formed in CNS during "animal hypnosis".

[0276]
The use of hypnosis for smooth sedation induction and reduction of postoperative violent emergencies from anesthesia in pediatric dental patients
Lu DP
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Hypnosis combined with chemical sedation is uncommonly utilized by physicians, however, the combination of hypnosis and sedation can be an effective modality in the management of uncooperative pedodontic patients. In order to examine the efficacy of this combination technique, we selected 13 pedodontic patients for Ketamine sedation combined with hypnosis. The patients ranged from four to 11 years of age, and all had previous histories of violent emotional reactions before and after dental treatment. We found the combination technique to be extremely effective in successfully overcoming the stressful and frightening aspects of dental care for these pedodontic patients.

[0277]
Hypnosis as an aid for tinnitus patients
Ear Nose Throat J 1994 May;73(5):309-12, 315 (ISSN: 0145-5613)
Kaye JM; Marlowe Fl; Ramchandani D; Berman S; Schindler B; Loscalzo G
Medical College of Pennsylvania, Philadelphia 19129

This study was undertaken to evaluate hypnosis versus stress management as therapeutic modalities in the treatment of tinnitus. Participants were recruited from the local tinnitus association and the Otolaryngology Division of the Department of Surgery. The instruments were following standardized tests (NIMH Diagnostic Int. Schedule; SCL 90R, Beck Depression Inventory) in addition to a tinnitus questionnaire. Improvement was shown on 5 separate scales, some alleviated by both types of treatment and others singularly by hypnosis or stress management. The data reinforce the use of behavioral techniques and suggest that different techniques may be more appropriate for specific symptoms.

[0278]
Is differential item difficulty specific to hypnosis?
Am J Clin Hypn 1994 Apr;36(4):258-65 (ISSN: 0002-9157)
Page RA
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Previous hypnosis studies obtaining retrospective depth reports (e.g., Perry & Laurence, 1980) or retrospective realism reports (e.g., Page & Handley, 1992) have found a “parallel nonoverlapping” pattern between mean depth or realism and susceptibility scale items for high- through low-susceptible subjects. To determine if such a pattern, as well as differential item difficulty in general, is specific to hypnosis, 98 undergraduates were administered the Harvard Group Scale of Hypnotic Susceptibility, Form A (HGSHS:A) of Shor and Orme (1962) as a “test of visual and motor imagination,” omitting the eye-closure induction (item #2). A pattern similar to other studies that employed hypnosis was produced. While supporting attribution theory (Bowers, 1973), results also indicate that differences in item difficulty are not specific to hypnosis, but instead are related more broadly to imagination.

[0279]

Autonomic changes during hypnosis: a heart rate variability power spectrum analysis as a marker of sympatho-vagal balance
Int J Clin Exp Hypn 1994 Apr;42(2):140-52 (ISSN: 0020-7144)
De Benedittis G; Cigada M; Bianchi A; Signorini MG; Cerutti S
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Spectral analysis of beat-to-beat variability in electrocardiography is a simple, noninvasive method to analyze sympatho-vagal interaction. The electrocardiogram is analyzed by means of an automatic, autoregressive modeling algorithm that provides a quantitative estimate of R-R interval variability by the computation of power spectral density. Two major peaks are recognizable in this specter: a low-frequency peak (LF, -0.1 Hz), related to the overall autonomic activity (orthos+parasympathetic) and a high-frequency peak (HF, -0.25 Hz), representative of the vagal activity. The LF/HF ratio is an index of the sympatho-vagal interaction. This technique was applied, using a computer-assisted electrocardiograph, to 10 healthy volunteers (6 high and 4 low hypnotizable subjects as determined by the Stanford Hypnotic Susceptibility Scale, Form C) in randomized awake and neutral hypnosis conditions. Preliminary results indicated that hypnosis affects heart rate variability, shifting the balance of the sympatho-vagal interaction toward an enhanced parasympathetic activity, concomitant with a reduction of the sympathetic tone. A positive correlation between hypnotic susceptibility and autonomic responsiveness during hypnosis was also found, with high hypnotizable subjects showing a trend toward a greater increase of vagal efferent activity than did low hypnotizables.

[0280]
The use of hypnosis in the management of 'gagging' and intolerance to dentures
Br Dent J 1994 Feb 5;176(3):97-102 (ISSN: 0007-0610)
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Hypnosis is not a therapy, but can provide the clinician with a set of techniques which may be used to augment or facilitate a particular course of treatment. The importance of the patient's history and clinical findings in the diagnosis of intolerance to dentures and the selection of patients for hypnosis is discussed. Principles of treatment using relaxation, anxiety control, conditioning/desensitisation and confidence boosting techniques are described. Some examples of typical case histories are used to illustrate the application of a variety of techniques that have been found to be successful.

[0281]

Suggestibility and repressed memories of abuse: a survey of psychotherapists' beliefs
Am J Clin Hypn 1994 Jan;36(3):163-71; discussion 172-87 (ISSN: 0002-9157)
Yapko MD

The mental health field is deeply divided in its views regarding the possibility of creating false memories of sexual abuse through suggestive procedures. Psychotherapists in clinical practice were surveyed regarding their views on memory and hypnosis in order to assess how their perspectives might influence their clinical methods. Survey data regarding hypnosis and suggestibility indicate that while psychotherapists largely view hypnosis favorably, they often do so on the basis of misinformation. A significant number of psychotherapists erroneously believe, for example, that memories obtained through hypnosis are more likely to be accurate than those simply recalled, and that hypnosis can be used to recover accurate memories even from as far back as birth. Such misinformed views can lead to misapplications of hypnosis when attempting to actively recover memories of presumably repressed episodes of abuse, possibly resulting in the recovery of suggested rather than actual memories.

[0282]
The use of hypnosis in anesthesia: a master class commentary
Int J Clin Exp Hypn 1994 Jan;42(1):8-12 (ISSN: 0020-7144)
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There are unequivocal benefits derived from the use of positive suggestion and hypnotic techniques in all patients who must submit to surgical and obstetrical procedures with modern general or regional anesthesia. We must learn, and we must teach our colleagues, the advantages of consistent use of the semantics of positive suggestion. When we help patients focus on the desired comfort, safety, and satisfaction obtained with well-managed modern anesthesia and surgery, they will enjoy great benefit, especially when we use the auditory perception that often exists during general surgery, they will enjoy great benefit, especially when we use the auditory perception that often exists during general...
anesthesia. Rather than regarding hypnotic suggestion as a mere adjunct to anesthesia, it should be regarded as an integral part of surgical and obstetrical care.

[0283]
Psychotherapeutic application of group hypnosis
Raikov L; Gofman AM; Kulikovsky M
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This clinical observational study examined the effects of group hypnosis on psychosomatic disorders. A psychotherapist conducted hypnotic sessions with a single group of 306 people on four consecutive days. Our follow-up studies indicated that group hypnosis can have strong positive effects on many types of disorders. The depth of hypnosis was not related to the level of improvement. The results suggest that the human body has considerable potential for psychophysiological regulation.

[0284]
Hypnosis and self-hypnosis, administered and taught by nurses, for the reduction of chronic pain: a controlled clinical trial
Buchser E; Burnand B; Sprunger AL; Clemence A; Lepage C; Martin Y; Chedel D; Guex P; Sloutskis D; Rumley R
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Hypnosis is a technique whereby an individual can reach a particular state, quite unrelated to sleep, characterized by aroused, attentive and focused concentration. Although there are numerous clinical applications of hypnosis, there are virtually no controlled clinical trials to support its effectiveness. We propose a controlled randomized clinical trial comparing a "control" group of chronic pain patients treated by a programme including conventional oral medication combined with various nerve blocks and/or spinal administration of drugs, with a "treatment" group having a similar treatment programme plus hypnosis carried out by nurses. Outcome measurements include mainly the variation of pain intensity, the amount of analgesic drug consumption, spontaneous physical activity, and the change in health-related quality of life. The assessment of the outcome variable is done at the initial workup, weekly for the first 3 weeks, and at 6 and 12 weeks. A follow-up survey is conducted at 6 months.

[0285]
Hypnosis and the allergic response
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In recent years our knowledge of the immune system and the pathogenesis of immune disorders has increased. There has been much research on the complex connections between the psyche, the central nervous system and the immune system and the effect of mood on disease processes. This paper reviews the evidence on the effects of hypnosis on the allergic skin test reaction, on allergies, particularly respiratory allergies and hayfever, and on bronchial hyperreactivity and asthma. Hypnosis, which is generally regarded as an altered state of consciousness associated with concentration, relaxation and imagination, and amongst other characteristics an enhanced responsiveness to suggestion, has long been thought to be effective in the amelioration of various bodily disorders. It has seemed that the state of hypnosis is capable of a bridging or mediating function in the supposed dualism between mind and body. There has been great variation in the experimental and clinical procedures such as type of hypnotic intervention employed, the training of subjects and the timing of the intervention. Also, variability in the type of allergen used and its mode of application is evident. But despite these limitations, many of the studies have shown a link between the use of hypnosis and a changed response to an allergic stimulus or to a lessened bronchial hyperreactivity. There is as yet no clear explanation for the effectiveness of hypnosis, but there is some evidence for an influence on the neurovascular component of the allergic response.

[0286]
[Clinical hypnosis therapy/self hypnosis for aspecific and episodic headache or migraine and other defined types of headaches in children and adolescents]
[Klinische Hypnosetherapie/Selbsthypnose fur unspezifische chronische und episodische Kopfschmerzen ohne Migrane und andere definierte Kopfweharten bei Kindern und Jugendlichen]
Schweiz Med Wochenschr Suppl 1994;62:64-6 (ISSN: 0250-5525)
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As far as we know, this is the first controlled prospective study of hypnotherapy and teaching of self-hypnosis for children and adolescents with tension headache. It is designed to evaluate a simple method of teaching children and adolescents with psychosomatic complaints how they can help themselves.

[0287]
Enhanced hypnotizability by cerebrally applied magnetic fields depends upon the order of hemispheric presentation: an anistropic effect
Int J Neurosci 1994 Dec;79(3-4):157-63 (ISSN: 0020-7454)
A significant alteration in the hypnotizability of normal subjects after brief (15 min) exposures to weak (1 microT) pulsed magnetic fields over the temporal lobes was determined by the serial order of hemispheric stimulation. Only subjects who received the right hemispheric stimulation first displayed significantly elevated hypnosis induction profile scores (effect size equivalent to a correlation of 0.41). Implications for a technology that can: a) modify hypnotizability, b) encourage the consolidation of quasiexperiences that are reconstructed as autobiographical memory, and c) change the sense of self, are discussed.

Performance by gender in a stop-smoking program combining hypnosis and aversion

Psychol Rep 1994 Oct;75(2):851-7 (ISSN: 0033-2941)

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Increased rates of smoking initiation and smoking-related illness among women have narrowed the gender gap in smoking behavior. Past studies of performance by gender in prevention and treatment programs have reported reduced success with women and have suggested a need for stronger interventions having greater effects on both genders’ smoking cessation. A field study of 93 male and 93 female CMHC outpatients examined the facilitation of smoking cessation by combining hypnosis and aversion treatments. After the 2-wk. program, 92% or 86 of the men and 90% or 84 of the women reported abstinence, and at 3-mo. follow-up, 86% or 80 of the men and 87% or 81 of the women reported continued abstinence. Although this field study in a clinical setting lacked rigorous measurement and experimental controls, the program suggested greater efficacy of smoking cessation by both sexes for combined hypnosis and aversion techniques.

Hypnotizability enhancement: clinical implications of empirical findings


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While some conceptualize hypnotizability as a stable attribute of the individual, there is a growing body of literature that indicates hypnotizability may be characterized as a constellation of potentially modifiable attitudes and skills that are strongly influenced by contextual factors. In this article I briefly review representative studies from the hypnotizability-enhancement literature and highlight several controversial issues that have emerged. Although the empirical debate regarding hypnotizability and its enhancement will continue, this literature review has produced findings that are of value to hypnotherapists who wish to facilitate optimal hypnotic responding and positive outcomes with their patients. Several of these findings and their implications for the clinical application of hypnosis are discussed.

Autogenic training and cognitive self-hypnosis for the treatment of recurrent headaches in three different subject groups

Pain 1994 Sep;58(3):331-40 (ISSN: 0304-3959)

ter Kuile MM; Spinhoven P; Linssen AC; Zitman FG; Van Dyck R; Rooijmans HG
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The aims of this study were to (a) investigate the efficacy of autogenic training (AT) and cognitive self-hypnosis training (CSH) for the treatment of chronic headaches in comparison with a waiting-list control (WLC) condition, (b) investigate the influence of subject recruitment on treatment outcome and (c) explore whether the level of hypnotizability is related to therapy outcome. Three different subject groups (group 1, patients (n = 58) who were referred by a neurological outpatient clinic; group 2, members (n = 48) of the community who responded to an advertisement in a newspaper; and group 3, students (n = 40) who responded to an advertisement in a university newspaper) were allocated at random to a therapy or WLC condition. During treatment, there was a significant reduction in the Headache Index scores of the subjects in contrast with the controls. At post-treatment and follow-up almost no significant differences were observed between the 2 treatment conditions or the 3 referral sources regarding the Headache Index, psychological distress (SCL-90) scores and medication use. Follow-up measurements indicated that therapeutic improvement was maintained. In both treatment conditions, the high-hypnotizable subjects achieved a greater reduction in headache pain at post-treatment and follow-up than did the low-hypnotizable subjects. It is concluded that a relatively simple and highly structured relaxation technique for the treatment of chronic headache subjects may be preferable to more complex cognitive hypnotherapeutic procedures, irrespective of the source of recruitment. The level of hypnotic susceptibility seems to be a subject characteristic which is associated with a more favourable outcome in subjects treated with AT or CSH.

Hypnotic underestimation of time: the busy beaver hypothesis


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Two experiments tested the hypothesis that the hypnotic underestimation of time is mediated by attentional processing. In Experiment 1, variations in the demands placed on attentional resources produced substantial differences in the subjective estimates of identical length intervals occurring within a hypnotic context. In Experiment 2, attentional manipulation was assessed in both hypnotic and waking contexts. Time judgments were again found to vary with attentional demands but not with hypnotic context. The results are consistent with a busy beaver hypothesis, which holds that hypnotic, as well as nonhypnotic, time estimates are a by-product of the attentional processing demands of the task.

[0292]
Hypnotizability, dissociation, and bulimia nervosa
J Abnorm Psychol 1994 Aug;103(3):455-9 (ISSN: 0021-843X)
Covino NA; Jimerson DC; Wolfe BE; Franko DL; Frankel FH
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This study examined the levels of hypnotizability and dissociation in an outpatient sample of 17 normal-weight bulimic women and 20 healthy controls. Bulimic patients were significantly more hypnotizable than controls (p < .003) and scored higher on a self-report scale of dissociative experiences (p < .02). The results of measures of hypnotizability and dissociation showed a significant positive correlation in the combined subject group. These results are consistent with previous reports on hospitalized patients and college students and suggest that psychological factors associated with hypnotizability might play a role in the etiology and treatment of bulimia nervosa.

[0293]
Effect of hypnotic suggestion on the delayed-type hypersensitivity response
JAMA 1994 Jul 6;272(1):47-52 (ISSN: 0098-7484)
Locke SE; Ransil BJ; Zachariae R; Molay F; Tollins K; Covino NA; Danforth D
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OBJECTIVE--To determine whether individuals selected for good general health, high hypnotizability, and the ability to alter skin temperature under hypnotic suggestion can influence the delayed-type hypersensitivity (DTH) response to varicella-zoster (VZ) antigen under hypnotic suggestion. DESIGN--A blinded clinical trial using a repeated measures design with subjects serving as their own controls. Subjects were randomly assigned to undergo a predetermined sequence of four different experimental conditions, occurring at weekly intervals, with each condition including VZ skin testing: (1) hypnosis with suggestions to enhance the DTH response to VZ antigen; (2) hypnosis with suggestions to suppress the DTH response; (3) hypnosis with suggestions for relaxation only; and (4) skin testing without hypnosis. SETTING--A National Institutes of Health-supported clinical research center in a teaching hospital. SUBJECTS--A stratified sample of 24 ambulatory, healthy, highly hypnotizable, volunteer college students selected for their above-average ability to alter skin temperature under hypnotic suggestions and their positive baseline responses to VZ antigen. There were 11 males and 13 females with a mean +/- SD age of 22 +/- 6 years. The mean +/- SD hypnotizability score (Harvard Group Scale of Hypnotic Susceptibility) was 11 +/- 1. INTERVENTIONS--Intradermal skin testing with VZ antigen (Mantoux method) and hypnotic suggestion. MAIN OUTCOME MEASURES--Areas of induration of the DTH response measured at 24 and 48 hours after injection of antigen. RESULTS--The area of the DTH response was not affected by the experimental interventions. The area of erythema was likewise unaffected. CONCLUSIONS--Our subjects were unable to alter their DTH responses using hypnotic suggestion.

[0294]
[Ambulatory short-term therapy of anxiety patients with autogenic training and hypnosis. Results of treatment and 3 months follow-up]
[Ambulante Kurztherapie von Angstpatienten mit autogenem Training und Hypnose. Behandlungsergebnisse und 3-Monats-Katamnese]
Stetter F; Walter G; Zimmermann A; Zahres S; Straube ER
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The aim of the study was to examine the effects of a short-term outpatient treatment (6 sessions a 90 minutes) with autogenic training (Schultz 1932) or hypnosis (Erickson and Rossi 1979), concerning patients with anxiety- and panic disorders (according to DSM-III-R and ICD-10-criteria). 27 Outpatients were recruited by newspaper articles. Most of them had not been treated before. Both short-term treatments consisted of 6 weekly group sessions (4-6 patients). Psychological examinations were carried out before and after treatment and at a follow-up after 3 months: Trait anxiety (STAI-X2) and psychosomatic complaints (BfS/BL') decreased in both groups significantly after treatment. This therapeutic effect was stable during the following 3 months. The frequency of panic attacks decreased as well under treatment, and this effect was even more marked during the 3 month following treatment. The therapeutic success was influenced by the frequency of autosuggestive exercises carried out by the patients at home. This form of short-term treatment is not sufficient for all patients with anxiety disorders but the results of that study encourage to use short-term interventions with autogenic training and hypnosis as initial therapeutic approaches for such patients and to combine them with other therapeutic interventions.

[0295]
Early American mesmeric societies: a historical study
Following an unsuccessful attempt by Mesmer to bring animal magnetism to the United States in 1784 through the Marquis de Lafayette, there was a period of little activity there for several decades. Then, concurrent with its revival in Europe and led by a few American practitioners who had been trained in France, several early societies of American magnetizers were founded beginning about 1815. These were initially organized in New York City and subsequently in New Orleans, Boston, Clinton, Cincinnati, Louisville, and Philadelphia. They played an important role in the development of hypnosis in America.

[0296]
Relationships of hypnotic susceptibility to paranormal beliefs and claimed experiences: implications for hypnotic absorption
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This study examined the relationships of hypnotic susceptibility level to belief in and claimed experience with paranormal phenomena. The Harvard Group Scale of Hypnotic Susceptibility, Form A (HGSHS:A) and the Inventory of Paranormal Beliefs and Experiences were administered on consecutive days to 43 undergraduate students (14 men, 29 women) at a midwestern university. A significant multiple correlation was obtained (r = .55, p < .001). A partial correlation between hypnotic susceptibility and belief in paranormal phenomena was also significant (r = .53, p < .001), while hypnotic susceptibility was not found to be significantly related to claimed paranormal experiences. Implications of these relationships for the role of absorption in hypnosis are discussed.

[0297]
Psychological preparation for labor and delivery using hypnosis
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Hypnotic preparation for labor and delivery is enjoying renewed interest. This interest lies in the mother's psychological comfort and sense of involvement in the birth process. In this paper I present a model of psychological preparation, illustrated with case examples, that appears to be superior to Lamaze. This model offers the mother a sense of involvement in the process, control, awareness, and a level of anxiety relief and pain management superior to that provided by Lamaze. This method requires no more time than does Lamaze and uses the following elements: (1) a unique opportunity for the mother to participate in tailoring the protocol to address her needs along with the husband or "coach" participating in the training; (2) utilization of a "parts model" for the hypnotic induction, deepening, and imagery; (3) incorporation of "hypnotic rehearsal", dissociation, time distortion, and cognitive reframing; and (4) continued application of the hypnotic procedure after delivery and into the recovery period. Following the delivery, for which they had been specifically prepared, subjects reported they were also able to use their hypnosis skills in other situations, medical or dental, as needed.

[0298]
Hypnotherapeutic techniques in the treatment of hyperemesis gravidarum
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Hyperemesis gravidarum is not an uncommon condition in the first trimester of pregnancy. In some of these patients, the condition is so severe that it causes the development of dehydration and electrolyte imbalances. When that happens, the patient usually requires hospital treatment, which includes intravenous fluids and antiemetic medications. Obstetricians are very careful before prescribing any medications in the first trimester of pregnancy, making it necessary to consider methods of treatment that minimize the risk of medication side effects to both mother and baby. One such method is the use of hypnotherapy. In this paper, I describe five cases where hypnotherapy was successfully used with a variety of techniques to resolve the problem of hyperemesis. This is followed by a discussion regarding the most efficacious techniques and the type of patient that best responds to hypnotherapeutic interventions.

[0299]
Hypnosis and the dream hidden observer: primary process and demand characteristics
J Abnorm Psychol 1994 May;103(2):316-27 (ISSN: 0021-843X)
Mare C; Lynn SJ; Kvaal S; Segal D; Sivec H
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In Study 1, virtuoso (n = 13; passed more than 10 suggestions on the Harvard Group Scale of Hypnotic Susceptibility, Form A [HGSHS:A] and Stanford Hypnotic Susceptibility Scale, Form C), high hypnotizable (n = 14; passed more than 8 suggestions on the HGSHS:A), and medium hypnotizable (n = 17; passed 4-8 suggestions on the HGSHS:A) Ss were
administered a hypnotic dream suggestion followed by a "dream hidden observer" suggestion (i.e., access hidden part; have new thoughts and images pertinent to dream). The majority of Ss reported dreams (81.8%) and hidden observers (80%), with hidden reports being characterized by more personal content, less primary processes, and poorer recall than dream reports. Study 2 replicated major findings. Although hypnotized (n = 18) and low hypnotizable simulating Ss (n = 17) responded comparably on most measures, hypnotizable Ss' dreams contained more primary process than did simulating Ss, providing support for M. R. Nash's (1991) psychoanalytic model.

[0300]
Is the hypnotized subject lying?
J Abnorm Psychol 1994 May;103(2):184-91 (ISSN: 0021-843X)
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Do the verbal reports of deeply hypnotized Ss truthfully reflect their subjective experiences of hypnotic suggestions? Experiment 1 established that the electrodermal skin conductance response (SCR) provides an effective method for detecting deception in the laboratory equally well in hypnotized and nonhypnotized Ss. In Experiment 2, deeply hypnotized and simulating Ss were administered a number of hypnotic suggestions in a typical hypnotic session, without mention of deception, and were questioned about their experiences while SCR measures were recorded concurrently. Results indicate that 89% of the hypnotized Ss' reports met the criterion for truthfulness, whereas only 35% of the simulators' reports met this criterion. Implications for the theory of hypnosis are discussed.

[0301]
Elicitation of "childhood memories" in hypnosis-like settings is associated with complex partial epileptic-like signs for women but not for men: implications for the false memory syndrome
Percept Mot Skills 1994 Apr;78(2):643-51 (ISSN: 0031-5125)
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20 male and 20 female undergraduate students were exposed singly for 20 min. to an exotic setting (partial sensory deprivation and weak, bilateral transtemporal pulsed magnetic fields) that enhances relaxation and exotic experiences. The numerical incidence of subjective experiences described as old memories, dreams, emotions, or vestibular sensations did not differ significantly between the sexes; however, women who reported a greater prevalence of preexperimental complex partial epileptic-like signs were more likely to report experiences of "old memories" (r = 0.61) while men who exhibited these signs were more likely to report dream-like (r = 0.49) experiences. Because complex partial epileptic-like signs are positively associated with suggestibility, the potential contribution of this differential gender effect to the etiology of the False Memory Syndrome requires further investigation.

[0302]
The effects of self-hypnosis for children with cystic fibrosis: a pilot study
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This pilot study assessed the effects of self-hypnosis on psychological and physiological functioning of children ages 7 to 18 with Cystic Fibrosis (N = 12). The study used a pre- and posttest design, repeated measures, and control group. Control and experimental groups were matched for age and clinical severity. The experimental group demonstrated significant changes in locus of control, health locus of control, and self-concept. State anxiety scores did not differ significantly, but changes in trait anxiety distinguished the experimental group from the control group. The experimental group also demonstrated significant increase in peak expiratory flow rates using an air flow meter immediately after self-hypnosis when compared to the control group. Generalizability of the results is discussed in terms of the small sample size. Recommendations are offered for future studies with larger samples and variations in procedure.

[0303]
Understanding change: five-year follow-up of brief hypnotic treatment of chronic bruxism
Am J Clin Hypn 1994 Apr;36(4):276-81 (ISSN: 0002-9157)
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In this paper I describe the treatment of a 63-year-old woman with a 60-year history of nocturnal bruxism. Treatment included assessment, two psychotherapy sessions, including a paradoxical behavior prescription to reduce daytime worrying, hypnotic suggestions for control of nocturnal grinding, and reinforcement of the patient's expectations for success. This case demonstrates how enduring change may occur rapidly in spite of the chronicity of a patient's complaint. Follow-up assessments at 2, 3, and 5 years revealed that she continued to be symptom-free with her self-reports corroborated by her spouse and family dentist. I discuss implications for understanding the role of hypnosis in therapeutic change.

[0304]
The (limited) possibilities of hypnotherapy in the treatment of obesity
In this paper we review the possibilities and limitations of hypnotherapeutic techniques in the treatment of obesity. In spite of some promising reports, the findings and opinions about the effectiveness of hypnosis in the treatment of obesity vary greatly. We provide a brief overview of specific hypnotherapeutic techniques—such as teaching relaxation, increasing self-control, encouraging physical exercise, altering self-esteem and body image, strengthening motivation, and exploring ambivalence for change—that can be involved in a multidimensional approach to obesity. Case reports illustrate the use of these techniques.

Creating metaphorical settings in which a patient may therapeutically interact while hypnotized would appear to have many of the advantages of more traditional uses of metaphors and to possess advantages of its own. Although this type of guided imagery may be widely used in practice, it is underrepresented in the literature compared to other uses of metaphor. I describe the use of a castle setting as one example of this type of metaphorical setting that may be useful in working with trauma patients. I also describe some features useful for this interventions, using three case examples.

This article presents an in-depth discussion of the integrated use of self-hypnosis and biofeedback in the treatment of pediatric biobehavioral disorders. The rationale for integrating these techniques and their similarities and differences are discussed. The concepts of children's imaginative abilities, mastery, and self-regulation are examined as they pertain to these therapeutic strategies. Three case studies are presented that illustrate the integrated use of self-hypnosis and biofeedback in the treatment of children with psychophysiological disorders. The authors speculate on the specific aspects of these self-regulation or "cyberphysiologic" techniques that appear particularly relevant to positive therapeutic outcomes.

The Parallel Experiential Analysis Technique (PEAT), a new method for gathering data on the subjective experiences of both the hypnotist and the subject, is described. The PEAT is an interactional modification of the Experiential Analysis Technique (EAT). Procedural details and methodological observations resulting from the modification of the EAT are discussed. Suggestions on how to characterize the phenomenology of the hypnotic interaction and to determine the degree of interactional synchrony on the subjective level between the hypnotist and subject are made.

Sedation is often justified in patients requiring colonoscopy. We investigated the potential usefulness of hypnotic relaxation in 13 women and 11 men (median age, 43 years; range, 22-67) for whom other forms of anesthesia were not available. Hypnotic relaxation resulted in moderate or deep sedation in 12 patients (nine women; p &lt; 0.05). In the patients in whom hypnosis was successful, pain was less intense than in patients in whom hypnosis was unsuccessful (p &lt; 0.001). In addition, all colonoscopies were completed in the successful group, versus 50% in the unsuccessful group (p &lt; 0.05). The patients in the successful group all agreed to another examination under the same conditions, whereas only 2% in the unsuccessful group agreed (p &lt; 0.001). Our study suggests that, in a subgroup of hypnotizable patients, hypnotic relaxation may be a safe alternative to drug sedation and merits further study.
Hypotherapeutic and family therapeutic technic of systemic therapy in treating enuresis nocturia and diuria will be discussed under diagnostic and therapeutic aspects. The integration and exclusion of family members in treatment is seen as a central issue. Questions of indication and contraindication are viewed from a family-dynamic perspective.

In this article we address a number of issues relevant to the practice of psychotherapy and hypnotherapy: How reliable is memory? How are therapists' and clients' beliefs and expectancies related to pseudomemory formation? Are certain clients particularly vulnerable to pseudomemory creation? Does hypnosis pose special hazards for pseudomemory reports? What are the variables or factors that mediate hypnotic pseudomemories? In addition to reviewing the literature on these topics, we intend to sensitize the clinician to the potential pitfalls of critical reliance on the patient's memories, as well as uncritically accepted clinical beliefs and practices.

Pain reports and amplitudes of painful argon laser-induced brain potentials were obtained for 10 high and 10 low hypnotizable volunteers following placebo and a randomized sequence of four hypnotically induced conditions of (a) neutral hypnosis, (b) deep relaxation, (c) pleasant dissociated "out of body" imagery, and (d) focused analgesia of the hand. Both high and low hypnotizable subjects exhibited significant reductions of reported pain during conditions of neutral hypnosis, relaxation, dissociated imagery, and focused analgesia. High hypnotizable subjects displayed significantly greater reductions than low hypnotizables in all conditions except placebo. Both high and low hypnotizables exhibited significant reductions of reported pain in all five conditions as well as in the posthypnotic condition, when amplitudes of evoked potentials were compared to the prehypnotic baseline. Only the high hypnotizable group showed significant reductions in amplitudes when the data were recalculated to reflect relative changes compared to the average amplitude of the pre- and postconditions to compensate for a possible habituation effect indicated by the significantly lowered amplitudes in the posthypnotic condition. The results are discussed in light of a number of hypotheses concerning mechanisms of hypnotic analgesia.

The question of hypnotic subjects complying with instructions, perhaps even purposely deceiving the hypnotist or deceiving themselves, has arisen from the state-nonstate (skeptical-credulous) theoretical controversy. However, experimental testing of competing hypotheses has been difficult. The current report offers methodological procedures that may prove useful. Subjects who were given posthypnotic amnesia instructions were tested on free recall and implicit recall of a 20-word list. To detect the possibility of deception, videotapes of real subjects and simulating subjects during and after posthypnotic amnesia were rated for nonverbal signs of deception, signs taken from the works of Ekman, Ekman and Friesen, and Zuckerman et al. Preliminary results were gathered on a small pilot sample, and recommendations for procedural improvements are proposed.

This paper traces my personal development from anesthetist to hypnotist, psychotherapist, and, finally, psychoanalyst. The change was precipitated by the successful treatment of a patient with congenital organic skin disease by hypnotism. Alongside my change of profession, I attempt to illustrate my change of ideas and the change of my relationship to patients which accompanies these other changes. I feel that my personal experience throws some light on the nature of suggestion and hypnosis and how they differ from each other and from psychoanalysis. I believe that observations support the idea that hypnotism is a folie a deux caused by mutual projective identification between two people and that in
Less dramatic form this condition commonly occurs in normal development as well as in pathological psychological states. Several cases illustrate these ideas.

Nonpharmacologic management of patient distress during mechanical ventilation
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Patients on mechanical ventilators experience distress related to the endotracheal tube, the critical care environment, and the critical illness. The strategies suggested here to limit distress—therapeutic relationship building and communication, cognitive-behavioral therapies, and contracted family visiting—all can be implemented by critical care providers. A growing research base documents the success of these interventions in intubated patients.

The hidden observer, hypnotic dreams, and age regression: clinical implications
Lynn SJ; Mare C; Kvaal S; Segal D; Sivec H
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This article summarizes data from three studies (Mare, Lynn, Kvaal, Segal, & Sivec, in press; Lynn, Mare, Kvaal, Segal, & Sivec, 1993) designed to extend research on the "hidden observer" to two phenomena of clinical relevance: hypnotic dreams and suggested age regression. Subjects received suggestions for a hypnotic dream or age regression and then received suggestions for a "hidden observer" (i.e., the subject possesses a part of the self that is aware of images and ideas that the conscious mind is unaware of) with respect to the dream or age-regression experience. Hidden reports contained more personally relevant information than the target suggestions (i.e., dream, age regression). Subjects were also less likely to recall hidden reports. The high rate of hidden-observer responding (&gt;80%) was also evident in nonhypnotized simulating and relaxed subjects, although they did not exhibit as much primary process thinking in their dream reports as hypnotized subjects. Case studies of a trauma client and a forensic client are used to illustrate the clinical potential of hidden-observer suggestions.

Memory distortion and sexual trauma: the problem of false negatives and false positives
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Logically, two broad types of mnemonic errors are possible when adult psychotherapy or hypnosis patients reflect on whether they were sexually abused or not as a child. They may believe that they were not abused when in fact they were (false negative error), or they may believe they were abused when in fact they were not (false positive error). The author briefly reviews the empirical evidence for the occurrence of each of these types of errors, and illustrates each with a clinical case. Further, in considering the incidence, importance, and clinical implications of these errors, the author contends that clinical efficacy in no way assures that a false negative or a false positive has been avoided. A plea is made for theorists and researchers to acknowledge that both categories of errors can occur and to conduct future clinical and laboratory research accordingly.

Seizure suggestibility may not be an exclusive differential indicator between psychogenic and partial complex seizures: the presence of a third factor
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Differential diagnosis between psychogenic or ('hysterical') pseudoseizures and clinical partial complex seizures has often employed an index or inference of suggestibility. However, recent research indicates a moderate association between complex partial epileptic-like signs and hypnotic capacity in the normal population as well as for complex partial epileptic patients. Consequently, the precipitation of overt, non-stereotyped seizures by instruction may not be a reliable diagnostic method when an insidious process is slowly elevating temporal/limbic lobe lability. Implications for treatment and contra-indication of antipsychotic (D2 antagonist) drugs are discussed.

[Charcot and hysteria]
[Charcot et l'hysterie]
Rev Neurol (Paris) 1994 Aug-Sep;150(8-9):490-7 (ISSN: 0035-3787)
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Charcot's work on hysteria has always been controversial. All his attitudes, whether on the theory of the ovary, the
hysteroepileptic seizure or the use of hypnosis, have always been charicatured, misunderstood and separated from the wider context of his overall approach. Rereading Charcot's works shows that he developed his approach progressively over a period of more than 20 years before coming to his psychological model of hysteria. This model explains the formation of the symptom and the hysterical conversion via a mechanism of being ignorant of the motor representation. This concept has never been disproven and remains the only theory explaining the formation of the hysteria symptom. Based on Charcot's fundamental contribution, Freud and Janet further developed their work on the psychopathology of hysteria.

[0319]
Effects of hypnotic suggestions on ultraviolet B radiation-induced erythema and skin blood flow
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Results from both animal and human studies have indicated that inflammatory skin reactions such as the flare response to histamine prick test involve a neurogenic regulatory component. It is still unknown to which degree inflammation induced by ultraviolet (UV) radiation may be mediated by the central nervous system. To investigate this, the effect of hypnotic suggestions to increase and decrease the response to UVB radiation on erythema and cutaneous blood flow was investigated in 10 highly hypnotizable subjects. The results showed a significant effect of hypnotic suggestions on cutaneous blood flow compared with the responses of a control group. For erythema no conclusive evidence was found. The results indicate the possibility of separate regulatory mechanisms behind central nervous system influence on UVB-induced erythema and skin blood flow respectively, and further investigations are needed.

[0320]
Psychophysiological and clinical implications of the coincidence of high hypnotic ability and high neuroticism during threat perception in somatization disorders
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The electrophysiological response to cognitive threat of hypnotizable female patients with somatic symptoms and high on both hypnotic ability and neuroticism (H-H) was found to be significantly higher (p < .01) than that of a matched group of female patients moderate on hypnotic ability and low on neuroticism (M-L). On verbal report the H-H and the M-L groups did not differ, but they were significantly different on a measure of self-deception (L scale) or repression. The above findings are consistent with predictions from the High Risk Model of Threat Perception (HRMTP), which states that people in the H-H group are both chronically and acutely more reactive to threat than the people in the M-L group. This finding may have important theoretical, clinical, and financial implications for the diagnosis, therapy, and prevention of somatization disorders seen in primary medical care.

[0321]
Multiple identity enactments and multiple personality disorder: a sociocognitive perspective
Psychol Bull 1994 Jul;116(1):143-65 (ISSN: 0033-2909)
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People who enact multiple identities behave as if they possess 2 or more selves, each with its own characteristic moods, memories, and behavioral repertoire. Under different names, this phenomenon occurs in many cultures; in North American culture, it is frequently labeled multiple personality disorder (MPD). This article reviews experimental, cross-cultural, historical, and clinical findings concerning multiplicity and examines the implications of these findings for an understanding of MPD. Multiplicity is viewed from a sociocognitive perspective, and it is concluded that MPD, like other forms of multiplicity, is socially constructed. It is context bounded, goal-directed, social behavior geared to the expectations of significant others, and its characteristics have changed over time to meet changing expectations.

[0322]
Retrieval inhibition in directed forgetting and posthypnotic amnesia
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In Experiment 1, subjects received either by word or by list directed forgetting or posthypnotic amnesia instructions. Recall and recognition performance of subjects who received directed forgetting instructions was consistent with previous findings reported by Basden, Basden, and Gargano (1993), with subjects who received by word instructions showing both recall and recognition deficits for to-be-forgotten items. By contrast, subjects who were given by list instructions showed recall but no recognition deficits, which suggests that although differential encoding underlies word method directed forgetting, retrieval inhibition underlies list method directed forgetting. Subjects who received posthypnotic amnesia instructions (irrespective of method of delivery used) showed recall deficits but no recognition deficits, which suggests that retrieval inhibition underlies posthypnotic amnesia. In Experiment 2, recognition scores were lower with public (oral) tests than with private (written) tests, and recovery was equivalent for to-be-forgotten and to-be-remembered items. The results
are interpreted as inconsistent with the differential tagging mechanisms proposed by Huesmann, Gruder, and Dorst (1987).

[0323] Apnea in postsurgical hypnotherapy of an esophageal cancer patient: a brief communication
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Use of clinical hypnosis in the postsurgical psychotherapy of an esophageal cancer patient who could not swallow involved reenactment of the successful surgery and producing hallucinations of taste and smell, as well as working through emotions related to the surgery and her disease. An apnea that occurred in a late phase of the treatment was addressed with the familiar arm pumping technique that had been used as a deepening technique, resulting in the patient's resuming normal breathing. The experience reminds the practitioner of the possible unexpected professional demands when working in a medical environment. It also provides clues as to the underlying psychological mechanisms and their role in successful symptom removal. A 6-year follow-up confirmed the lasting effect of this brief psychotherapy.

[0324] A controlled investigation of right hemispheric processing enhancement after restricted environmental stimulation (REST) with floatation
Psychol Med 1994 May;24(2):457-62 (ISSN: 0033-2917)
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Two groups of 16 subjects, 8 of each gender, were examined on two occasions, one group before and after restricted environmental stimulation with floatation, and the other group without floatation was the control group. They were examined with a tactile object discrimination task carried out with each hand separately while blindfolded, and with a recognition memory test for words and unfamiliar faces, a test validated on neurological patients with left and right hemispheric lesions respectively. Consistent with both tasks the floatation group showed a significantly greater enhancement of right hemispheric processing after floatation than was found when retesting the controls. The results were distinguished from previous research on hypnosis where the same relative state of hemispheric imbalance was achieved with the same tasks, but largely through inhibitory influences on the left hemisphere.

[0325] Pseudomemory in hypnotized and simulating subjects
Int J Clin Exp Hypn 1994 Apr;42(2):118-29 (ISSN: 0020-7144)
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High hypnotizable (n = 23) and low hypnotizable simulating (n = 13) subjects received pseudomemory suggestions. High hypnotizable and low hypnotizable simulating subjects were equally likely to pass the target noise suggestion during hypnosis and were also equally likely (high hypnotizables, 47.83%; low hypnotizable simulators, 64.29%) to report pseudomemories when tested for pseudomemory after instructions to awaken. As in previous research with task-motivated subjects, pseudomemory rate (high hypnotizables, 47.48%; low hypnotizable simulators, 46.15%) was not reduced by informing subjects that they could distinguish fantasy and reality in a nonhypnotic state of deep concentration. At final inquiry, after deep concentration, high hypnotizable and low hypnotizable simulating subjects' pseudomemories remained comparable (43.48% and 38.46%, respectively). Unlike previous research, high hypnotizable subjects did not report more unsuggested noises and more pseudomemories of novel sounds than did awake low hypnotizable simulating subjects. Pseudomemory reports were generally consistent with subjects' ratings of whether the hypnotist expected them to believe the sounds were real or imagined.

[0326] Dissociative tendencies and dissociative disorders
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Although dissociative disorders are relatively rare, dissociative experiences are rather common in everyday life. Dissociative tendencies appear to be modestly related to other dimensions of personality, such as hypnotizability, absorption, fantasy proneness, and some facets of openness to experience. These dispositional variables may constitute diathesis, or risk factors, for dissociative psychopathology, but more complex models relating personality to psychopathology may be more appropriate. The dissociative disorders raise fundamental questions about the nature of self and identity and the role of consciousness and autobiographical memory in the continuity of personality.

[0327] Cognitive-behavioral interventions for children's distress during bone marrow aspirations and lumbar punctures: a critical review
J Pain Symptom Manage 1994 Feb;9(2):96-108 (ISSN: 0885-3924)
Children with cancer often have difficulty coping with the invasive medical procedures that are part of diagnosis and treatment. Bone marrow aspirations and lumbar punctures are painful and cause some children severe anxiety and distress. The increased risk and expense of general anesthesia and the relative ineffectiveness of sedatives and anxiolytics has prompted clinicians to examine nonpharmacologic methods for controlling pain and distress. This report critically examines intervention studies that focus on cognitive-behavioral strategies such as distraction, imagery, or hypnosis for reducing procedural distress in children with cancer.

Psychological preparation for pediatric oncology patients undergoing painful procedures: a methodological critique of the research
Child Health Care 1994 Winter;23(1):51-67 (ISSN: 0273-9615)
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Hypnosis and cognitive-behavioral packages are effective in preparing pediatric oncology patients for bone marrow aspiration and lumbar puncture. However, the relative efficacy of different preparations has not been determined, and potent components of preparation packages have yet to be identified. Further, factors hypothesized to moderate effectiveness of preparation (e.g., cognitive development) have not been investigated. Finally, due to a failure to employ process measures, the extent to which hypothesized mediators of behavior change (e.g., self-efficacy) are modified by preparation is unclear. Following an overview of empirical investigations, we make recommendations for addressing these limitations in future research.

Archetypal healing
Am J Hosp Palliat Care 1994 Jan-Feb;11(1):26-33 (ISSN: 1049-9091)
Jones D; Churchill JE

With emphasis on healing versus curing, the authors draw from a wide assortment of treatment methods for psychospiritual relief of pain in the terminally ill. These archetypal methods include: life-review therapy; ministry of presence; clinical hypnosis; myths, symbols, rituals, and community; creative therapies. In life-review therapy, the ill person shares his/her life story with the provider much like the healing rituals of the ancient storyteller did in his community. In the ministry of presence, the caregiver focuses on sharing his vulnerability, not his professional skills. Clinical hypnosis emphasizes the naturalness and simplicity of accessing the unconscious along with problem areas of the hypnoclinician. Myths, symbols, rituals, and community serve as nurturing agents in the intervention of pain, while creative therapies such as music, drama, crafts, and art continue to be powerful healing instruments. Archetypal healing produces relief of pain in the caregiver, as well as the ill, with emphasis on healing versus curing.

Event-related potentials during hypnotic hallucination
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Event-related potentials were elicited by visual stimulation and recorded at frontal, central, and posterior scalp sites so as to study the psychophysiological process associated with hypnotic hallucination. Subjects were screened using two measures of hypnotic susceptibility (Harvard Group Scale of Hypnotic Susceptibility, Form A and the Stanford Hypnotic Susceptibility Scale, Form C). Seven high and 9 low hypnotizable right-handed females participated in the experiment. Eight intermediate hypnotizable right-handed females served as controls. Peak amplitudes and latencies of P1, N1, P2, N2, and P3 components were compared in two hypnotic conditions (obtained by means of hypnotic suggestions): stimulus enhancement and stimulus elimination. High hypnotizable subjects displayed a significant attenuation of the P1 and N1 amplitudes of the evoked response while experiencing stimulus elimination. The effect for the P1 component was greatest at the posterior sites compared to that found at the anterior and central sites. A similar trend across condition was also observed for P3 peak amplitude, even though the Group x Condition interaction was only marginally significant (p &lt; .07). During negative hallucination, P3 peak latency for high hypnotizables was shorter than that obtained during stimulus enhancement. This effect was more pronounced across the right hemisphere. These results are discussed in light of previous findings.

Hypnotic susceptibility, imaging ability, and the detection of embedded words within letters
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Two experiments were conducted to determine the role of hypnotic susceptibility level (high or low) and imaging ability (vivid or poor) in the performance of a visual search for words embedded within matrices of letters. In Experiment 1,
subjects searched for target words from a list; however, distractor words were also embedded in the matrices. Results indicated that subjects judged both high in hypnotic susceptibility and vivid in imaging ability demonstrated the fastest search speed with a greater percentage of target words found. These subjects also made fewer false alarm errors (locating distractor words not on the target list). The poorest performance was exhibited by subjects judged both low in hypnotic susceptibility and poor in imaging ability. The amount of variance accounted for by hypnotic susceptibility and imaging ability was approximately equal for each dependent measure. In Experiment 2, when subjects searched for target words from a list without distractor words embedded in matrices, similar results to those reported for Experiment 1 were produced, except that the percentage of words found was equivalent across groups. This was attributed to the elimination of potential false alarm errors. The results are explained in terms of the use of either a holistic or a detail strategy in the performance of a visual search.

[0332]
Psychiatric aspects of hyperemesis gravidarum
Psychother Psychosom 1994;61(3-4):143-9 (ISSN: 0033-3190)
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Hyperemesis gravidarum is a potentially dangerous disorder of pregnancy characterized by severe and protracted vomiting. It is suggested that psychosocial factors may have a role in determining whether the pregnant woman experiences a transient spell of mild vomiting or progresses towards the much rarer but more significant pernicious vomiting. Psychotherapy, hypnotherapy and behavior therapy have been reported to contribute to the treatment of patients with hyperemesis gravidarum. A review of the etiological factors as well as of the therapeutic approaches is presented.

[0333]
Changes in cellular immune function after immune specific guided imagery and relaxation in high and low hypnotizable healthy subjects
Psychother Psychosom 1994;61(1-2):74-92 (ISSN: 0033-3190)
Zachariae R; Hansen JB; Andersen M; Jinquan T; Petersen KS; Simonsen C; Zachariae C; Thesstrup-Pedersen K
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This article presents the results of two investigations, each measuring cellular immune function on 3 investigation days 1 week apart in 15 high and 15 low hypnotizable healthy subjects randomly selected for three groups: (1) a guided imagery group receiving instructions to enhance cellular immune function; (2) a relaxation group which did not receive instructions regarding the immune system, and (3) a control group. Study 1 investigated changes in monocyte chemotaxis (MC) and lymphocyte proliferative response (LPR) to three mitogens, while natural killer cell activity (NKCA) was measured in study 2. The results show similar patterns of brief decreases in LPR and NKCA immediately after intervention on all investigation days in both the imagery and relaxation groups. Increases in MC were found in both intervention groups on day 1. On a follow-up investigation day in study 2, a brief stress task yielded a slight increase in NKCA. In study 2, the control group showed decreases in NKCA similar to those observed in the two intervention groups. In general there were no significant changes in preintervention immune function throughout the investigation period. When comparing the effects in high and low hypnotizable subjects, we found that high hypnotizables showed greater decreases in LPR and NKCA than low hypnotizables. There are several inconsistencies between the results of the limited number of investigations studying the effects of guided imagery and relaxation on immune function. These differences may in part be explained by differences in methodology, time intervals between blood sampling, and subject characteristics such as age, health status and hypnotizability. The inconsistent results make it premature to make inferences about possible benefits of the application of these techniques in the treatment of immune related diseases, and further investigations are needed.

[0334]
Non-pharmacological approaches to the treatment of narcolepsy
Sleep 1994 Dec;17(6 Suppl):S97-102 (ISSN: 0161-8105)
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A way of evaluating the part played by non-drug treatments is to study cases of patients who discontinued stimulant medications but still came back for follow-up visits. Out of 40 patients with narcolepsy-cataplexy, three refused medication because their work was compatible with a regimen of naps (follow-up 1 year), and 10 stopped taking drugs when they could adapt nap therapy to a new life-style (follow-up 6.9 +/- 5 years). Three interrelated levels of non-pharmacological treatments of narcolepsy were examined: 1) Behavioral management, which includes: (A) structured sleep schedules; literature shows that a single long afternoon nap proffered greatest performance benefits in reaction time, significantly increased over a no-nap control condition, with no evidence of sleep inertia. The placement of this nap might yield better results if scheduled 1 hour before that of a normal subject. (B) Dietary factors: little is known about the effects of diet in narcoleptics; however, avoiding simple sugars will improve alertness in some patients. 2) Medical and psychiatric aspects of care. 3) Social factors as an interface between the patients and their environment.

[0335]
A cognitive-behavioral approach to temporomandibular dysfunction treatment failures: a controlled comparison
J Orofac Pain 1994 Fall;8(4):397-401 (ISSN: 1064-6655)
The effects of cognitive-behavioral treatment for patients with temporomandibular disorders were studied by comparing active treatment to a wait-list control condition. Patients were predominantly women and had been referred to the study after having poor response to dental/physical medicine care. Patients' conditions were evaluated pretreatment and posttreatment based on self-report measures of pain, distress, and jaw function problems. They were examined by a dentist who assessed pain-free opening, muscle palpation pain, and tenderness of the temporomandibular joints. The 5-week cognitive-behavioral treatment included relaxation training, self-monitoring of stressors, and cognitive coping strategies. Treatment had its greatest impact on improving mood, especially anxiety; however, there were some effects on the patients' experiences of pain.

The brain tryptophan hydroxylase activity in the sleep-like states in frog
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The activity of the rate-limiting enzyme of serotonin biosynthesis, tryptophan hydroxylase, was determined in the brain stem in awake frogs, and frogs in three sleep-like states: with plastic muscle tone (SLS-1), with rigid muscle tone (SLS-2), and with relaxed muscle tone (SLS-3). Significant decrease in the enzyme activity has been found in frogs in SLS-1 and SLS-2 compared to awake animals. The development in frogs a cataleptic-like immobility after treating the animals with rhythmic lighting was accompanied with a decrease in the brain tryptophan hydroxylase activity. These results provide strong evidence for the involvement of the brain serotonin in frogs in the control of evolutionary ancient sleep-like states, probably by the regulation of muscle tone.

Dissociated or fabricated? Psychiatric aspects of repressed memory in criminal and civil cases
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During the last decade, clinicians, courts, and researchers have been faced with exceedingly difficult questions involving the crossroads where memory, traumatic memory, dissociation, repression, childhood sexual abuse, and suggestion all meet. In one criminal case, repressed memories served as the basis for a conviction of murder. In approximately 50 civil cases, courts have ruled on the issue of whether repressed memory for childhood sexual abuse may form the basis of a suit against the alleged perpetrators. Rulings that have upheld such use underscore the importance of the reliability of memory retrieval techniques. Hypnosis and other methodologies employed in psychotherapy may be beneficial in working through memories of trauma, but they may also distort memories or alter a subject's evaluation of their veracity. Because of the reconstructive nature of memory, caution must be taken to treat each case on its own merits and avoid global statements essentially proclaiming either that repressed memory is always right or that it is always wrong.

Recovered-memory therapy and robust repression: influence and pseudomemories
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A subset of the psychotherapists practicing trauma-focused therapy predicate their treatment on the existence of a newly claimed, powerful form of repression that differs from repression as used in the psychoanalytic tradition and from amnesia in any of its recognized forms. Recovered-memory specialists assist patients to supposedly retrieve vast quantities of information (e.g., utterly new dramatic life histories) that were allegedly unavailable to consciousness for years or decades. We refer to the hypothesized mental mechanism as "robust repression" and call attention to the absence of evidence documenting its validity and to the differences between it and other mental mechanisms and memory features. No recovered-memory practitioner has ever published a full specification of the attributes of this mechanism. That is, the properties it would have to have for the narratives developed during therapy to be historically accurate to any significant degree. This article reports a specification of the properties of the robust repression mechanism based on interviews with current and former patients, practitioners' writings, and reports to researchers and clinicians. The spread of reliance on the robust repression mechanism over the past 20 years through portions of the clinical community is traced. While involved in therapy, patients of recovered-memory practitioners come to believe that they have either instantly repressed large numbers of discrete events or simultaneously repressed all information about abuse they may have endured for as long as a decade.(ABSTRACT TRUNCATED AT 250 WORDS).

Satanism, ritual abuse, and multiple personality disorder: a sociohistorical perspective
Mulhern S
During the past decade in North America, a growing number of mental health professionals have reported that between 25% and 50% of their patients in treatment for multiple personality disorder (MPD) have recovered early childhood traumatic memories of ritual torture, incestuous rape, sexual debauchery, sacrificial murder, infanticide, and cannibalism perpetrated by members of clandestine satanic cults. Although hundreds of local and federal police investigations have failed to corroborate patients' therapeutically constructed accounts, because the satanic etiology of MPD is logically coherent with the neodissociative, traumatic theory of psychopathology, conspiracy theory has emerged as the nucleus of a consistent pattern of contemporary clinical interpretation. Resolutely logical and thoroughly operational, ultrascientific psychodemonology remains paradoxically oblivious to its own irrational premises. When the hermetic logic of conspiracy theory is stripped away by historical and socio/psychological analysis, however, the hypothetical perpetrators of satanic ritual abuse simply disappear, leaving in their wake the very real human suffering of all those who have been caught up in the social delusion.

[0340]
Toward an intellectual history of transference, 1888-1900
Psychiatr Clin North Am 1994 Sep;17(3):559-70 (ISSN: 0193-953X)
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Freud's concept of transference was not the discovery of a solitary genius, but was an inspired, creative synthesis deeply rooted in the prevailing discourses of his time. In the nineteenth century, transference started out as a neurologic term; Freud used that concept of displacable energies in his neurologic writings as early as 1888. Then in Studies in Hysteria, Freud explained the basis by which ideas dissociated and made for a mesalliance with the physician. False connections such as transference were conceptualized along lines drawn by Charcot's school, and the concept of auto-suggestion that they used to explain the inherent suggestibility of a hysterical. In developing this 1895 model of transference, Freud strove to tame disquieting concerns about the epistemologic status of hysteria and hypnosis. It is the epistemologic anxiety created by accusations of iatrogenic suggestion as much as the sexual anxiety Szasz pointed to that prodded Freud to focus exclusively on the intrapsychic. It also may be the legacy of this epistemologic anxiety that accounts for the fact that until recently, psychoanalytic theoreticians have been hesitant to explore the effect that the real person of the analyst might have on the manifestations of transference. In the last years of the nineteenth century, Freud modified his theory of transference and built a place for it in his topographic model of mind. In the Interpretation of Dreams, Freud integrated the biologic and psychologic possibilities inherent in prior usages of ubertragung. By 1900, transference could theoretically refer to both a hypothesized displacement of quantifiable neuronal energies as well as the psychological phenomena Freud observed occurring between him and his patients. Perceptual theories of illusion like Helmholtz's provided Freud with a model that by analogy helped re-define transference as a central facet of irrational inner life. Transference in 1900 accounted for a patient's possible distortion of the person of the physician, but it also postulated a more general subjectification of consciousness and perception. In transference, a conscious perception could be as distorted by unconscious wishes as a day residue was in dreams. When Ida Bauer (a.k.a "Dora") stalked out of Freud's office, this newly empowered theory was in the metapsychological wings waiting to make meaning of her failed treatment. No longer was transference an unimportant mishap, a nuisance, or a theoretical aside. By 1900, transference was ready to stand, as it does today, at the core of psychoanalytic theory.

[0341]
Psychological components of effort sense
Med Sci Sports Exerc 1994 Sep;26(9):1071-7 (ISSN: 0195-9131)
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The perception of effort is multidimensional and it is governed by many physiological, psychological, and experiential factors. This paper deals with a discussion of selected psychological states and traits that are known to be correlated with the expression of effort sense. It has been shown that anxiety, somatic perception, depression, and neuroticism are associated with perceived exertion. Extroversion has been found to be inversely correlated with perceived exertion, and positively correlated with preferred exercise intensity. These empirical findings are congruent with theoretical expectations in each case. It has also been found that perception of effort can be increased and decreased in a systematic manner with various psychological interventions such as hypnotic suggestion, dissociative cognitive strategies, and imagery. Changes in effort sense can also be systematically modified by titrating exercise volume (e.g., overtraining, tapering), and this exercise-induced alteration in perception covaries with affective changes. The research reviewed in this paper supports the conclusion that effort sense is best conceptualized as a complex psychobiological construct as originally proposed by Borg three decades ago.

[0342]
Alternative medicine complements standard. Various forms focus on holistic concepts
Health Prog 1994 Sep;75(7):52-7 (ISSN: 0882-1577)
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Western or conventional medical practices are founded on the principle of Newtonian physics; the body is viewed as a
large clock whose broken parts are fixed or replaced. The placebo effect, hypnosis, psychoneuroimmunology, and spontaneous remission have recently inspired researchers to look beyond this mechanistic model toward a new paradigm of greater understanding regarding the entity we call "human beings." The premise of alternative medicine, based on the paradigm of whole systems, suggests that human beings are more than physical bodies with fixable and replaceable parts; they are a complicated network of pulsating energy frequencies often described in terms of a human aura. Western researchers now call this "the human energy field." Homeopathy, acupuncture, polarity healing, and the healing power of touch are only a few of the more common branches of holistic medicine that unite body, mind, and spirit for optimal health. The U.S. Congress has appropriated more than $2 million to the National Institutes of Health to research the validity of alternative or complementary medicines. In light of proposed changes in the healthcare system, alternative medicine may eventually be incorporated into the American structure of healthcare delivery. Proponents of holistic medicine agree that various forms of alternative medicine should be used to complement, rather than compete, with, the current accepted standard of healthcare.

[0343]
[Psychosomatic aspects of focal dystonia: two case reports]
[Psychosomatische Aspekte fokaler Dystonien: Zwei Fallbeispiele]
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Dystonic movements and other dyskinesias often cause diagnostic difficulties due to their complex symptomatology. Namely focal dystonias are frequently misdiagnosed as conversion reactions. Idiopathic dystonias are generally considered a nonstructural (neurobiochemical) disorder of the basal ganglia. Many case reports, however, have dealt with patients presenting with "atypical" dystonia whose symptoms were relieved by psychotherapy or hypnosis. We present the histories of two young women exhibiting focal dystonia emerging for the first time under circumstances of profound emotional trouble. We discuss the general difficulties in the diagnosis of dystonic movement disorders and review the criteria for the diagnosis of "psychogenic dystonia". The basal ganglia integrate limbic, proprioceptive and sensorimotor inputs to create emotionally and functionally appropriate voluntary movements. Therefore, the traditional dichotomy "psychogenic-somatogenic" appears to be inappropriate when applied to extrapyramidal movement disorders. In a psychosomatic understanding, the assumption of a psychogenic "trigger" for a somatic movement disorder does not mean a contradiction.

[0344]
Anodyne imagery: an alternative to i.v. sedation in interventional radiology
AJR Am J Roentgenol 1994 May;162(5):1221-6 (ISSN: 0361-803X)
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OBJECTIVE. Pain and anxiety are to be expected in patients undergoing interventional procedures, and they are usually treated by IV conscious sedation. Insufficient treatment of pain and anxiety can cause cardiovascular strain and restlessness, which may jeopardize the success of the procedure. On the other hand, pharmacologic oversedation can provoke respiratory and cardiovascular depression, thereby increasing the procedural risks and delaying the patient's recovery. We therefore evaluated a nonpharmacologic method, which we call anodyne imagery (anodyne: able to soothe or relieve pain; soothing the feelings; relaxing), as an alternative to the use of drugs in interventional radiology.

SUBJECTS AND METHODS. Anodyne imagery technique consists of conditioned relaxation, induction of a trance state, and guided processing of the patient's internal imagery. An intrapatient comparison of drug use was made in five patients who had equivalent procedures with and without anodyne imagery and an intergroup comparison was made between a group of 16 other patients undergoing anodyne imagery and a group of 16 control patients matched for factors affecting use of drugs and recruited from 100 interventional cases analyzed for patterns of drug use. For statistical analysis, drug unit scores (weighting: 1 mg of midazolam = 1 unit and 50 micrograms of fentanyl = 1 unit) were compared within patients by paired t-test and between groups of patients by analysis of variance in two-sided tests, with p less than .05 considered to be significant.

RESULTS. The 100 patients who did not have anodyne imagery received 0-6 mg of midazolam (median, 1.4 mg); 0-500 micrograms of fentanyl (median, 80 micrograms), and 0.5-9 drug units (median, 2.5). Drug administration was insignificantly affected by the physician conducting the procedure, the type of procedure, or the patient's age, but significantly increased with longer table times. Ten of the 21 patients undergoing anodyne imagery associated fear-provoking images with their interventional procedure that were generally intense, vivid, and dramatic. Intrapatient comparison showed significantly lower median drug use with anodyne imagery than without (0.1 vs 5.3 drug units, p = .01). Intergroup comparison also yielded significantly lower median drug use during procedures with anodyne imagery than without (0.2 vs 2.6 drug units, p = .0001). CONCLUSION. Patients having interventional radiologic procedures frequently experience intense and frightening imagery related to the procedure. Our initial experience with anodyne imagery suggests that this alternative method of analgesia can mitigate patients' anxiety and fears and reduce the amount of drugs used during interventional radiologic procedures, and thereby has the potential to improve procedural safety and increase the speed of recovery.

[0345]
Current concepts in the management of the irritable bowel syndrome
Rev Gastroenterol Mex 1994 Apr-Jun;59(2):127-32 (ISSN: 0375-0906)
Snape WJ
In the irritable bowel syndrome gastrointestinal tract motility is disturbed from the esophagus to the colon, causing pain and altered function. When colonic motility is abnormal, the patient can experience either constipation or diarrhea in addition to abdominal pain and bloating. In constipated patients the postprandial colonic motility can increase normally after eating or the colon can remain motionless. Generally propagating contractions are absent in patients with constipation predominant irritable bowel syndrome. Propagating contractions are increased in frequency in patients with diarrhea, although the phasic contractions are decreased. Questionnaires are absent in patients with structural disease such as ulcerative colitis and patients with functional disease, however they cannot differentiate between the different subgroups of patients with constipation predominant irritable bowel syndrome. Treatment strategies are beginning to focus on the underlying pathophysiologic abnormality.

[0346]
The variability of type I hypersensitivity reactions: the importance of mood
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Immediate (Type I) hypersensitivity skin reactions to allergens or antigens have been used as immune measures that may be subject to intentional modulation. In preliminary experiments using hypnosis we encountered unacceptably large, uncontrollable variability. A method was subsequently devised in which serial, five-fold dilutions of allergen or histamine were administered to the subject's forearm and reactions were recorded photographically on slide film. Areas were determined by computer-assisted image analysis. Seven healthy volunteers were tested for eight sessions (testing included mood scales, blood pressure, pulse and skin temperature). Mean wheal size and titration gradient data from allergen reactions correlated strongly with the psychological factor of liveliness but not stress, although no manipulation of mood was involved. A stepwise regression analysis accounted for 61% of the variance of the allergen mean wheal data, and 31% was from the liveliness factor alone. Thus, the more lively the subject felt, the smaller was the allergic response.

[0347]
Pain and symptom control in paediatric palliative care
Cancer Surv 1994;21:211-31 (ISSN: 0261-2429)
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Important differences become evident in a comparison of cancer pain between children and adults. Management of pain in children is commonly multidisciplinary, is less dependent on invasive measures and relies more on systemic therapy. Children are not little adults: their immaturity, developing cognition and dependence all influence their experience and interpretation of pain. Much progress has been made in altering practices such as under-prescribing and underdosing that have adversely affected adequate control of pain in children. The challenge for paediatric health care providers in the mid 1990s is not only to be informed of current practices in pain and symptom control in paediatric palliative care, but also to remember to establish those practices in day to day management. Even though pain and its effects in children are now better understood, it is often still not managed optimally. Good management of pain in children depends on accurate assessment. In the past 10 years, assessment of pain in children has advanced considerably. However, assessment of pain in the preverbal child is still inadequate and in need of attention. Sedation, tolerance and involuntary movements may occur as side effects of opioids in children and may cause significant problems in management of the dying child. Psychostimulants can diminish sedation to some extent, but there is little information as yet on the value of these drugs in children. Tolerance to opioids may develop quickly, leading to poor control of pain and distress for the child. Strategies to improve management of tolerance include use of regional anaesthetic techniques such as the epidural/intrathecal route for opioid administration. Involuntary movements induced by opioids are uncommon but have the potential to cause significant distress. The mechanisms underlying these side effects of opioids need to be established. Strategies are needed for the effective treatment and prevention of these side effects. Neuropathic pain can be severe, distressing and difficult to treat. Experience of its treatment in terminally ill children is limited. Effective use of tricyclic antidepressants and systemically administered local anaesthetics is still to be determined. Regional anaesthetic techniques may be of great benefit when neuropathic pain cannot be controlled with systemic therapy. Procedural pain is more common than pain related to disease in the management of paediatric cancer. Further research is needed to identify the best approach to its management. We have found nitrous oxide to be of great benefit in management of procedural pain in children. Non-pharmacological methods of treatment of pain in children, such as transcutaneous electrical nerve stimulation or acupuncture, may also be useful and should receive continuing evaluation. There are significant and current issues in paediatric palliative care besides management of pain. There are difficulties in the provision of home nursing care for children with cancer in the terminal phase of their illness, including lack of community nursing services at night and on weekends and lack of adequate home help for parents. Attitudes of staff involved in the care of the child and family and their commitment to working as a multidisciplinary team strongly influence the quality and success of care given. Pain control and palliative medicine are evaluate by measures of quality assurance or outcome, and adoption of such evaluations should improve standards of care. Euthanasia in children is even more difficult as an ethical dilemma than in adults. Optimum symptom control with current techniques should almost always obviate its consideration. We are opposed to euthanasia. Psychosocial and cultural issues all influence the family's experience of palliative care. Further research is necessary in all of these areas. (ABSTRACT TRUNCATED).
Dissociative identity disorder (multiple personality) is increasingly diagnosed, often follows childhood trauma, and is characterized by rigidification of phenomena that resemble hypnosis. To interpret dissociated aspects of selfhood as autonomous entities is a useful heuristic; but when taken too literally, it leads to three kinds of anomaly: (1) legal: dissociators remain culpable for misdeeds carried out beyond apparent awareness or control; (2) clinical: legitimization sometimes leads not to relief, but to escalating cycles of regressive dependency; and (3) scientific: the form of dissociated entities varies with how they are defined, in ways that are intrinsically motivated and clinically manipulable. These anomalies yield to an evolutionary perspective that views dissociative identity disorder as an evolved strategy of adaptive deception of self and others; e.g., a beaten subordinate avoids further retribution by "pleading illness." Such a deceit best avoids detection when fully experienced; through its intensity and persistence, it becomes real at a new level. One's basic competencies remain intact, however, and are the source of the anomalies described. They can be clinically accessed and empowered, providing the key to therapeutically change when dissociative processes are problematic. Overall, despite clear impairment in subjective awareness and volition, dissociative-disordered individuals are best held fully accountable for the consequences of their actions.

Effects of hypnotic level, affect valence and cerebral asymmetry on reaction time (RT) in the discrimination of Ekman and Friesen's (1978) stimuli of angry and happy faces were studied in counterbalanced conditions of waking and hypnosis. Assessed previously on two hypnotic susceptibility scales [Harvard Group Scale of Hypnotic Susceptibility; Stanford Hypnotic Susceptibility Scale, Form C (SHSSC)], non-depressed subjects were 16 low (0-4 SHSSC) and 17 highly (10-12 SHSSC) hypnotizable, right-handed college students. Subjects were required to identify affects of faces, presented tachistoscopically to left (LVF) or right (RVF) visual fields, by using a forced-choice RT paradigm. Highs were significantly faster than lows in angry and happy affect recognition. Hypnosis had no significant effects. For highs only, angry emotional valence was identified faster when presented to the right hemisphere (LVF), but there were no significant hemispheric effects for happy emotional valence. For lows there were no hemispheric differences. Gender was a nonsignificant factor. Significant correlations showed that faster reaction times to angry and happy stimuli, in both LVF and RVF in waking and hypnosis, were obtained by subjects who reported more deeply absorbed and extremely focused and sustained attention on the Tellegen (1982) Absorption Scale and a subscale of the Differential Attentional Processes Inventory (Grumbles & Crawford, 1981). Vividness of Visual Imagery Questionnaire (Marks, 1973) and Affect Intensity Measure (Larsen, 1985), in general, did not correlate with RTs. The potential role of the fronto-limbic attentional system in the recognition of external visual sensory affect is discussed.

Clinical hypnosis is now an available tool for general practitioners. Hypnotists do not possess any magical powers. It is the patient who possess the magic; the hypnotist merely unlocks this power.

A meta-analysis was performed on 18 studies in which a cognitive-behavioral therapy was compared with the same therapy supplemented by hypnosis. The results indicated that the addition of hypnosis substantially enhanced treatment outcome, so that the average client receiving cognitive-behavioral hypnotherapy showed greater improvement than at least 70% of clients receiving nonhypnotic treatment. Effects seemed particularly pronounced for treatments of obesity, especially at long-term follow-up, indicating that unlike those in nonhypnotic treatment, clients to whom hypnotic inductions had been administered continued to lose weight after treatment ended. These results were particularly striking because of the few procedural differences between the hypnotic and nonhypnotic treatments.

The use of hypnosis in helping cancer patients control anxiety, pain, and emesis: a review of recent empirical studies
This is a review of the systematic studies conducted since 1980 in the area of hypnotic interventions for anxiety, pain, and emesis control in child and adolescent cancer patients. The focus of the present paper is on how the problems encountered in studying the use of hypnosis with this population influence the results. The review is divided between studies focused on controlling anxiety and pain and those focused on controlling nausea and vomiting. Consistent findings are identified, and suggestions for future research are made.

[0353]
Attribution of meaning: an ecosystemic perspective on hypnotherapy
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Although the concept of attribution of meaning has been used previously in theorizing about hypnosis, it was in the development of an ecosystemic conceptualization of hypnosis that it came to the fore as of major practical importance. The way clients and families think about themselves, about their problems, and about hypnosis has particular implications for hypnotherapy. In this paper a theoretical rationale for the development of the concept of attribution of meaning is provided. It is also shown, by means of case examples, how emphasis on the attributions made by clients can influence the manner in which particular hypnotherapeutic strategies are employed.

[0354]
Doctoral dissertations on hypnosis: 1980-1989
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This article extends Clark, Hungerford, and Reilley's (1984) review of dissertations accepted by American universities from 1923 to 1980 by examining dissertations of the 1980s. A table shows which areas of research received the most attention in each of the last 3 decades. There was an increase in the percentage of psychology and educational psychology researchers using hypnosis in dissertations.

[0355]
Incest memories recalled in hypnosis--a case study: a brief communication
Int J Clin Exp Hypn 1995 Apr;43(2):118-26 (ISSN: 0020-7144)
Nagy TF
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Accuracy of repressed memories recovered in hypnosis cannot be reliably determined with any greater certainty than non-hypnotically recalled events. Therefore, the practice of therapists' accepting hypnotically enhanced memories as veridical, absent corroborating evidence, is not advocated. A 52-year-old woman with a 27-year history of panic attacks and sleep disorder inadvertently recovered incest memories in hypnosis. Photographs and remembered events by other family members were thought by the patient to provide general support although they did not constitute actual proof of abuse. Implications are discussed.

[0356]
[Hypnosis in dentistry. I. Comparative evaluation of 45 cases of hypnosis]
[Fogorv Sz 1995 Mar;88(3):111-5 (ISSN: 0015-5314)]
Fabian TK
Semmelweis Orvostudomanyi Egyetem, Oralbiologai Tanszek, Budapest

The use of meditative state for hypnotic induction in the dental practice was investigated in 45 cases. In 38 cases (84.4%) the hypnosis was found as a useful additional method. It was especially useful to reduce anxiety, and in some psychosomatic diseases.

[0357]
Hypnosis as adjunct therapy in conscious sedation for plastic surgery
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BACKGROUND AND OBJECTIVES. Sedation is often requested during local and regional anesthesia. However, some surgical procedures, such as plastic surgery, require conscious sedation, which may be difficult to achieve. Hypnosis, used routinely to provide conscious sedation in the authors' Department of Plastic Surgery, results in high patient and surgeon satisfaction. The authors conducted a retrospective study to investigate the benefits of hypnosis in
supplementing local anesthesia. METHODS. The study included 337 patients undergoing minor and major plastic surgical procedures under local anesthesia and conscious intravenous sedation. Patients were divided into three groups depending on the sedation technique: intravenous sedation (n = 137) using only midazolam and alfentanil; hypnosis (n = 172), during which patients achieved a hypnotic trance level with age regression; and relaxation (n = 28), comprising patients in whom hypnosis was induced without attaining a trance level. In all three groups, midazolam and alfentanil were titrated to achieve patient immobility, in response to patient complaints, and to maintain hemodynamic stability. Midazolam and alfentanil requirements; intra- and postoperative pain scores; as well as pre-, intra-, and postoperative anxiety score, reported on a 10-cm visual analog scale, were recorded and compared in the three groups. RESULTS. Intraoperative anxiety reported by patients in the hypnosis group (0.7 +/- 0.11) and in the relaxation group (2.08 +/- 0.4) was significantly less than in the intravenous sedation group (5.6 +/- 1.6). Pain scores during surgery were significantly greater in the intravenous sedation group (4.9 +/- 0.6) than in the hypnosis group (1.36 +/- 0.12; P &lt; .001) and the relaxation group (1.82 +/- 0.6; P &lt; .01). Furthermore, midazolam requirements were significantly lower in the hypnosis group (P &lt; .001) and in the relaxation group (P &lt; .01) as compared with the intravenous sedation group: respectively, 0.04 +/- 0.002, 0.07 +/- 0.005, and 0.11 +/- 0.01 mg/kg/h. Alfentanil requirements were significantly decreased in the hypnosis group, as compared with the intravenous sedation group: 10.2 +/- 0.6 microgram/kg/h versus 15.5 +/- 2.07 micrograms/kg/h; P &lt; .001. In the relaxation group, alfentanil requirements were 14.3 +/- 1.5 micrograms/kg/h (ns). Postoperative nausea and vomiting were reported by 1.2% of patients in the hypnosis group, 12.8% in the relaxation group and 26.7% in the intravenous sedation group. Greater patient satisfaction with the anesthetic procedure and greater surgical comfort were also reported in the hypnosis group. CONCLUSIONS. Successful hypnosis as an adjunct sedation procedure to conscious intravenous sedation provided better pain and anxiety relief than conventional intravenous sedation and allowed for a significant reduction in midazolam and alfentanil requirements. Patient satisfaction was significantly improved.

Hypnosis in reproductive health care: a review and case reports
Birth 1995 Mar;22(1):37-42 (ISSN: 0730-7659)
Baram DA

Hypnosis has many applications in the field of reproductive health care. This paper describes its use in the treatment of sexual dysfunction, urinary incontinence, chronic pelvic pain, hyperemesis gravidarum, and pain relief in labor and delivery. Four case reports are used for illustration. Misconceptions about the risks and benefits of hypnosis are discussed. Information about training for clinicians in hypnosis is described.

[Effect of hypnosis and autogenic training on acral circulation and coping with the illness in patients with progressive scleroderma]
[Zum Einfluss der Hypnose und des Autogenen Trainings auf die akrale Durchblutung und die Krankheitsverarbeitung bei Patienten mit progressiver Sklerodermie (PS)]
Hautarzt 1995 Feb;46(2):94-101 (ISSN: 0017-8470)
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In 12 patients with systemic sclerosis the influence of hypnosis and autogenic training on the acral blood circulation and the coping with the disease was investigated in a pilot study. In the first step significant increases in the skin temperature of the finger (mean +/- SD: 3.9 +/- 1.2 degrees C) could be found after relaxation hypnosis. In the second step six patients (study group) gained experience with autogenic training. The other six patients served as control group. In the study group, the skin temperature of the fingers (short-term effect) was significantly higher than in the control group (1.9 +/- 1.0 degrees C). Long-term effects of the autogenic training (mean acral rewarning time, duration and course of the Raynaud attacks, acral lesions of the hands, psychosomatic status of complaints, type of relation to the disease as precondition for coping with the disease) were not found within the relatively short follow-up period of 4 months. Two patients, however, reported that they could shorten the duration of Raynaud attacks by autogenic training. In our patients heterogeneity and an increased score of multiple psychosomatic complaints were registered at the outset. As far as the type of relation to the disease is concerned, the patients could be assessed as almost adapted. Hypnosis and autogenic training can be recommended as complementary therapy in systemic sclerosis.

Hypnotic sex change: creating and challenging a delusion in the laboratory
J Abnorm Psychol 1995 Feb;104(1):69-74 (ISSN: 0021-843X)
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The authors suggested a change of sex to virtuoso, high-hypnotizable, and low-hypnotizable simulating participants in an application of the real-simulating paradigm of hypnosis. The experiences of sex change that participants reported during hypnosis were challenged through procedures of contradiction and confrontation. Behavioral and self-report data indicated that virtuosos experienced a transient delusion about their sex that was compelling and resistant to challenge. Implications are discussed for investigations of delusion through the use of hypnosis in the laboratory and for understanding delusion in the clinical setting.
Influence of "animal hypnosis" on the motor polarization dominant created by the action of DC anode on the cortical sensorimotor area was studied in rabbits. It was shown that "animal hypnosis" induced at the dominant optimum elicited long-term (up to 2-4 days) inhibition of motor reaction of the "dominant" limb to sensory test stimuli. Motor polarization dominant was inhibited rather than eliminated by the "animal hypnosis", since after extinction of trace processes of "animal hypnosis" the motor "dominant" reaction could be recovered solely by the test stimuli without repeated DC application.

The validity of repressed memories and the accuracy of their recall through hypnosis: a case study from the courtroom

For 100 years, repressed memories have remained an enigma and a defining point of conflict between various psychological disciplines. Since repressed memories are not readily available for conscious recall, the scientific proof of their existence remains elusive. At the present time, the only way to authenticate the existence of repressed memories is by a case report that documents the reality of the repressed event and then its recall after a period of amnesia. In the following case report, a subject on trial for murder had repressed the events surrounding the crime. Hypnosis was used to recover those memories. That information was then used to dramatically alter the outcome of the trial.

Hypnosis modelling in neural networks

In the framework of the neural network theory effects similar to hypnotic displays are constructed. They are based on the associative paradigm involving non-linear interaction of excitatory and inhibitory channels with synaptic memory. The non-linearity of long-term memorizing processes may cause effects exhibited by blind spots, which are interpreted as the first stage of hypnosis. More complicated phenomena are discussed in terms of a two-layer model.

Assessment of experimentally-induced pain effects and their elimination by hypnosis using pupillometry studies

Hypnotherapeutical technique were often used for control of pain. However, an objective examination of this phenomenon was seldom carried out. The aim of the study was the psychophysiological objectivation of the effect of experimental induced pain and the elimination of pain by means of hypnosis. 22 healthy volunteers (11 female and 11 male) aged between 22 and 35 years participated in the study. In the 1st phase of the experiment static pupillometry was carried out before randomized presentation of a light stimulus (143 lux, 0.3 sec) and of a pain stimulus (coldness-spray, -50 degrees C, 0.5 sec) respectively. Afterwards the dynamic pupillary measurement was done. Additionally the Fourier analyses of pupillary oscillations reflecting central nervous activation during the static measurement (25,6 sec) was calculated. In the 2nd phase the subjects were investigated by means of the same techniques during hypnosis with specific suggestions for elimination of pain. Under light condition as well as after induction of pain an autonomic deactivation could be observed during hypnosis. Furthermore under pain condition a central deactivation could also be found, reflecting the depth of the hypnosis and the reduced perception of pain.

Pseudo-epileptic seizures: hypnosis as a diagnostic tool

In this pilot study hypnosis was used in an attempt to provide evidence of a psychogenic component of pseudo-epileptic seizures. The criterion for psychogenesis was the reversal of the amnesia, which is often present in epileptic- and pseudo-epileptic seizures. The technique has been validated by a semi-blind referral of cases for analysis after the clinician had been able to make a firm diagnosis based on electro-encephalographic corroboration of the nature of the seizure. In eight out of nine patients (of the original 13 patients, three patients dropped out and one patient was not evaluable), the
experimental diagnosis corresponded with the clinical diagnosis. As pseudo-epileptic seizures can be characterized by their dissociative nature, a reasonable hypothesis is that patients with pseudo-epileptic seizures are more responsive to hypnosis than patients with epileptic seizures. Measurements of hypnotizability among seven patients with epileptic seizures and six patients with pseudo-epileptic seizures supported this supposition.

[0366]
[An EEG coherence analysis during the interaction of a motor polarization dominant and "animal hypnosis" in rabbits]
[Kogerentnyij analiz EEG pri vzaimodeistviy dvigatelej dominanty i "zhivotnogo gipnoza" u krolikov]
Zh Vyssh Nerv Deiat Im I P Pavlova 1995 May-Jun;45(3):521-9 (ISSN: 0044-4677)
Rusinova EV; Davydov VI

Intercorrelations of electrical activity of sensorimotor and premotor cortical areas of the right and left hemispheres were studied by means of coherence analysis during interaction of "animal hypnosis" and motor polarization dominant created by the action of DC anode on the area of the left hemisphere in rabbits. It was shown that the session of the "animal hypnosis" performed on the background of the optimum of polarization dominant elicited disappearance of asymmetry of coherence in the delta-range frequency of electrical activity of the examined cortical areas. After the end of hypnotic state and appearance of the motor reaction of the "non-dominant" right limb to the test stimulus, right-left asymmetry was again observed in coherence spectra of electrical activity of sensorimotor and premotor cortical areas. This phenomenon of was characteristic for the optimum of polarization dominant.

[0367]
Hypnotherapy as a treatment for atopic dermatitis in adults and children
Br J Dermatol 1995 May;132(5):778-83 (ISSN: 0007-0963)
Stewart AC; Thomas SE
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Eighteen adults with extensive atopic dermatitis, resistant to conventional treatment, were treated by hypnotherapy, with statistically significant benefit (P < 0.01) measured both subjectively and objectively, which was maintained at up to 2 years where results were available. Twenty children with severe, resistant atopic dermatitis were treated by hypnosis. All but one showed immediate improvement, which was maintained at the following two clinic appointments. In 12 children, replies to a questionnaire at up to 18 months after treatment, showed that 10 had maintained improvement in itching and scratching, nine in sleep disturbance, and seven maintained improvement in itching and scratching, nine in sleep disturbance, and seven maintained improvement in mood.

[0368]
First admission (1846) of hypnotic testimony in court
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The record of an 1846 trial for murder in New York state was reviewed. This was the first case in which testimony based on hypnosis (mesmerism) was admitted without objection in an American court of law. The allegations against the defendant were not supported by the evidence offered, and a verdict of not guilty was rendered.

[0369]
Client-centered hypnotherapy for tinnitus: who is likely to benefit?
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In this study we prospectively analyzed 41 patients, 15 females and 26 males with a mean age of 54, who underwent three sessions of client-centered hypnotherapy for their tinnitus. Of these patients, 28 (68%) showed some benefit for their tinnitus 3 months after completing their hypnosis, and 13 (32%) showed no evidence of improvement for their tinnitus. Hearing loss was associated with a nonbeneficial outcome for tinnitus treated with hypnotherapy. Of the nonbeneficial group, 46% had a hearing loss of 30 db or more in their better-hearing ear compared to less than 15% in the beneficial group, a significant difference (X2 = 6.34, df = 1, p &lt; 0.02). Client-centered hypnotherapy can be offered to anyone who wants to have therapy for their tinnitus; in those with significant hearing loss the benefit may be less.

[0370]
The use of the Crasilneck Bombardment Technique in problems of intractable organic pain
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The Crasilneck Bombardment Technique consists of six diversified methods of hypnotic inductions used consecutively within one hour; it has been used with a series of recalcitrant pain patients. The six sequential systems, used 7 to 10 minutes each, include (1) relaxation, (2) displacement, (3) age regression, (4) glove anesthesia, (5) hypnoanesthesia, and (6) self-hypnosis. The 12 consecutive patients, all of whom manifested severe organic pain problems, had not responded
to any form of treatment, including standard hypnosis techniques. Ten of the twelve patients responded positively to the Bombardment Method. One year posttreatment, patient estimates of pain control ranged from 80% for minimal relief to 90% for maximum relief most of the time. The types of intractable pain treated were six headaches, three backaches, one arthritic pain, one postherpetic neuralgia pain problem, and one temporomandibular joint pain.

[0371]
The admissibility of hypnotic evidence in U.S. Courts.
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For the past two decades, the American judiciary has confronted the admissibility of hypnotic evidence in criminal prosecutions. These courts have uniformly rejected the admissibility of out-of-court statements made while an individual is in hypnosis. In contrast, the courts divided sharply over the admissibility of hypnotically refreshed testimony. Some courts adopted a per se rule of exclusion; these courts, however, also carved out exceptions for testimony based on prehypnotic memory and testimony of the accused. Courts admitting hypnotically refreshed testimony adopted three different positions: (a) a "credibility" approach, which left the reliability issue to the jury; (b) a "discretionary admission" approach, which left the reliability issue to the trial judge; and (c) a "procedural safeguards" approach. In addition, constitutional concerns played an influential role in some of these cases. This diversity in the case law often resulted from a judicial failure to understand the scientific research on hypnosis. Courts have also considered the use of hypnosis as a basis for expert testimony about an accused's mental state. Unless the advantages of hypnotically refreshed testimony are significant, why add more problems?

[0372]
The illusion of familiarity: an alternative to the report-criterion account of hypnotic recall
Int J Clin Exp Hypn 1995 Apr;43(2):194-211 (ISSN: 0020-7144)
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Hypnosis increases the likelihood that participants will report incorrect material at higher levels of confidence. One interpretation of such data is that hypnosis induces individuals to lower the criterion they use to make memory reports. A lowered report criterion could account for the increase in items that participants are willing to report as memories but not for the increase in confidence that typically accompanies hypnotic retrieval. Although some participants may indeed lower their report criterion, this alone should not result in the highly confident confabulation so often observed. An alternative perspective is that for some participants, hypnosis alters the experience of retrieval such that items generated during retrieval attempts are more likely to have the qualities (e.g., perceptual fluency, vividness) usually associated with remembering. This illusion of familiarity would account for the higher levels of confidence that are so frequently observed in hypnotic recall, and adopting this perspective should lead to even greater caution in the use of hypnosis as an aid to retrieval.

[0373]
Hypnosis, childhood trauma, and dissociative identity disorder: toward an integrative theory
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It is contended that prevailing exogenous trauma theory provides in most cases neither a sufficient nor a necessary explanation for the current large number of diagnosed cases of dissociative identity disorder (multiple personality disorder) and related dissociative syndromes purported to have arisen as a response to severe early childhood physical and sexual abuse. Relevant aspects of instinctual drive theory, ego psychology, object relations theory, self psychology, social psychological theory, sociocultural influences, and experimental hypnosis findings are drawn on to demonstrate the importance of adopting a more integrative theoretical perspective in the diagnosis and treatment of severe dissociative syndromes. Further cooperative experimental and clinical research on the etiology, prevalence, and clinical manifestations of the group of dissociative disorders is strongly encouraged.

[0374]
Imagination training: a tool with many uses
Contemp Pediatr 1995 Feb;12(2):22-6, 29-30, 32 passim (ISSN: 8750-0507)
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Guided imagery, self-hypnosis, and related strategies can help improve patient comfort during medical procedures. Use them to relieve pain and nausea, control heightened anxiety and phobias, and generally make the office visit easier for everyone.

[0375]
EEG concomitants of hypnosis and hypnotic susceptibility
J Abnorm Psychol 1995 Feb;104(1):123-31 (ISSN: 0021-843X)
Electroencephalograph (EEG) measures described high- and low-hypnotizable participants in terms of 3 conditions: an initial baseline period; baselines preceding and following a standard hypnotic induction; and during the induction. The following results were obtained. 1. High and low-hypnotic susceptible participants displayed a differential pattern of EEG activity during the baseline period, characterized by greater theta power in the more frontal areas of the cortex for the high-susceptible participants. 2. In the period preceding and following a standardized hypnotic induction, low-susceptible participant displayed an increase in theta activity, whereas high-susceptible participants displayed a decrease. 3. During the actual hypnotic induction itself, theta power significantly increased for both groups in the more posterior areas of the cortex, whereas alpha activity increased across all sites. Implications of these data include the possibility of psychophysiological measures offering a stable marker for hypnotizability, and anterior/posterior cortical differences being more important than hemispheric foci for understanding hypnotic processes.

We evaluated predictions derived from the ultradian theory of hypnosis regarding the effects of temperature, light, trance length, and time of day on reported trance depth in 95 college undergraduates. Temperature and light showed no relation to trance depth. However, as predicted by ultradian theory, subjects who were kept in trance for 15 minutes reported greater trance depth than those who experienced a 5-minute trance. Time of day interacted with subjects' self-reported time of peak alertness in the following way: Subjects who reported greatest alertness in the morning achieved greater trance depth in the morning than in the evening, whereas those subjects who reported greater evening alertness reported deeper trance in the evening than in the morning. This latter finding was inconsistent with ultradian theory and prior research. Alternative explanations for this finding are discussed. Overall, the results from the present study do not provide strong support for Rossi's ultradian theory of hypnosis.

The effects of the Carleton Skills Training Program (CSTP) on hypnotizability were compared to those of a modified training program in which instructions for physical enactment of the response were omitted. After training, subjects in the original CSTP reported an increase in the extent to which they intentionally enacted suggested behaviors. In contrast, subjects in the modified training program reported increased fantasy without voluntary physical enactment. Nevertheless, both training programs increased behavioral and subjective responsiveness to suggestion, and there were no significant differences in response enhancement between the two programs. Across conditions, increases in behavioral and subjective responses to suggestion were correlated with increased use of fantasy. In contrast, increases in enactment were correlated only with compliance. The modified training program is recommended as a means of enhancing suggestibility with less likelihood than the original CSTP of engendering compliance.

Self-regulation therapy (Amigo, 1992) is a set of procedures derived from cognitive skill training programs for increasing hypnotizability. First, experiences are generated by actual stimuli. Clients are then asked to associate those experiences with various cues. They are then requested to generate the experiences in response to the cues, but without the actual stimuli. When they are able to do so quickly and easily, therapeutic suggestions are given. Studies of self-regulation therapy indicate that it can be used successfully to treat smoking.

Two studies investigated the relationship between mental imagery and hypnotizability, with the imagery measures administered in a hypnotic context. The correlation of hypnotizability with vividness of imagery was significant in one study, but not in the other; both correlations were significantly lower than that obtained between hypnotizability and absorption, assessed in the same samples. The correlations with control of visual imagery, and with various measures of
Experience in the use of hypnosis in complex treatment of 75 children with urologic diseases at an in-patient hospital is
generalized. In patients with total epispadias, exstrophy and trauma of the urinary bladder postoperative hypnotherapy
helped in training and restoration of micturition as a result of which a second operative intervention was not needed. After
removal of a drain which had been inserted for a long time for urethral stricture suggestions made during hypnosis allayed
fear and pain during micturition and thus significantly contributed to the restoration of this act. In children with
neurogenous urinary bladder and valve of the posterior urethra hypnotherapy was successfully applied after dissection or
cauterization of the valve to remove the syndrome of day and night urinary incontinence. Thus, the function of micturition
may be restored most fully only by an effect exerted on all links of the pathological process.

In this paper, non-pharmacological aspects of acute pain management were explored. Much of the research to date with
dis respect to pain management, has been done, addressing the needs of chronic rather than acute pain. It is thought that
misconceptions are still held by some health care professionals regarding the adequacy of pharmacology to deal totally
with the problems of acute pain management, and it is of more importance to concentrate on issues associated with
chronic pain. This is borne out by the relative attention paid to acute and chronic pain in the current body of research.
Some aspects of non-pharmacological methods of pain management have been well researched over the last 20 to 30
years, whilst others are more recent innovations. Non-pharmacological aspects of acute pain management were
examined under two headings: 1. Psychological approaches: including preoperative information giving, cognitive
methods, relaxation training, distraction, guided imagery, humour, hypnosis, music and biofeedback. 2. Complementary
therapies and other techniques: including both hands on and other physical therapies using equipment: massage,
aromatherapy, reflex zone therapy, acupuncture, shiatsu, therapeutic touch and TENS. There is a sound body of
knowledge to support the use of many of the established nonpharmacological methods in the management of acute pain.
These include: appropriate preoperative information giving, preoperative relaxation, guided imagery and breathing
training, cognitive reframing, distraction in both visual and auditory (music) forms, massage, acupuncture, TENS. Other
methods which may be of assistance in acute pain management but are inconclusive in their effect from the current body
of available research and may require further examination include: hypnosis, humour therapy, biofeedback techniques,
aromatherapy, reflex zone therapy, shiatsu, Therapeutic Touch.

Two cases of premenstrual sleep terrors and injurious sleep-walking
J Psychosom Obstet Gynaecol 1995 Jun;16(2):79-84 (ISSN: 0167-482X)
Schenck CH; Mahowald MW
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There are currently three recognized menstrual-related sleep disorders: premenstrual insomnia, menopausal insomnia
and premenstrual hypersomnia. Another category, premenstrual parasomnia (sleep behavior disorder), is now suggested.
Case 1, a 17-year-old female, presented with a 6-year history of exclusively premenstrual sleep terrors and injurious
sleep-walking that began 1 year after menarche. During the four nights preceding each menses, she would scream and
run from her bed. There was no history of premenstrual syndrome. Neurological evaluations had been unrevealing, apart
from mild mental retardation and attention deficit disorder; there was no psychiatric history. Polysomnography 3 days
before the onset of menses confirmed the diagnosis of sleep-walking. Pharmacotherapies were not satisfactory, but self-
hypnosis at bedtime was rapid effective with benefit sustained at 2.5-year follow-up. Case 2, a 46-year-old woman
without psychiatric disorder, presented with a 5-year history of sleep terrors and injurious sleep-walking that initially was
not menstrually related, but beginning 8 months prior to referral, she developed an exclusively premenstrual parasomnia
that, after polysomnography, was partially controlled with bedtime self-hypnosis and clonazepam, 0.25 mg.

A case of a patient with multiple allergies to local anesthesia and who required extraction of a maxillary canine is
reported. The patient used her psychophysical capabilities to control the pain and anxiety associated with the surgery. A discussion of psychophysical pain control is presented.

[0384]
Hypnotizability and dissociativity in sexually abused girls
Child Abuse Negl 1995 May;19(5):645-55 (ISSN: 0145-2134)
Putnam FW; Helmers K; Horowitz LA; Trickett PK
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Research on the relation between hypnotizability and clinical dissociation has led to contradictory findings. Measures of hypnotizability and dissociation are only weakly correlated in general population samples, but studies of posttraumatic stress and dissociative disorders patients have found elevated levels of clinical dissociation and hypnotizability respectively. This study assesses the relationships among hypnotizability, clinical dissociation and traumatic antecedents in 54 sexually abused girls, ages 6-15 years, and 51 matched controls. Hypnotizability was assessed on initial evaluation and again in matched subsamples at one year using the Stanford Hypnotic Clinical Scale for Children. Clinical dissociation was assessed using the Child Dissociative Checklist. Abuse variables were extracted from Child Protective Services reports. There were no significant differences in hypnotizability between abuse and control subjects. There were significant differences in clinical dissociation initially and on 1-year retest. Hypnotizability and clinical dissociation were only weakly correlated (r(105) = .118, p = NS). However, in the abuse group, highly hypnotizable subjects were significantly more dissociative. Higher levels of clinical dissociation were associated with abuse by multiple perpetrators and co-presence of physical abuse independent of the sexual abuse. A small subgroup of "double dissociative" subjects, high in both hypnotizability and dissociativity, was identified. Double dissociation was associated with multiple perpetrators and earlier onset of sexual abuse.

[0385]
Non-opioid-based approaches to burn pain
J Burn Care Rehabil 1995 May-Jun;16(3 Pt 2):372-6 (ISSN: 0273-8481)
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Burn pain is almost always acute, and treatment strategies are often on the opposite end of the spectrum from chronic pain. However, many of the techniques developed for chronic pain can be useful for burn pain, particularly when the problem involves characteristics of both. The cognitive styles that patients bring to burn care and the manner in which they interpret nociception provide a rich source of intervention strategies. Learning theory can be extremely useful in pain control, particularly if such principles are structured into the overall manner in which care is provided (e.g., medication schedules and therapy approaches). Because patients in the burn unit often undergo significant distress, less conventional approaches such as hypnosis may assume a legitimate role. Finally, the needs of children have been neglected in the burn pain literature, and efforts on adjunctive techniques should also consider this population.

[0386]
Sexuality and the psyche
Aust Fam Physician 1995 May;24(5):785-9 (ISSN: 0300-8495)
Johnson D
Australian Society of Hypnosis

A lack of knowledge of human sexuality, on completing medical school, was the prompt to explore this area more fully. However, as more experience is gained in an area, more questions are raised, emphasising that the black and white approach taken in medical school is often inappropriate in human health.

[0387]
[Sleep and dreams in pictures]
[Schlaf und Traum im Bild]
Schweiz Rundsch Med Prax 1995 Apr 11;84(15):432-9 (ISSN: 1013-2058)
Stoll RT

Human life is divided into two thirds wakefulness and one third sleep. A newborn child sleeps to strengthen, the adult for regeneration. At the end of life man sinks down into the sleep of death: Hypnos and Thanatos are twin sons of the Queen of Night. Myths from different cultures are influenced by the experience of sleep and its inner world of pictures, the dreams. Artists, painters and sculptors let their visions float steadily into new pictures, and creatures of sleep formed out of diverse materials. Devine sleep, sleep for new life, sleep of health, creative sleep, prophetic sleep, sleep for revelation and for decisions.

[0388]
Strategies for autoregulation of peripheral skin temperature
Percept Mot Skills 1995 Apr;80(2):675-86 (ISSN: 0031-5125)
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The present study examined different mental strategies for effective and rapid regulation of skin temperature in adjacent areas. In the main study, subjects (N = 10) were asked to achieve mentally a maximal temperature difference between the right index and the right little fingers within 25 minutes. In a control group (N = 10), possible effects of a temperature-influencing device (cold and warm water bags on the left hand) on the right index and little fingers were examined. Because results were impressive, a series of similar studies was conducted. The results demonstrate the efficacy of mental strategies for a differential thermoregulation of adjacent skin areas (between 1 and 3 cm). Possible explanations and implications are discussed.

[0389]
Reducing smoking at the workplace: implementing a smoking ban and hypnotherapy
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Smoking cessation programs may be an important component in the implementation of worksite smoking policies. This study examines the impact of a smoke-free policy and the effectiveness of an accompanying hypnotherapy smoking cessation program. Participants in the 90-minute smoking cessation seminar were surveyed 12 months after the program was implemented (n = 2642; response rate = 76%). Seventy-one percent of the smokers participated in the hypnotherapy program. Fifteen percent of survey respondents quit and remained continuously abstinent. A survey to assess attitudes toward the policy was conducted 1 year after policy implementation (n = 1256; response rate = 64%). Satisfaction was especially high among those reporting high compliance with the policy. These results suggest that hypnotherapy may be an alternative smoking cessation method, particularly when used in conjunction with a smoke-free worksite policy that offers added incentive for smokers to think about quitting.

[0390]
Effects of a behavioral stress-management program on anxiety, mood, self-esteem, and T-cell count in HIV positive men
Psychol Rep 1995 Apr;76(2):451-7 (ISSN: 0033-2941)
Taylor DN

This study evaluated the effects of a behavioral stress-management program on anxiety, mood, self-esteem, and T-cell count in a group of HIV-positive men who were asymptomatic except for T-cell counts below 400. The program consisted of 20 biweekly sessions of progressive muscle relaxation and electromyograph biofeedback-assisted relaxation training, meditation, and hypnosis. Ten subjects were randomly assigned to either a treatment group of a no-treatment control group, and the 2 groups were compared on pre- to posttreatment changes in the dependent measures. Analysis showed that, compared with the no-treatment group, the treatment group showed significant improvement on all the dependent measures, which was maintained at a 1-mo. follow-up. Since stress is known to compromise the immune system, these results suggest that stress management to reduce arousal of the nervous system and anxiety would be an appropriate component of a treatment regimen for HIV infection.

[0391]
Hypnotically recalling dreams during analysis
Psychoanal Rev 1995 Apr;82(2):207-27 (ISSN: 0033-2836)
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This study described the procedure, the theoretical rationale, and clinical material relating to the hypnotic recalling of dreams during periods of protracted "dreamless" analyses. Two clinical examples were used to demonstrate the efficacy of using a special hypnotic procedure close to the analytic free-association method for the remembering or recalling the dreams. Discussion of the clinical material found: 1. the main factors contributing to a "dreamless" analysis were to be found in the transference-countertransference resistances of the analysis; 2. the justification for introducing the special hypnotic procedure as a parameter in the analysis was discussed and confirmed; 3. the remembering-recalling of the first dream-following the hypnotic intervention—lead to the recovery of a critical childhood memory; and 4. the parameter of using hypnosis as a method of breaking the intractable resistance of a "dreamless" analysis did not become an alien force which intervened whenever strong resistances appeared. On the contrary, it seemed to serve as a temporary therapeutic mechanism for allowing an energy shift to occur in the all-or-none defensive state of a "dreamless" analysis.

[0392]
A short unobtrusive hypnotic induction for assessing hypnotizability: II. Clinical case reports
Pekala RJ
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Three clinical cases illustrating the use of a brief hypnotic-assessment procedure (HAP) utilizing the Phenomenology of Consciousness Inventory (PCI) (Pekala, 1982, 1991c) are presented. The PCI-HAP consists of a 20-minute induction procedure, a short debriefing interview, and completion of the PCI by the client after the session. The procedure allows for the assessment of a client's hypnotizability level in a manner that is relatively unobtrusive and that generates phenomenological data to begin to help tailor a hypnotic intervention to the client. The use of the PCI-HAP for the three cases reviewed suggests that it can provide useful information about a client's hypnotizability level that I find helpful in...
In the present study we assessed a short-form hypnotic-induction procedure for determining hypnotic susceptibility. Eighty-four subjects completed a short hypnotic-induction procedure and afterwards completed two self-report phenomenological state instruments (the Phenomenology of Consciousness Inventory, PCI, Pekala, 1982, 1991c and the Phenomenology of Consciousness Inventory: Short Form, PCI:SF, Pekala, 1988) in reference to a sitting-quietly period embedded within the hypnotic-induction procedure. A week later the same subjects completed the Harvard Group Scale of Hypnotic Susceptibility (Shor & Orne, 1962) and the PCI in reference to a short, sitting-quietly interval embedded in the Harvard. Using a regression equation obtained from prior research (Pekala & Kumar, 1987), a Pearson r correlation of .51 was obtained between a predicted Harvard Group Scale (pHGS) score from subjects' subjective experiences of the first hypnotic-induction procedure and subjects' actual performances on the Harvard Scale. These results suggest the usefulness of using a 20-minute hypnotic-assessment procedure with a self-report instrument like the PCI to measure a client's hypnotic susceptibility.

Hypnotic analgesia reduces R-III nociceptive reflex: further evidence concerning the multifactorial nature of hypnotic analgesia

Mechanisms of hypnotic analgesia were investigated by examining changes in the R-III, a nociceptive spinal reflex, during hypnotic reduction of pain sensation and unpleasantness. The R-III was measured in 15 healthy volunteers who gave VAS-sensory and VAS-affective ratings of an electrical stimulus during conditions of resting wakefulness, suggestions for hypnotic analgesia, and attempted suppression of the reflex during non-hypnotic conditions. The H-reflex was also measured to monitor and control for general changes in alpha-motoneuron excitability. Hypnotic sensory analgesia was related to reduction in the R-III after controlling for changes in the H-reflex (R² = 0.51, P < 0.003), suggesting that hypnotic sensory analgesia is at least in part mediated by descending antinociceptive mechanisms that exert control at spinal levels in response to hypnotic suggestion. The relationship between hypnotic affective analgesia and reduction in R-III approached significance (R² = 0.26; P = 0.053). Reduction in R-III was 67% as great and accounted for 51% of the variance in reduction of pain sensation. In turn, reduction in pain sensation was 75% as great and accounted for 77% of the variance in reduction of unpleasantness. The results suggest that 3 general mechanisms may be involved in hypnotic analgesia. The first, implicated by reductions in R-III, is related to spinal cord antinociceptive mechanisms. The second, implicated by reductions in pain sensation over and beyond reductions in R-III, may be related to brain mechanisms that serve to prevent awareness of pain once nociception has reached higher centers, as suggested by Hilgard.

Biofeedback-aided hypnotherapy for intractable phobic anxiety

Phobically avoidant people need treatments that enable them to cope effectively with their task threats. Field-mastery techniques that emphasize the importance of cognitively and behaviorally active roles to be taken by both therapist and patient have been shown to be superior to the clinic-based exposure and encouragement approaches. This paper describes a treatment model used with patients who were refractory to any performance-based treatment because of various reasons, primarily intense fear of even the initial guided exposure. Biofeedback-aided hypnotherapy (BAH) was the integrated new treatment employed. It offered the simultaneous safety of the clinic, enhanced vivification of the feared situation, combined with continuous convincing feedback about the growing mastery. BAH may ease the fear associated with the binary leap from in-vitro treatment to actual exposure. This treatment offers an alternative to phobic patients who are too fearful to engage in any other effective treatment modality.

Taped therapeutic suggestions and taped music as adjuncts in the care of coronary-artery-bypass patients

A randomized, single-blinded, placebo-controlled trial examined the benefits of taped therapeutic suggestions and taped music in coronary-artery-bypass patients. Sixty-six patients listened to either suggestion tapes or music tapes, intraoperatively and postoperatively; 29 patients listened to blank tapes intraoperatively and listened to no tapes.
postoperatively. Half the patients who listened to a tape found it helpful. There were no significant differences between
groups in length of SICU or postoperative hospital stay, narcotic usage, nurse ratings of anxiety and progress,
depression, activities of daily living, or cardiac symptoms. There were no significant differences in these same outcomes
between the patients who were helped by the tapes and the patients not helped. These results suggest that if taped
therapeutic suggestions have a measurable effect upon cardiac surgery patients, demonstrating this effect will require
more detailed patient evaluations to identify subgroups of patients responsive to this type of intervention.

[0397]

Pseudomemories: the standard of science and the standard of care in trauma treatment
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The pseudomemory (PM) debate has focused on individuals who do not remember sexual abuse and later recover these
memories, often in therapy. This paper critically reviews experimental research on stress and memory and on
suggestibility and memory in terms of its applicability to PM production in therapy. Three different kinds of suggestibility
are identified—hypnotizability, postevent misinformation suggestibility, and interrogatory suggestibility. It is hypothesized
that interrogatory suggestibility alone or the interaction of all three pose significant risk for PM production. It is argued that
a better standard of science is needed before claims can be made about PM production in therapy, since no experimental
studies have been conducted on memory performance or suggestibility effects in therapy. However, the findings derived
from memory research on other populations, nevertheless, are useful to inform the standard of care in treating recovered
memory patients.

[0398]

Hypnotic analgesia, expectancy effects, and choice of design: a reexamination
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Previous research by Stam and Spanos suggests that if waking analgesia is followed by hypnotic analgesia, subjects
refrain from maximally responding during the waking trial so they report less pain under hypnosis (i.e., a "holdback
effect"). This hypothesis was re-examined using more stringent controls. Thirty-six highly susceptible subjects chosen by
a combination of the Harvard Group Scale of Hypnotic Susceptibility, Form A and the Stanford Hypnotic Susceptibility
Scale, Form C were randomly assigned to one of three treatment groups (waking analgesia followed by hypnotic
analgesia, waking analgesia followed by waking analgesia, or hypnotic analgesia followed by waking analgesia). Each
group received three 60-second immersions of cold pressor pain stimulation (baseline, Immersion 1, Immersion 2) and
rated pain using a magnitude estimation and a category rating scale. The obtained results failed to support the
hypotheses of a holdback effect or a "reverse-order holdback effect." Properties of within-subjects and between-subjects
designs were considered in explaining the superiority of hypnotic analgesia over waking analgesia typically found in
within-subjects models.

[0399]

Fluctuations in hypnotic susceptibility and imaging ability over a 16-hour period
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Within-subject variability for hypnotic susceptibility as measured by the Harvard Group Scale of Hypnotic Susceptibility,
Form A and for imaging ability as measured by the Vividness of Visual Imagery Questionnaire was determined over a 16-
hour period. Half of the subjects were day persons, those most alert during daytime hours (as determined by the
Alertness Questionnaire); the remaining subjects were night persons. For day persons, hypnotic susceptibility was
greatest at 10:00 a.m. and 2:00 p.m.; for night persons, susceptibility was greatest at 1:00 p.m. and between 6:00 p.m.
and 9:00 p.m. Imaging ability also varied as a function of time of administration. However, these peak periods occurred
before and after hypnotic susceptibility peaks. Such a pattern was interpreted as indicating the possible existence of an
ultradian cycle for imaging ability.

[0400]

Somatization. Concepts, data, and predictions from the high risk model of threat perception
J Nerv Ment Dis 1995 Jan;183(1):15-23 (ISSN: 0022-3018)
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Eighty-three consecutive patients with chronic somatic complaints seen prior to therapy were tested on the eight factors of
the High Risk Model of Threat Perception. Thirty-two percent were high and 28% were low on hypnotic ability, which is
more highs and lows than would be expected in a normal population. In the high and low hypnotic ability somatizers, the
distribution of somatic and psychological symptoms is significantly different from the moderate group. Counterintuitively,
hypnotic ability and major life change were orthogonal to all of the other risk factors. These findings are consistent with
eight of nine predictions from the High Risk Model of Threat Perception.
Augmenting sedation with hypnosis in drug-dependent patients
Anesth Prog 1995;42(3-4):139-43 (ISSN: 0003-3006)
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The successful use of conscious sedation in patients physically dependent on centrally acting drugs is problematic for the dental anesthesiologist because of the concomitant development of tolerance to standard sedative agents. Dosage requirements necessary to adequately sedate these patients are often higher than recommended and carry an increased risk of drug overdose. The following report summarizes our experience with 18 drug-dependent patients in whom hypnosis was employed in conjunction with a standard sedation regimen. Attempts to complete various dental procedures while employing sedation alone on these patients had previously failed. All patients exhibited highly fearful or phobic behavior toward dental treatment as assessed by the Corah Dental Anxiety Scale. If an intravenous sedative regimen (midazolam or diazepam plus methohexital) was employed, hypnotic induction preceded the administration of the sedative drugs. If an intramuscular sedative regimen was employed (meperidine plus promethazine), the hypnotic induction took place after drug administration. With the combined hypno-sedative approach, treatment outcomes were judged to be good or excellent in 11 of 18 patients. Interestingly, in five of seven patients for whom the treatment outcome was rated poor or fair, the possibility of tolerance or cross-tolerance existed between a drug being abused and the sedative regimen. In contrast, this possibility existed in only 1 of 11 patients with good or excellent treatment outcomes. We conclude that hypnosis can augment the effects of sedation in this patient population. However, it is also important to choose a sedative regimen where tolerance is unlikely to exist.

[Medical students and alternative medicine—a survey]
[Medizinstudenten und unkonventionelle Heilweisen—eine Befragung]
Gesundheitswesen 1995 Jun;57(6):345-8 (ISSN: 0941-3790)
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In the last decade, the growing interest and use of alternative healing methods among practitioners and patients has been documented in many empirical studies. The present inquiry of n = 140 undergraduate medical students at the University of Dusseldorf reveals a continually increasing knowledge of methods, self-experience as patients or lay persons, and an interest in learning one or more techniques. The highest interest in acquiring a working knowledge of a method is for acupuncture (55.7%), homeopathy (42.1%), autogenous training (24.9%), and reflex-zone therapies (11.4%). On a five-point-rating scale (3 = no effect) for estimated effectiveness, acupuncture, music therapy, autogenous training, massage, chiropractics (each 1.7) and homeopathy (1.9) ranked high, whereas esoteric methods like laying-on-of-hands (3.3), hypnosis (2.5) and ozone and oxygen therapies (2.9) were low. The average score of 2.1 for all alternative methods indicates that they are generally considered more effective than not. A shift from a bio-medical "paradigm" towards psychosomatic and biopsychosocial thinking can be hypothesized, since (body-) psychotherapies (2.0) and body therapies (1.7) are rated highly effective.

Psychotherapy and the recovery of memories of childhood sexual abuse: U.S. and British practitioners' opinions, practices, and experiences
Poole DA; Lindsay DS; Memon A; Bull R
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Licensed U.S. doctoral-level psychotherapists randomly sampled from the National Register of Health Service Providers in Psychology (Surveys 1 and 2, n = 145; Council for the National Register of Health Service Providers in Psychology, 1992) and British psychologists sampled from the Register of Chartered Clinical Psychologists (Survey 2, n = 57; British Psychological Society, 1993) were surveyed regarding clients' memories of childhood sexual abuse (CSA). The 3 samples were highly similar on the vast majority of measures. Respondents listed a wide variety of behavioral symptoms as potential indicators of CSA, and 71% indicated that they had used various techniques (e.g., hypnosis, interpretation of dreams) to help clients recover suspected memories of CSA. Across samples, 25% of the respondents reported a constellation of beliefs and practices suggestive of a focus on memory recovery, and these psychologists reported relatively high rates of memory recovery in their clients.

Alternative medicine and general practitioners. Opinions and behaviour
Can Fam Physician 1995 Jun;41:1005-11 (ISSN: 0008-350X)
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OBJECTIVE: To describe general practitioners' opinions and behaviour regarding alternative medicine. DESIGN: Cross-sectional survey of a random sample of Ontario and Alberta general practitioners. SETTING: General practices in Ontario and Alberta. PARTICIPANTS: A questionnaire was mailed to 400 general practitioners. Of the 384 eligible physicians,
Throughout medical history, suggestion is the oldest and most common method of relieving human distress and treating physical disease. One of the oldest Egyptian documents, the Ebers Papyrus (1552 BC) states, "Lay your hands upon him to quiet the pain in the arms and say that the pain will disappear." The psychogenic and therapeutic potency of Native American trance dances are also well documented. In a North American tribe practicing ancient traditions, such dances were found to produce an altered feeling for time, loss of conscious control, drastic emotional outbreaks, illusions, hypersuggestibility, and a deep feeling of restored youthfulness (Jilek, 1982). These and other historical documents show the deep historical connection between somatic and mental processes. From the viewpoint of a neurologist or a psychiatrist, a combination of somatic illness, depressive syndromes, organic psychosyndromes, and multimorbidity is frequent in elderly patients (Kortus, 1992). Thus, integrated psychotherapy in geriatric rehabilitation is necessary and useful. Practical psychotherapeutic methods are discussed in this manuscript.

The belief in the validity of the multiple personality concept is discussed in this article. Two scaffolding constructions are analyzed: dissociation and repression. As generally employed, these constructions grant no agency to the multiple personality patient. The claim is made that the conduct of interest arises in discourse, usually with the therapist as the discourse partner. In reviewing the history of multiple personality and the writings of current advocates, it becomes clear that contemporary users of the multiple personality disorder diagnosis participate in a subculture with its own set of myths, one of which is the autonomous actions of mental faculties. Of special significance is the readiness to transfigure imaginings into rememberings of child abuse, leading ultimately to the manufacture of persons. The implications for both therapy and theory of regarding the patient as agent in place of the belief that the contranormative conduct is under the control of mentalistic faculties are discussed.

The development of a new measure of dissociation using items from the Minnesota Multiphasic Personality Inventory-2 (MMPI-2; Butcher, Dahlstrom, Graham, Tellegen, & Kaemmer, 1989) is described. In Experiment 1, 525 college students were administered a measure of hypnotic susceptibility and completed several specialized measures of dissociation or dissociation-like experiences. The new measure, the North Carolina Dissociation Index (NCDI) demonstrated adequate internal consistency and good convergent validity. In Experiment 2, the NCDI demonstrated adequate internal consistency and test-retest reliability with a different sample of college students. Moreover, NCDI scores showed a relatively strong correlation with an interview-based measure of dissociative symptoms. In addition, a small sample of students with dissociative disorders had significantly higher NCDI scores than students with anxiety disorders and normal control subjects. In Experiment 3, 19 gang combat veterans were administered a semistructured diagnostic interview and the MMPI-2. Subjects who were diagnosed with Posttraumatic Stress Disorder (PTSD) scored significantly higher on the NCDI than subjects who did not have PTSD. The NCDI is intended primarily as a tool in settings where the MMPI-2 is routinely administered.

Treatment of nicotine dependence
Am J Health Syst Pharm 1995 Feb 1;52(3):265-81; quiz 314-5 (ISSN: 1079-2082)
Haxby DG
Drug and nondrug interventions used in treating nicotine dependence are reviewed. Tobacco use is the leading preventable cause of death in the United States. Risks of smoking-related disease and death decline sharply when smokers quit, but 26% of Americans continue to smoke. Most smokers find it extremely difficult to quit smoking because of their nicotine addiction. Nonpharmacologic interventions used to promote smoking cessation include behavioral therapy, setting a specific date for quitting, receiving advice to quit from a health care professional, follow-up visits to review progress, self-help approaches, group counseling, filtration devices, hypnosis, and acupuncture. The efficacy of these approaches ranges from substantial to almost nil. The only pharmacologic agent with FDA-approved labeling for use in smoking-cessation therapy is nicotine. When used in conjunction with appropriate nonpharmacologic interventions, nicotine-replacement therapy roughly doubles the rate of quitting obtained with placebo. Nicotine-replacement therapies consist of nicotine transdermal (patch) systems and nicotine chewing gum. The nicotine patch is the first-line replacement therapy because it is effective when accompanied by only minimal (as opposed to more intensive) nonpharmacologic interventions and because it is easier to use and comply with than gum. Clonidine, antidepressants, and buspirone require further study to determine what role, if any, they should play in the treatment of nicotine dependence. The stages of smoking cessation are precontemplation, contemplation, action, and maintenance; interventions are selected on the basis of the stage the smoker is in. Nicotine dependence is difficult to treat, but there are aids that boost a smoker's chances of quitting. Nicotine patches and chewing gum offer the most effective pharmacologic options, especially when combined with behavioral interventions and counseling.

[0409]
Introducing alternative/complementary healing to allopathic medical students
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We have designed a senior elective, Introduction to Alternative Medicine, to prepare our students better to practice in multicultural environments, and to expand their views of health and healing. We combined didactic lecture, films, first-hand experience with some methods, and observation of alternative practitioners in their offices/clinics. Students explored hypnosis, chiropractic, therapeutic touch, meditation, biofeedback, acupuncture, homeopathy, naturopathy, and massage therapy. Discussions of scientific efficacy, legal and ethical considerations, and the role of spirituality in health and healing focused on limitations of science-based approaches and reasons why alternative/complementary methods are popular with patients and allopathic physicians. We conclude that allopathic medical schools have an important role in reducing the isolation of their students from alternative health beliefs, practices, and systems of care that are common in our communities.

[0410]
Can children with spastic cerebral palsy use self-hypnosis to reduce muscle tone? A preliminary study
2000 Mar 21;2(2):93-96 (ISSN: 1096-2190)
Mauersberger K; Artz K; Duncan B; Gurgevich S
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A few scattered reports suggest self-hypnosis may be helpful in reducing muscle tone in children with spastic cerebral palsy (CP). These reports are largely anecdotal and offer little objective evidence. This study used the Biocomp 2000 biofeedback electromyogram device to measure the degree of muscle tension in two muscle groups before, during, and after hypnosis in four children with spastic quadriplegic CP. Three of the four children were able to show a very significant decrease in muscle tension while under "trance" and were able to use self-relaxation techniques when confronted with stressful situations. Two of the children also had athetoid or involuntary movements and each was able to better control those movements with the aid of hypnosis. All four children demonstrated improved functional abilities.

[0411]
The power of a musical instrument: Franklin, the Mozarts, Mesmer, and the glass armonica
Hist Psychol 2000 Nov;3(4):326-43 (ISSN: 1093-4510)
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In 1761 Benjamin Franklin invented the armonica (often referred to as the glass harmonica), an instrument designed to simplify the playing of the musical glasses. The instrument immediately became popular and inspired compositions by Wolfgang Mozart, who had the opportunity to hear and play one at the house of Franz Anton Mesmer. Armonica music was used by Mesmer in his seances, because he felt it could promote healing by propagating a mystical fluid that he called animal magnetism through the body. After Mesmer's theories were debunked by a highly respected panel of scientists, the armonica fell out of vogue. Because Franklin was on the panel that examined the discredited mesmerism, he indirectly contributed to his own invention's demise.

[0412]
Cardiovascular reactivity during hypnosis and hypnotic susceptibility: three studies of heart rate variability
Ray WJ; Sabsevitz D; De Pascalis V; Quigley K; Aikins D; Tubbs M
This paper was designed to examine the relationship between hypnotic susceptibility and cardiovascular measures, especially parasympathetic activity, in 3 separate studies. In these studies, neither heart rate nor heart rate variability differed between the high and low hypnotically susceptible individuals at the initial baseline. Furthermore, in the first study, experimental tasks designed to elicit differential sympathetic and parasympathetic cardiac responses demonstrated no interaction with hypnotic susceptibility. Overall, these 3 studies suggest that hypnotic susceptibility in itself is not associated with parasympathetic aspects of either basal cardiac states or cardiac responses. In addition, a hypnotic induction itself did not differentially influence parasympathetic activity for the high versus low susceptible individuals.

[0413]
Functional anatomy of hypnotic analgesia: a PET study of patients with fibromyalgia
Eur J Pain 1999 Mar;3(1):7-12 (ISSN: 1090-3801)
Wik G; Fischer H; Bragge B; Finner B; Fredrikson M
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Hypnosis is a powerful tool in pain therapy. Attempting to elucidate cerebral mechanisms behind hypnotic analgesia, we measured regional cerebral blood flow with positron emission tomography in patients with fibromyalgia, during hypnotically-induced analgesia and resting wakefulness. The patients experienced less pain during hypnosis than at rest. The cerebral blood-flow was bilaterally increased in the orbitofrontal and subcallosal cingulate cortices, the right thalamus, and the left inferior parietal cortex, and was decreased bilaterally in the cingulate cortex. The observed blood-flow pattern supports notions of a multifactorial nature of hypnotic analgesia, with an interplay between cortical and subcortical brain dynamics. Copyright 1999 European Federation of Chapters of the International Association for the Study of Pain.

[0414]
The complex 'whole': exploring homoeopathic and spiritual considerations
Bell F

Unlike the biomedical model, holistic health care takes a much broader view of what constitutes health and the responsibility for helping restore an individual's health. Homoeopathy addresses the physical, mental and emotional aspects of the whole individual, while alternative practices such as yoga, hypnotherapy and meditation can be described as 'functional' spiritual practices which demonstrate the taking of personal responsibility for health care to the individual.

[0415]
Hypnotherapy for crohn's disease. A promising complementary/alternative therapy
2000 Mar 21;2(2):127-131 (ISSN: 1096-2190)
Abela MB
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Crohn's disease is a nonspecific chronic syndrome of unknown origin for which, to date, no conventional (i.e., medical or surgical) cure exists. However, recent clinical case studies and anecdotal reports have shown that the use of different forms of hypnotherapy for the treatment of Crohn's have actually resulted in cures. This report reviews and compares the effectiveness of hypnotherapy in the treatment of Crohn's disease vis-a-vis current medical and surgical therapies, in addition to reviewing evidence of the modulation of immune function parameters by hypnosis, while providing support for current etiological hypotheses of Crohn's disease as an autoimmune disorder.

[0416]
Current Issues in Dissociative Identity Disorder
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Dissociative identity disorder (DID) is among the most challenging of mental disorders to diagnose and treat. It has also been the subject of many controversies in the field. The author first discusses how the disorder is defined and reviews the DSM-IV criteria for DID as well as concepts of identities, personalities, and personality states. A number of controversial areas are then discussed, including the epidemiology and etiology of DID, dealing with allegations of abuse, and whether to assess for DID and to deal with alters and trauma history in treatment. A variety of diagnostic approaches is described, including clinical interviews, mental status examinations, and screening and diagnostic instruments such as the Dissociative Experiences Scale (DES). The differential diagnosis of DID is reviewed. The disorders that it is most important to consider in the differential diagnosis of DID are other dissociative disorders, psychotic disorders, affective disorders, borderline personality disorder, partial complex seizures, factitious disorders, and malingering. The second half of the article deals with treatment issues. The author reviews the various stages toward the treatment of DID (e.g., strategical integralist, tactical integralist) and then discusses the stages of DID treatment as described by a variety of authors. Treatment issues related to different subgroups of DID patients are described. The author also presents a method for monitoring the flow of DID treatment. The article concludes with special discussions of selected topics such as working with alters, trauma and abreaction, hypnosis, and the use of medication. [Copyright Information:
Meditation, a wakeful hypometabolic state of parasympathetic dominance, is compared with other hypometabolic conditions, such as sleep, hypnosis, and the torpor of hibernation. We conclude that there are many analogies between the physiology of long-term meditators and hibernators across the phylogenetic scale. These analogies further reinforce the idea that plasticity of consciousness remains a key factor in successful biological adaptation.

Coronary artery bypass graft (CABG) surgery to bypass blocks in the vascular pipeline can correct an acute problem, but it doesn't treat the underlying disease. This cardiac surgical team from a leading medical center explains why and how music therapy, aromatherapy, hypnosis, diet, and other modalities can be used to complement and extend the effect of the surgical repair.

Burn pain can cause psychologic and functional difficulties, and is difficult to predict from wound depth. The initial painful stimulation of nerve endings by the burn with continued painful stimuli result in peripheral and central mechanisms causing amplification of painful stimuli, and the development of chronic pain syndromes that can be difficult to treat. In order to assess the effect of analgesic interventions it is essential to measure the patient's pain in a simple and reproducible manner. A number of tools exist for this measurement, ranging from longer and more detailed techniques such as the McGill pain questionnaire most suited to relatively stable pain, to visual analogue scores and picture-based scores for children. Pain management begins with the acute injury, with initial measures such as cooling of the burn and use of inhalational agents such as oxygen/nitrous oxide mixtures. On arrival in hospital, for any but trivial burns, intravenous opioids are appropriate and should be administered as small intravenous boluses titrated against effect. Following the initial resuscitation, pain may be divided into background pain and that associated with procedures. These often require different analgesic interventions. Background pain may be treated with potent intravenous opioids by infusion or patient controlled analgesia and then on to oral, less potent opioids, followed by other oral analgesics. Often drug combinations work best. More severe procedural pain may be treated with a variety of interventions from a slight increase in therapy for the background pain to more potent drugs, local blocks, or general anaesthesia. In addition to drug-based methods of managing burn pain, a number of nonpharmacologic approaches have been successfully employed including hypnosis, auricular electrical stimulation, massage, and a number of cognitive and behavioural techniques.
with psychotherapeutic approaches. Benzodiazepines should be used only with psychotherapy to teach better coping. Families or caregivers may need to learn behavior modification to minimize covert environmental rewards for NES. With proper diagnosis and treatment, about 45% of patients will become seizure-free, and another one third of patients will show reduced seizure frequency.

[0421]
Empirically supported treatments in pediatric psychology: nocturnal enuresis
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OBJECTIVE: To review the medical and psychological literature concerning enuresis treatments in light of the Chambless criteria for empirically supported treatment. METHOD: A systematic search of the medical and psychological literature was performed using Medline and Psychlit. RESULTS: Several review studies and numerous well-controlled experiments have clearly documented the importance of the basic urine alarm alone as a necessary component in the treatment of enuresis or combined with the "Dry-Bed Training" intervention, establishing them as "effective treatments." Other multicomponent behavioral interventions that also include the urine alarm such as "Full Spectrum Home Training" have further improved the outcome for bed-wetters, but are classified as "probably efficacious" at this time because independent researchers have not replicated them. Less rigorously examined approaches that focus on improving compliance with treatment or include a "cognitive" focus (i.e., hypnosis) warrant further study. CONCLUSIONS: We recommend a "biobehavioral" perspective in the assessment and treatment of bed-wetting and suggest that combining the urine alarm with desmopressin offers the most promise and could well push the already high success rates of conditioning approaches closer to 100%. Much important work is yet to be completed that elucidates the mechanism of action for the success of the urine alarm and in educating society about its effectiveness so that its availability is improved.

[0422]
Irritable Bowel Syndrome
Curr Treat Options Gastroenterol 1999 Feb;2(1):13-19 (ISSN: 1092-8472)
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I believe there are four essential elements in the management of patients with irritable bowel syndrome (IBS): to establish a good physician-patient relationship; to educate patients about their condition; to emphasize the excellent prognosis and benign nature of the illness; and to employ therapeutic interventions centering on dietary modifications, pharmacotherapy, and behavioral strategies tailored to the individual. Initially, I establish the diagnosis, exclude organic causes, educate patients about the disease, establish realistic expectations and consistent limits, and involve patients in disease management. I find it critical to determine why the patient is seeking assistance (eg, cancer phobia, disability, interpersonal distress, or exacerbation of symptoms). Most patients can be treated by their primary care physician. However, specialty consultations may be needed to reinforce management strategies, perform additional diagnostic tests, or institute specialized treatment. Psychological co-morbidities do not cause symptoms but do affect how patients respond to them and influence health care-seeking behavior. I find that these issues are best explored over a series of visits when the physician-patient relationship has been established. It can be helpful to have patients fill out a self-administered test to identify psychological co-morbidities. I often use these tests as a basis for extended inquiries into this area, resulting in the initiation of appropriate therapies. I encourage patients to keep a 2-week diary of food intake and gastrointestinal symptoms. In this way, patients become actively involved in management of their disease, and I may be able to obtain information from the diary that will be valuable in making treatment decisions. I do not believe that diagnostic studies for food intolerances are cost-effective or particularly helpful; however, exclusion diets may be beneficial. I introduce fiber supplements gradually and monitor them for tolerance and palatability. Synthetic fiber is often better-tolerated than natural fiber, but must be individualized. In my experience, excessive fiber supplementation often is counterproductive, as abdominal cramps and bloating may worsen. Antidiarrheal agents are very effective when used correctly, preferably in divided doses. I use them in patients in anticipation of diarrhea and especially in those who fear symptoms when engaged in activities outside the home. I encourage patients to make decisions as to when and how much to use. However, almost always, a morning dose before breakfast is used (loperamide, 2 to 6 mg) and, perhaps again later in the day when symptoms of diarrhea are prominent. I prefer antispasmodics to be used intermittently in response to periods of increased abdominal pain, cramps, and urgency. For patients with daily symptoms, especially after meals, agents such as dicyclomine before meals are useful. For patients with infrequent but severe episodes of unpredictable pain, sublingual hyoscyamine often produces rapid relief and instills confidence. In general, I recommend that oral antispasmodics be used for a limited period of time rather than indefinitely, and generally for periods of time when symptoms are prominent. For chronic visceral pain syndromes, I recommend small doses of tricyclic antidepressants. These agents are especially effective in diarrhea-predominant patients with disturbed sleep patterns but may be unacceptable to patients with constipation. I educate patients that side effects occur early and benefits may not be apparent for 3 to 4 weeks. I consider using SSRIs in low doses in patients with constipation-predominant IBS; cisapride, 10 to 20 mg three times per day, also may be beneficial. When taken with drugs that inhibit cytochrome P450, cisapride has been associated with serious cardiac arrhythmias caused by QT prolongation, including ventricular arrhythmias and torsades de pointes. These drugs include the azole fungicides; erythromycin, clarithromycin, and troleandomycin; some antidepressants; HIV protease inhibitors; and others. In patients with IBS with mild to moderate co-
morbid depression, I have found that the use of SSRIs such as paroxetine, fluoxetine, or sertraline may be beneficial. It is important to tell patients that anxiety and disturbed sleep may occur during the first 10 days and benefits may not occur for 3 to 4 weeks. I prescribe a small amount of a short-acting benzodiazepine such as alprazolam, 0.5 mg two times per day, to control these symptoms. For generalized anxiety without depression, buspirone or clonazepam may be useful. I have found that patients who also have associated panic disorder may benefit from a benzodiazepine, tricyclic antidepressant, or an SSRI. However, these patients are best managed in conjunction with a psychiatrist or psychologist. I consider the use of alternative therapies in patients who fail to respond to conventional measures and who are receptive to alternative strategies. These include general relaxation techniques such as biofeedback and hypnosis therapies.

[0423] Effects of an opioid antagonist on pain intensity and withdrawal reflexes during induction of hypnotic analgesia in high- and low-hypnotizable volunteers
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The aim of this investigation was to study the effect of suggestions of hypnotic analgesia on spinal pain transmission and processing. Pain intensity and amplitude of nociceptive withdrawal reflexes to electrical stimuli were measured in 10 high- and 10 low-hypnotizable subjects during two sessions taking place at least 24 h apart under five conditions of: (1) pre-hypnosis; (2) neutral hypnotic relaxation; (3) suggestions of hypnotic analgesia; (4) suggestions of hypnotic analgesia after injections of either naloxone (1 ml, 1 mg/ml) or saline (1 ml) under double-blind conditions; and (5) post-hypnosis. The conditions of naloxone or saline were allocated to random to either Day 1 or Day 2 in a double-blind fashion. Results showed significant reductions of pain intensity during hypnotic analgesia, and a significant reduction in nociceptive reflexes during hypnotic analgesia on Day 1 in the highly hypnotizable group. No differences were found for low-hypnotizable subjects. The results support previous findings that pain intensity as well as the nociceptive reflex can be modulated by suggestions of hypnotic analgesia. While no effect of naloxone on pain intensity was found during hypnotic analgesia, naloxone significantly reversed the suppressive effect of suggestions of hypnotic analgesia on reflexes in high-hypnotizable subjects. Subsequent analysis showed that the effect of naloxone was associated with the intensity of the stimulus needed to elicit a reflex, and was unrelated to hypnotic susceptibility when controlling for stimulus intensity. These results suggest that the effect of naloxone was related to the greater stimulus intensities needed to elicit a reflex in the high-hypnotizable group, rather than to hypnosis or hypnotic susceptibility in itself. It is unclear why greater stimulus intensities were needed in high-hypnotizable subjects and further studies are needed. Copyright 1998 European Federation of Chapters of the International Association for the Study of Pain.

[0424] Seven-Year Experience with Office Microlaparoscopy and Hysteroscopy
J Am Assoc Gynecol Laparosc 1996 Aug;3(4, Supplement);S16-7 (ISSN: 1074-3804)
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Since 1989 more than 1200 office-based endoscopies have been performed at our facility. Visualization was initially achieved with 1.6-mm optical catheters, but recently, we have used larger-diameter fiber and glass rod endoscopes. Ancillary instruments progressed from 5- to 2-mm diameters, although occasionally we used up to 20-mm cannula punctures. Anesthesia remained consistent, with local infiltration followed by conscious sedation given by an on-site anesthesiologist. Lately, alternative methods of anesthesia including hypnosis and acupuncture have had some initial success. To date, we have performed 156 tubal ligations, 293 diagnostic laparoscopies, 151 treatments of endometriosis, 43 ovarian cyst aspirations, 29 adhesiolyses, 263 second-look procedures, 21 ectopic pregnancy removals, 198 diagnostic hysteroscopies, 64 endometrial biopsies, 20 fibroid resections, and 39 endometrial ablations. Patient response has been rewarding, thanks to decreased time off work, decreased cost of procedures to health insurance carriers, and immediate satisfaction from the diagnosis and treatment of their conditions.

[0425] Blepharoplasty under hypnosis: a personal experience
Plast Surg Nurs 2001 Fall;21(3):143-5, 160 (ISSN: 0741-5206)
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This paper is a first-hand account of my experience undergoing upper and lower blepharoplasty surgery in which hypnosis was used as the primary sedative agent. It describes the basics of hypnosis. It also includes a description of how I prepared myself for surgery as well as how I helped the surgical team prepare for this surgery. Recommendations are offered for nurses who would like to incorporate hypnotherapy into the operating room.

[0426] Being "the other therapist": the varieties of adjunctive experience with hypnosis
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Clinicians who utilize hypnosis in their practices are frequently approached with requests to participate in the care of patients who are currently in treatment with a primary therapist. Surprisingly, a review of the literature indicated that no research has been done on this common practice. This article provides a discussion of some of the important issues as well as the variables to consider in deciding whether to enter into this arrangement. It will serve as a starting point in generating further research on this crucial topic.

Frontal lobe contributions to hypnotic susceptibility: a neuropsychological screening of executive functioning
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Current theory on the cognitive mechanisms of hypnotic experience suggests that hypnosis is mediated by a dissociation between contention-scheduling mechanisms and a supervisory attention system. This theory is based on neuropsychological research with frontal lobe dysfunction patients, who show performance deficits similar in executive functioning to hypnotized individuals. To test an extension of this theory, high hypnotically susceptible (n = 9) and low hypnotically susceptible (n = 7) participants were given four tests of executive functioning. In a baseline condition, high susceptible individuals performed significantly better on one of the four tests (the Wisconsin Card Sorting Test). The role of increased cognitive flexibility in hypnotic susceptibility is considered as a possible component of the dissociated control model of hypnosis.

Posthypnotic amnesia for material learned before or during hypnosis: explicit and implicit memory effects
Barinier AJ; Bryant RA; Briscoe S
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This article focuses on dissociations between explicit and implicit expressions of memory during posthypnotic amnesia (PHA). Despite evidence of such dissociations, experimental design in this area has not always been consistent with contemporary memory research. Within a paradigm that aimed for conceptual and methodological clarity, we presented 40 high and 38 low hypnotizable individuals with a word list either before or during hypnosis, gave them a PHA suggestion for the word list, and tested them on explicit and implicit memory tasks. In the absence of conscious recollection, highs showed equivalent levels of priming (perceptual and semantic) to lows. However, when analysis focused only on those highs who remained amnesic after the implicit memory tasks, we confirmed perceptual, but not semantic, priming. These findings highlight the impact of methodological choices on theoretical interpretations of memory performance following a suggestion for PHA.

Hypnosis in treating symptoms and risk factors of major depression
Yapko M

This article summarizes aspects of effective psychotherapy for major depression and describes how hypnosis can further enhance therapeutic effectiveness. Hypnosis is helpful in reducing common symptoms of major depression such as agitation and rumination and thereby may decrease a client's sense of helplessness and hopelessness. Hypnosis is also effective in facilitating the learning of new skills, a core component of all empirically supported treatments for major depression. The acquisition of such skills has also been shown to not only reduce depression, but also the likelihood of relapses, thus simultaneously addressing issues of risk factors and prevention.

Acupuncture and clinical hypnosis for facial and head and neck pain: a single crossover comparison
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Despite their long histories, acupuncture and hypnosis have only recently been acknowledged as valuable by the medical establishment in the U.S. Few studies have used rigorous prospective measurement to evaluate the individual or relative merits of hypnosis and acupuncture in specific clinical settings. In this study, 25 patients with various head and neck pain were studied. Each had an initial assessment of their pain, as well as of their attitudes and expectations. All patients received acupuncture, followed by a reassessment of their pain. After a washout period they received another assessment of pain before and after hypnosis therapy. Preferences for therapy were sought following the hypnotic intervention. Both acupuncture and hypnosis were effective at relieving pain under these conditions. The average relief in pain reported was 4.2 units on a ten point scale, with hypnosis reducing pain by a mean of 4.8 units, compared to 3.7 for acupuncture (p = 0.26). Patient characteristics appeared to impact the effectiveness of treatment: patients with acute pain benefited most from acupuncture treatment, whereas patients with psychogenic pain were more likely to benefit from hypnosis. Patients with chronic pain had more variation in their results. Patients who received healing suggestions from a tape during a hypnotic trance benefited more than those who received no such suggestion, and acupuncture patients who
were needle phobic benefited less than those who were not fearful of needles. This study demonstrates the benefits of well designed studies of the effectiveness of these alternative modalities. More work is needed to help practitioners identify which patients are most likely to benefit from these complementary therapies.

[0431]
Cellular and humoral immunity, mood and exam stress: the influences of self-hypnosis and personality predictors
Int J Psychophysiol 2001 Aug;42(1):55-71 (ISSN: 0167-8760)
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The effects of self-hypnosis training on immune function and mood were examined in medical students at exam time. Hypnosis involved relaxation and imagery directed at improved immune function and increased energy, alertness and concentration. Hypotheses were made about activated and withdrawn personality differences. Eight high and eight low hypnotically susceptible participants were given 10 sessions of hypnosis, one live and nine tape-recorded, and were compared with control subjects (N=12). CD3, CD4, CD8, CD19 and CD56 NK cells and blood cortisol were assayed. Life-style, activated vs. withdrawn temperament, arousal and anxiety questionnaires were administered. Self-hypnosis buffered the decline found in controls in NK (P<0.002) and CD8 cells (P<0.0.07) and CD8/CD4% (P<0.06) (45-35% order of magnitude differences) while there was an increase in cortisol (P<0.05). The change in NK cell counts correlated positively with changes in both CD8 cells and cortisol. Results were independent of changes in life-style. Energy ratings were higher after hypnosis (P<0.01), and increased calmness with hypnosis correlated with an increase in CD4 counts (P<0.01). The activated temperament, notably the cognitive subscale (speaking and thinking quickly), was predictive of exam levels of T and B lymphocytes (P<0.08-P<0.02), and reaching r=0.72 (P<0.001) in the non-intervention control group. The sizeable influences on cell-mediated immunity achieved by a relatively brief, low cost psychological intervention in the face of a compelling, but routine, stress in young, healthy adults have implications for illness prevention and for patients with compromised immunity.

[0432]
Posthypnotic responding: the relevance of suggestion and test congruence
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Thirty real, hypnotized subjects and 34 simulating, unhypnotized subjects were given either a suggestion to respond when they heard a cue (general) or a suggestion to respond when they heard a cue after hypnosis (posthypnotic). Half the subjects were given the cue during hypnosis (hypnotic test) and half were given it after hypnosis (posthypnotic test). Those who were given the cue during hypnosis were also given it after hypnosis. Between- and within-group comparisons were made of subjects' behavioral responses, latencies to respond, and ratings of experiential compulsion. The findings indicated that subjects' behavior and experience were influenced by congruence between information conveyed by the suggestion and the test about when and how they should respond.

[0433]
Differentiation of hypnosis and relaxation by analysis of narrow band theta and alpha frequencies
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Narrow band theta and alpha activity were recorded over anterior and posterior sites before, during, and after hypnosis in high and low hypnotically susceptible subjects (N = 16). In theta, high susceptibles had greater activity posthypnosis, otherwise there were no group differences. These findings common to low and high susceptibles suggest that theta is an index of relaxation that continues after hypnosis in highs. In alpha in high susceptibles, posterior power increased from the prehypnosis to hypnosis conditions and decreased posthypnosis. Exactly the converse effects were seen in lows. Furthermore, highs had greater alpha power than lows during both prehypnosis and hypnosis conditions, demonstrating an association of alpha with hypnotic susceptibility. The results indicate that, whereas theta indexes relaxation, alpha indexes the hypnotic experience and susceptibility.

[0434]
The history of the Nederlandse Vereniging voor Hypnose (Netherlands Society of Hypnosis)
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The foundation and history of the Nederlandse Vereniging voor Hypnose (Netherlands Society of Hypnosis or Nvvh) is described. The year 2001 marks the 70th anniversary of the Nvvh’s creation. The article describes the accomplishments, leadership, and philosophy of the Society across the decades. Current professional and training directions are discussed.
The response set theory of hypnosis: expectancy and physiology
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A recent exposition of the response set theory of hypnosis (Kirsch, 2000) contained incorrect and misleading figures. The correct figures illustrated a complementary relation between mental and physiological phenomena. The figures as published erroneously suggested that the author espoused epiphenomenalism. As shown in this corrected version, Kirsch proposes that mind states and body states be considered as two ways of viewing a single psychophysiological phenomenon.

Freud's relevance to hypnosis: a reevaluation
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In this paper we examine Freud's life and thinking, based on his collected works, and reevaluate some of his ideas in the light of various aspects of contemporary hypnosis research. Although Freud has often been blamed for simplistic thinking about hypnosis and for its eclipse during the opening decades of this century, his writings reveal a rich theory of hypnosis and a frank acknowledgement of the debt psychoanalytic theory and practice owe to it. Even though he abandoned hypnosis as a clinical tool, Freud maintained a theoretical interest in the subject and in many respects anticipated issues in current research. Whereas his emphasis on the hypnotist's skill may have been exaggerated, his insights concerning attention, social expectations, group dynamics, reality testing, and the relationship between hypnosis and sleep have been borne out by empirical investigations.

Rapid self-hypnosis: a new self-hypnosis method and its comparison with the Hypnotic Induction Profile (HIP)
Martinez-Tendoro J; Capafons A; Weber V; Cardena E
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Despite its clinical importance, there are few systematic studies on the application of self-hypnosis. Rapid Self-Hypnosis (RSH) was created to provide a new procedure that is easy, comfortable, fosters alertness, and can be done covertly in everyday life. We present it as an alternative to the self-hypnosis version of the Hypnosis Induction Profile (HIP). Using a crossover design, we found in an experimental session that the RSH and the HIP produced comparable objective and subjective scores in the Barber Suggestibility Scale (BSS). However, as compared with the HIP, participants rated RSH as significantly more coherent, pleasant, faster and easier to learn, more likely to be used in everyday life and go unnoticed by others, less bothersome to use, and more likely to be used in private. Additional research should clarify whether these differences are reliable and have clinical significance. Our results suggest that RSH will be a valuable addition to the clinician's arsenal.

Automatic word processing: a new forum for hypnotic expression
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Automatic word processing, a form of dissociation utilizing hypnosis and computer technology, was developed to provide patients a forum for hypnotic expression with unique features. Using automatic word processing, the six patients in this report were able to express themselves extensively, edit their responses to queries, and even write poetry while doing hypnosis. Automatic word processing can be used with some patients to gain important insights and therapeutic successes that might not be achieved as easily by other means. Because this is a new technique, much of its potential remains to be defined.

Autonomic profile under hypnosis as assessed by heart rate variability and spectral analysis
Pharmacopsychiatry 2001 May;34(3):111-3 (ISSN: 0176-3679)
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To test the hypothesis of a sympathovagal balance shift towards an enhanced vagal tone under the condition of a standardized hypnosis, we used the assessment of heart rate variability including spectral analysis in 10 healthy subjects (5 female, 5 male, age ranging from 27 to 42 years). We compared the subjects under baseline condition (resting) and under hypnosis, measured on a different day, for a measuring period of five minutes for each condition. The result was reduced total power in the low frequency band (0.01-0.05 Hz) reflecting sympathetic activity. Also, the ratio of low to high frequency power (LF/HF) was reduced when under hypnosis. This reduction was due to a reduced LF component, but
only a slightly reduced mid frequency component. With considerable variability, we also found activated mid frequency bands (0.05-0.15Hz) under hypnosis, likely reflecting baroreceptor activity. We conclude that the autonomic status in hypnosis is associated with a change towards reduced low frequency activity, but not necessarily with enhanced high frequency activity.

[0440]
Self-hypnosis for the treatment of functional abdominal pain in childhood
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Functional abdominal pain, defined as recurrent abdominal pain in the absence of an identifiable physiologic cause, can respond to psychological intervention in appropriate patients. In this patient series, functional abdominal pain of 4 of 5 pediatric patients resolved within 3 weeks after a single session of instruction in self-hypnosis. The potential impact of widespread application of such hypnotherapy may be large, because abdominal pain is thought to be the most common recurrent physical symptom attributable to psychological factors among children and adolescents.

[0441]
Perceptual reconstruction in the treatment of inordinate grief
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Troubled by continuing emotionally painful memories of her ill mother's face as she struggled to breathe during her terminal days in the hospital, an adult daughter requested hypnosis to "erase" those images from her memory. Since that is not feasible, the subject instead was provided in a single session with a hypnosis-based, imagery-focused strategy in which the disturbing images of her mother were replaced by hypnotically reconstructed positive memories as she had appeared in prior, happy times. This was successful: the restructured images were maintained and grew stronger over time as reported four months post-session. It was concluded that hypnotically restructured memories can be useful techniques in the management of inordinate grief.

[0442]
Hypnosis, behavioral theory, and smoking cessation
J Dent Educ 2001 Apr;65(4):340-7 (ISSN: 0022-0337)
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Although nicotine replacement and other pharmacological treatments head the list of popular interventions for smoking cessation, approaches based on psychology can also assist smokers. Hypnosis, suggestion, and behavior therapies have been offered to patients and studied experimentally for several decades. Although no single psychological approach has been found to be superior to others, psychological interventions contribute significantly to successful treatment outcome in smoking cessation. This article describes common hypnotic and behavioral approaches to smoking cessation and critically reviews some of the findings from clinical and experimental research studies. The authors also offer suggestions regarding treatment and future research.

[0443]
Anterior brain functions and hypnosis: a test of the frontal hypothesis
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Neuropsychological frontal lobe tests were used to compare individuals with high (n = 8) and low (n = 9) hypnotizability during both baseline and hypnosis conditions. Subjects were assessed on two hypnotic susceptibility scales and a test battery that included the Stroop test, word fluency to letter- and semantic-designated categories, tests of simple reaction time and choice reaction time, a vigilance task, and a questionnaire of 40 self-descriptive statements of focused attention. Effects for hypnotic susceptibility and hypnosis/control conditions were scant across the dependent variables. High hypnotizables scored higher on the questionnaire at baseline, and their performance on the word-fluency task during hypnosis was reduced to a greater extent than lows. Findings indicate that although the frontal area may play an important role regarding hypnotic response, the mechanisms seem to be much more complex than mere general inhibition.

[0444]
Contemporary psychoanalysis and hypnosis
Int J Clin Exp Hypn 2001 Apr;49(2):146-65 (ISSN: 0020-7144)
Peebles-Kleiger MJ

The relationship between psychoanalysis and hypnosis is presented in three parts: past, present, and future. First, the
parallel developments in psychoanalysis and hypnosis over the past 100 years are summarized. Four major theoretical evolutions in psychoanalysis (drive theory, ego psychology, object relations theory, and self psychology) are described, with their corresponding influences on the practice of psychoanalytically informed hypnosis. Second, four contemporary movements in psychoanalysis are enumerated (postmodernism, spontaneity, pluralism, and integrationism), with commentary on these movements' likely impact on the current and future practice of hypnosis. Finally, the impact of shrinking mental health dollars on the practice of psychoanalysis and psychoanalytically informed treatments is presented. Hypnosis is offered as uniquely positioned, with its history of multitheoretically informed brief interventions, grounded in research and clinical practice, to provide psychoanalysis with a life raft into the next 100 years of practice.

[0445]
Indexing the experience of sex change in hypnosis and imagination
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The authors suggested a change of sex to high hypnotizable participants in hypnosis and imagination conditions and indexed the subjects' experiences with a continuous, concurrent behavioral measure that involved them turning a dial to indicate changes in the strength of the suggested effect. In addition, the researchers indexed the participants' experiences through retrospective ratings of realness, involuntariness, and active thinking. The dial rating showed that the onset of the experience was more rapid for hypnotic than for imagination participants. Moreover, there were differences in the relationship between dial ratings and retrospective ratings across the conditions as well as across the suggestion, test, and cancellation phases of the item. The findings are discussed in terms of how the dial method provides a better understanding of suggested sex change as well as a better understanding of the private experience of hypnosis and imagination.

[0446]
Self-hypnosis for management of chronic dyspnea in pediatric patients
Pediatrics 2001 Feb;107(2):E21 (ISSN: 1098-4275)
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INTRODUCTION: Hypnotherapy can be useful in the management of anxiety, discomfort, and psychosomatic symptoms, all of which may contribute to a complaint of dyspnea. Therefore, instruction in self-hypnosis was offered to 17 children and adolescents with chronic dyspnea, which had not resolved despite medical therapy, and who were documented to have normal lung function at rest. This report documents the result of this intervention. METHODS: A retrospective chart review identified all patients followed by a single pediatric pulmonologist (R.D.A.), with a chief complaint of chronic dyspnea from April 1998 through December 1999. These patients had been evaluated and treated for medical diseases according to their history, physical examination, and laboratory investigations. The pulmonologist offered to teach self-hypnosis to all of these patients, who comprise the cohort in this report. Chronic dyspnea was defined as recurrent difficulty breathing or shortness of breath at rest or with exertion, which had existed for at least 1 month in patients who had not suffered within a month from an acute pulmonary illness. The pulmonologist was trained in hypnosis through his attendance at three 20-hour workshops. Hypnosis was taught to individual patients in 1 or two 15- to 45-minute sessions. Patients were taught hypnotic self-induction techniques and imagery to achieve relaxation. Additionally, imagery relating to dyspnea was developed by coaching patients to change their imagined lung appearance from a dyspneic to a healthy state. Patients were encouraged to practice self-hypnosis regularly and to use lung imagery to eliminate dyspnea if it occurred. RESULTS: Seventeen patients (13 males and 4 females) with chronic dyspnea were documented to have normal pulmonary function at rest. Their mean age was 13.4 years (range: 8-18 years). Twelve of the 17 previously were diagnosed with other conditions, such as allergies, asthma, and gastroesophageal reflux. Fifteen of the 17 manifested at least 1 other symptom associated with their dyspnea, including an anxious appearance (4 patients); chest tightness or pain (5); cough (4); wheeze (3); difficulty with inspiration (2); hyperventilation (1); inspiratory noise, such as stridor, gasping, rasping, or squeak (8); dizziness (1); feeling something is stuck in the throat (2); parasthesias (4); and tachycardia (3). Of the 17 patients, 2 complained of dyspnea at rest only, 13 complained of dyspnea with activity only, and 2 complained of dyspnea both at rest and with activity. Nine patients reported that they frequently needed to discontinue their physical activity because of dyspnea. The mean duration of their dyspnea before learning self-hypnosis was 2 years (range: 1 month to 5 years). The dyspnea was of &lt;6 months duration for 4 of the patients. For 9 of the 17 patients a potential psychosocial association with their dyspnea was identified: 3 developed symptoms at school only; 2 with exercise during competitive races only; 3 after a major disagreement between their parents; and 1 developed symptoms each time his family moved to a new neighborhood. Before presentation, 7 of the 17 patients received chronic inhaled antinflammatory therapy, and 3 were using inhaled albuterol, as needed. All 17 patients had normal physical examinations, with the exception of healed scars on the chest and abdomen of 1 patient, a repaired cleft palate in 1 patient, and rhinitis in another. Four of the 17 underwent pulmonary function testing before and after exercise, 6 had chest radiographs, and 3 had electrocardiograms. All of these tests were normal. A patient with a history of psychogenic cough declined to learn self-hypnosis. Thirteen of the remaining 16 patients were taught to use self-hypnosis in 1 session. A second session was provided to 3 patients within 2 months. Thirteen of the 16 patients reported their dyspnea and any associated symptoms had resolved within 1 month of their final hypnosis instruction session. Eleven believed that resolution of their dyspnea was attributable to hypnosis, because their symptoms cleared immediately after they received hypnosis instruction (5 patients) or with its regular use (6). Two did not attribute resolution of dyspnea to hypnosis because they did not use it at home. The remaining 3 reported that their dyspnea had improved. Patients were followed
for a mean 9 months (range: 2-15 months) after their final hypnosis session. Ten of the 16 regularly used self-hypnosis at home for at least 1 month after the final hypnosis session. There was no recurrence of dyspnea, associated symptoms, or onset of new symptoms in patients in whom the dyspnea resolved. Under supervision of the pediatric pulmonologist, 2 of 7 patients discontinued their chronic antiinflammatory therapy when they became asymptomatic after hypnosis. Subsequently, their pulmonary function remained normal. DISCUSSION: (ABSTRACT TRUNCATED).

[0447] EMDR and hypnosis in the treatment of phobias. Eye Movement Desensitization and Reprocessing
Am J Clin Hypn 2001 Jan-Apr;43(3-4):263-74 (ISSN: 0002-9157)
McNeal SA

Clinical hypnosis and EMDR have both been employed in the treatment of phobias. EMDR has been a controversial treatment method with the research showing mixed results concerning its efficacy. Many studies have shown the effectiveness of hypnosis in the treatment of phobias, but no studies have directly compared hypnosis to EMDR. This paper discusses each approach to treatment, with special emphasis on EMDR. Relevant research and current theories are reviewed along with questions raised and recommendations for future research.

[0448] Potential contributions of hypnosis to ego-strengthening procedures in EMDR. Eye Movement Desensitization Reprocessing
Am J Clin Hypn 2001 Jan-Apr;43(3-4):247-62 (ISSN: 0002-9157)
Phillips M

This paper explores how hypnotic principles can be systematically incorporated into the standard EMDR protocol to enhance various ego strength capacities during EMDR treatment. Expanding these skill areas can widen the therapeutic window of possibility for clients with a variety of complex clinical issues, including posttraumatic, dissociative or personality disorders, anxiety symptoms, and depressive difficulties. Clinical case examples are used to illustrate ways of integrating hypnotic principles within a proposed EMDR protocol to promote ego strengthening and facilitate therapeutic change.

[0449] Recommendations and illustrations for combining hypnosis and EMDR in the treatment of psychological trauma
Am J Clin Hypn 2001 Jan-Apr;43(3-4):217-31 (ISSN: 0002-9157)
Beere DB; Simon MJ; Welch K
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Three experienced therapists, trained in hypnosis and EMDR, distilled some tentative hypotheses about the use of hypnosis in EMDR from fifteen cases, two presented here. When a therapist uses hypnosis with EMDR, it seems that the client is having difficulty or the therapist anticipates that the client will have difficulty managing the experiences processed with EMDR. Hypnosis initiated either during the introduction to EMDR or within a therapy session prior to the initiation of EMDR seems to have served two functions. The first function is to activate inner work that prepares the client to use EMDR successfully, and the second function is to facilitate overtly the processing of the traumatic experience. Clients might have two kinds of difficulties in managing affect or distress: (1) they may have a long-standing, irrational and strongly held belief that interferes with managing affect or distress, and (2) they may never have developed the capacity to tolerate intense affect, distress or pain. Should a therapist use hypnosis during the closing down phase of a session without preparing the client with hypnosis during the introduction to EMDR, the therapist should seriously reconsider the pace and focus of EMDR and the client's resources to manage affect and distress.

[0450] Accessing the power in the patient with hypnosis and EMDR. Eye Movement Desensitization and Reprocessing
Am J Clin Hypn 2001 Jan-Apr;43(3-4):203-16 (ISSN: 0002-9157)
Bjick S

Both Ernest Rossi's ideodynamic accessing model of hypnosis and EMDR are intended to access information stored in the mind-body system. In this paper the author is suggesting that treatment effectiveness can be enhanced by combining these particular models. The similarities and the uniqueness of each method, both theoretically and in terms of the different protocols, are compared to provide a rationale for combining them. Verbatim examples from clinical cases are presented to demonstrate exactly how these models can be usefully combined in clinical practice.

[0451] ECEM (eye closure eye movements): integrating aspects of EMDR with hypnosis for treatment of trauma
Am J Clin Hypn 2001 Jan-Apr;43(3-4):187-202 (ISSN: 0002-9157)
Hollander HE; Bender SS
University of Medicine and Dentistry of New Jersey, USA

The paper addresses distinctions between hypnotic interventions and Eye Movement Desensitizing and Reprocessing (EMDR) and discusses their effect on persons who have symptoms of Posttraumatic Stress Disorder (PTSD). Eye movements in hypnosis and EMDR are considered in terms of the different ways they may affect responses in treatment.
A treatment intervention within hypnosis called ECEM (Eye Closure, Eye Movements) is described. ECEM can be used for patients with histories of trauma who did not benefit adequately from either interventions in hypnosis or the EMDR treatment protocol used separately. In ECEM the eye movement variable of EMDR is integrated within a hypnosis protocol to enhance benefits of hypnosis and reduce certain risks of EMDR.

[0452]
Use of hypnosis in controlling lumbar puncture distress in an adult needle-phobic dementia patient
Simon EP; Canonico MM
Tripler Regional Medical Center, Honolulu, Hawaii

Lumbar punctures are often vital to the medical management of patients with suspected organic pathology, yet they are commonly met with such distress that medical risk is significantly increased, and patient rapport is significantly decreased, further compromising medical treatment. Although the use of hypnosis for lumbar punctures is well established in pediatric patients, no literature exists for adult patients. Similarly, there is no extant research regarding hypnosis for dementia patients, likely due to the limiting factors of impaired attention and concentration. With these factors in mind, a method for incorporating hypnosis into a lumbar puncture procedure is described for a needle-phobic adult patient suffering from dementia.

[0453]
Affective and metabolic responses to hypnosis, autogenic relaxation, and quiet rest in the supine and seated positions
Int J Clin Exp Hypn 2001 Jan;49(1):5-18 (ISSN: 0020-7144)
Garvin AW; Trine MR; Morgan WP
University of Wisconsin-Madison, USA

This study examined the influence of hypnosis, autogenic relaxation, and quiet rest on selected affective states and metabolism. The influence of body position (seated vs. supine) on these same outcome measures was also investigated. Anxiety, tension, and overall mood were assessed before and 30 minutes after each treatment, and oxygen uptake was measured continuously. State anxiety, tension, and a general measure of mood were reduced significantly following each intervention, but oxygen uptake did not change with the exception of small, transient alterations during the physical challenges performed in the hypnosis condition. It is concluded that administration of a routine hypnosis induction to healthy individuals results in a reduction of state anxiety and an improvement of mood commensurate with effects achieved by autogenic training and quiet rest, and these effects occur in both the supine and seated position.

[0454]
Enhancing self-belief with EMDR: developing a sense of mastery in the early phase of treatment
Am J Psychother 2001;55(4):531-42 (ISSN: 0002-9564)
Shapiro S

Deep inside each of us is a seed that holds our vision of truth, peace, and happiness. Our early childhood attachments, societal influences, and innate capacity determine how well that seed is nurtured and the deepest inner vision is set free. This article is about the ways that vision becomes clouded by attachment deficits, trauma, and subsequent symptoms. The deep inner wish to heal allows for transformation, and approaches like Eye Movement Desensitization and Reprocessing, and hypnotherapy can assist in creating a more rapid acceleration of trauma resolution and transformation of self.

[0455]
Treatment of chronic fatigue with neurofeedback and self-hypnosis
NeuroRehabilitation 2001;16(4):295-300 (ISSN: 1053-8135)
Hammond DC
Department of Physical Medicine & Rehabilitation, University of Utah School of Medicine, Salt Lake City, UT, USA

A 21 year old patient reported a relatively rapid onset of serious chronic fatigue syndrome (CFS), with her worst symptoms being cognitive impairments. Congruent with research on rapid onset CFS, she had no psychiatric history and specialized testing did not suggest that somatization was likely. Neuroimaging and EEG research has documented brain dysfunction in cases of CFS. Therefore, a quantitative EEG was done, comparing her to a normative data base. This revealed excessive left frontal theta brainwave activity in an area previously implicated in SPECT research. Therefore, a novel treatment approach was utilized consisting of a combination of EEG neurofeedback and self-hypnosis training, both of which seemed very beneficial. She experienced considerable improvement in fatigue, vigor, and confusion as measured pre-post with the Profile of Mood States and through collaborative interviews with both parents. Most of the changes were maintained at 5, 7, and 9 month follow-up testing.

[0456]
Psychological approaches during dressing changes of burned patients: a prospective randomised study comparing hypnosis against stress reducing strategy
Burns 2001 Dec;27(8):793-9 (ISSN: 0305-4179)
Frenay MC; Faymonville ME; Devlieger S; Albert A; Vanderkelen A
Burn Centre, Military Hospital Queen Astrid, Rue Bruyn, 1, 1120, Brussels, Belgium
A prospective study was designed to compare two psychological support interventions in controlling peri-dressing change pain and anxiety in severely burned patients. Thirty patients with a total burned surface area of 10-25%, requiring a hospital stay of at least 14 days, were randomised to receive either hypnosis or stress reducing strategies (SRS) adjunctively to routine intramuscular pre-dressing change analgesia and anxiolytic drugs. Visual analogue scale (VAS) scores for anxiety, pain, pain control and satisfaction were recorded at 2-day intervals throughout the 14-day study period, before, during and after dressing changes. The psychological assistance was given on days 8 and 10 after hospital admission. The comparison of the two treatment groups indicated that VAS anxiety scores were significantly decreased before and during dressing changes when the hypnotic technique was used instead of SRS. No difference was observed for pain, pain control and satisfaction, although VAS scores were always better in the hypnosis group. The study also showed that, overall, psychological support interventions reduced pain and increased patient satisfaction. These results confirm the potential benefits of psychological assistance during dressing changes in burned patients.

[0457]
Matching hypnotic interventions to pathology types: a working model for expressive psychotherapies
Int J Clin Exp Hypn 2001 Oct;49(4):352-60; discussion 361-3 (ISSN: 0020-7144)
Boyer MF

This article identifies Kohut's typology of Guilty Man and Tragic Man as a clinically useful construct in outpatient psychotherapy. The author notes that an expressive approach focused on ambivalent conflict is indicated for the Guilty Man, and a restructuring expressive approach is indicated for the Tragic Man. A hypnosis technique is identified for use with each of these two approaches: the Door of Forgiveness technique (primarily for conflict-focused therapies) and the Conference Table Technique (for restructuring therapies).

[0458]
Hypnotic color blindness and performance on the Stroop test
Mallard D; Bryant RA
University of New South Wales, Sydney, Australia

A suggestion for hypnotic color blindness was investigated by administering a reverse Stroop color-naming task. Prior to the suggestion for color blindness, participants learned associations between color names and shapes. Following the color blindness suggestion, participants were required to name the shapes when they appeared in colors that were either congruent or incongruent with the learned associations. The 18 high hypnotizable participants who passed the suggestion were slower to name (a) shapes in which the color name was incongruent with the color in which it was printed, (b) "unseen" rather than "seen" shapes, and (c) color-incongruent shapes that were printed in the color in which they were "color-blind." These patterns are discussed in terms of potential cognitive and social mechanisms that may mediate responses to hypnotic color blindness.

[0459]
The hypnotic dreams of healthy children and children with cancer: a quantitative and qualitative analysis
Le Baron S; Fanurik D; Zeltzer LK
Division of Family and Community Medicine, Stanford University School of Medicine, Palo Alto, CA 94304, USA

In this study, the Stanford Hypnotic Clinical Scale for Children was administered to 52 healthy children and 47 children and adolescents with cancer. Responses to the dream item of this scale were analyzed for the type and detail of imagery. The hypnotizability scores of both groups were similar. However, children with cancer reported more pleasant than unpleasant fantasy in their hypnotic dreams, and their dream reports tended to contain less fantasy and detail overall. Rescoring the dream item based on extent of fantasy and detail resulted in a lower pass rate for that item, especially for children with cancer. Regardless of health status, older children experienced more self-involvement in their hypnotic dreams compared to younger children.

[0460]
Hypnotic devices may be more than placebo
Am J Clin Hypn 2001 Oct;44(2):149-54 (ISSN: 0002-9157)
Page RA; Handley GW; Rudin SA
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The study attempted to assess the effectiveness of two devices in facilitating the induction of hypnosis in subjects preselected as low in hypnotizability. Undergraduates were exposed to no treatment (control) or one of four combinations of devices during the induction phase of being administered the Stanford Hypnotic Susceptibility Scale, Form B of Weitzenhoffer and Hilgard (1959). Analyses revealed only one of the conditions resulted in a significant difference in subjects' realness ratings of hypnotic items and an increase in hypnotizability score. If the effect is more than a chance significance of placebo, the underlying mechanisms remain unknown.

[0461]
EEG P300 event-related markers of hypnosis
Barabasz, Barabasz, Jensen, Calvin, Trevisan, and Warner (1999) showed that, when subjects are stringently selected for hypnotizability and responses are time locked to events, robust markers of hypnotic responding emerge that reflect alterations in consciousness that correspond to subjects' subjective experiences of perceptual alteration. To further test the Barabasz et al. (1999) hypothesis, we obtained EEG visual P300 event-related potentials (ERPs) from 20 high- and low-hypnotizable subjects. The effects of positive obstructive and negative obliterating instructions were tested during waking and alert hypnotic conditions. High-hypnotizables showed greater ERP amplitudes in response to the negative hallucination condition and lower ERP amplitudes in response to the positive obstructive hallucination when compared to the low-hypnotizables. Contrary to socio-psychological or role play conceptualizations, the hypnotic induction resulted in specific psychophysiological responses which could not be produced by waking imagination or by the lows who were trying to mimic hypnotic responding.

In the face of ambiguous life events, depressed individuals are more likely to make negative and depressing interpretations than nondepressed individuals. Fundamental to the success of cognitive-behavioral treatments, one of the most empirically supported treatments for depression is teaching the client to recognize and self-correct so-called cognitive distortions. To facilitate that learning process, clients can learn to better recognize and tolerate ambiguity inherent in many situations, and thereby diminish the drive to form subjective interpretations (either negative or positive) when more objective evidence is unavailable. This article describes ambiguity as a risk factor for depression and details a strategy employing hypnosis for teaching the skills of both recognizing and tolerating ambiguity.

Psychological accounts of hypnosis have hypothesized that hypnosis and attention might share similar mechanisms and that hypnosis simply represents an extensive state of reduced attention. This assumption implies that reports of pain and electrocortical brain responses to painful stimulation should be similarly reduced when subjects are exposed to suggestions of hypnotic analgesia (HA) or requested to distract their attention from painful stimuli (distraction of attention: DA) as compared to a control condition (CC). To test this hypothesis, we recorded event-related electrical brain potentials to noxious laser-heat stimuli and pain reports during HA, DA, and CC from subjects highly susceptible to hypnotic suggestions. Pain reports were significantly reduced during HA and DA as compared to CC. The amplitudes of the late laser-evoked brain potential (LEP) components N200 and P320 were also significantly smaller during DA than during CC. However, no significant difference of these late LEP amplitudes was obtained for HA as compared to CC. Results indicate that hypnotic analgesia and distraction of attention represent different mechanisms of pain control and involve different brain mechanisms.

The bispectral index (BIS) and the auditory evoked potential (AEP) index as calculated by the new A-line monitor were measured during hypnosis with propofol, which included an episode of wakefulness. Both indices followed a similar pattern during sedation, with values decreasing with sedation and increasing when awake. Baseline AEP values varied between 60 and 98, and BIS values were between 96 and 98. The AEP-index value was at all times 10-20 points lower than the BIS-index. The transition to loss of response occurred at a mean AEP value of 46 and BIS value of 58. The transition to just responding following a period of unconsciousness occurred at a mean AEP value of 46 and BIS 65. Both monitoring techniques, however, displayed large interindividual variations making it impossible to discriminate in real time between subtle changes of clinical state. The new neuropsychiological monitors A-line AEP and BIS are interesting tools for creating a better understanding of the anaesthetic effects of drugs; however, further refinements are required before their relative roles can be fully established in the clinical setting.

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A study of bispectral analysis and auditory evoked potential indices during propofol-induced hypnosis in volunteers: the effect of an episode of wakefulness on explicit and implicit memory
Anesthesia 2001 Sep;56(9):988-93 (ISSN: 0003-2409)
Barr G; Anderson RE; Jakobsson JG
Department of Cardiothoracic Anaesthetics and Intensive Care, Karolinska Hospital, Stockholm, Sweden

The bispectral index (BIS) and the auditory evoked potential (AEP) index as calculated by the new A-line monitor were measured during hypnosis with propofol, which included an episode of wakefulness. Both indices followed a similar pattern during sedation, with values decreasing with sedation and increasing when awake. Baseline AEP values varied between 60 and 98, and BIS values were between 96 and 98. The AEP-index value was at all times 10-20 points lower than the BIS-index. The transition to loss of response occurred at a mean AEP value of 46 and BIS value of 58. The transition to just responding following a period of unconsciousness occurred at a mean AEP value of 46 and BIS 65. Both monitoring techniques, however, displayed large interindividual variations making it impossible to discriminate in real time between subtle changes of clinical state. The new neuropsychiological monitors A-line AEP and BIS are interesting tools for creating a better understanding of the anaesthetic effects of drugs; however, further refinements are required before their relative roles can be fully established in the clinical setting.

Pain language of bone marrow transplantation patients

Yapko M
Previous studies have shown that hypnosis may be effective in reducing intensity of pain among bone marrow transplantation patients whereas cognitive behavioral intervention without imagery was not effective for this group of patients. Since hypnosis alters patients' perception of pain and cognitive behavioral intervention changes patients' beliefs and improves their coping with pain, we hypothesized that sensory pain is more important than affective pain in understanding the pain experience of patients undergoing bone marrow transplantation. To test this hypothesis we administered the McGill Pain Questionnaire longitudinally to 50 consecutive eligible recipients of bone marrow transplantation during hospitalization to assess the different dimensions of pain they experienced. Consistent with our hypothesis, sensory pain fluctuated with treatment stages, and the pattern was consistent with previous findings. Patients reported significantly higher sensory pain than affective pain at all assessment points. In contrast, affective pain remained low and stable throughout the treatment. Our results contribute to the understanding of the nature of pain in bone marrow transplantation and suggest pain management strategies that focus on sensory pain as in hypnosis are more useful for such patients.

[Hypnosis as a modulator of cellular immune dysregulation during acute stress]
Kiecolt-Glaser JK; Marucha PT; Atkinson C; Glaser R
Department of Psychiatry, Ohio State University College of Medicine, Columbus 43210, USA

To assess the influence of a hypnotic intervention on cellular immune function during a commonplace stressful event, the authors selected 33 medical and dental students on the basis of hypnotic susceptibility. Initial blood samples were obtained during a lower stress period, and a second sample was drawn 3 days before the first major exam of the term. Half of the participants were randomly assigned to hypnotic-relaxation training in the interval between samples. Participants in the hypnotic group were, on average, protected from the stress-related decrements that were observed in control participants' proliferative responses to 2 mitogens, percentages of CD3+ and CD4+ T-lymphocytes, and interleukin 1 production by peripheral blood leukocytes. More frequent hypnotic-relaxation practice was associated with higher percentages of CD3+ and CD4+ T-lymphocytes. These data provide encouraging evidence that interventions may reduce the immunological dysregulation associated with acute stressors.

[Modeling and closed-loop control of hypnosis by means of bispectral index (BIS) with isoflurane]
Gentilini A; Rossoni-Gerosa M; Frei CW; Wymann R; Morari M; Zbinden AM; Schnider TW
Automatic Control Laboratory, ETH Zentrum, Zurich, Switzerland

A model-based closed-loop control system is presented to regulate hypnosis with the volatile anesthetic isoflurane. Hypnosis is assessed by means of the bispectral index (BIS), a processed parameter derived from the electroencephalogram. Isoflurane is administered through a closed-circuit respiratory system. The model for control was identified on a population of 20 healthy volunteers. It consists of three parts: a model for the respiratory system, a pharmacokinetic model and a pharmacodynamic model to predict BIS at the effect compartment. A cascaded internal model controller is employed. The master controller compares the actual BIS and the reference value set by the anesthesiologist and provides expired isoflurane concentration references to the slave controller. The slave controller manipulates the fresh gas anesthetic concentration entering the respiratory system. The controller is designed to adapt to different respiratory conditions. Anti-windup measures protect against performance degradation in the event of saturation of the input signal. Fault detection schemes in the controller cope with BIS and expired concentration measurement artifacts. The results of clinical studies on humans are presented.

[Being awake intermittently during propofol-induced hypnosis: a study of BIS, explicit and implicit memory]
Barr G; Anderson RE; Owall A; Jakobsson JG
Department of Cardiothoracic Anaesthetics and Intensive Care, Karolinska Hospital, Stockholm, Sweden

BACKGROUND: Being awake during anaesthesia is a serious complication. An anaesthetic depth monitor must discriminate in real time between wakefulness and unconsciousness. The present study created a period of wakefulness during propofol-induced hypnosis. Bispectral index (BIS), explicit and implicit memories of the awake period were investigated. METHODS: Ten volunteers were studied. The calculated brain concentration of a target controlled infusion of propofol was increased until loss of response (LOR) to verbal command and then propofol was stopped. When fully awake, volunteers were presented with a picture, sound and smell. Propofol infusion was restarted until LOR and then ceased. BIS and the calculated brain concentration of propofol were recorded every minute. A structured interview was conducted for explicit memories after awakening and for explicit as well as implicit memories the day after. RESULTS: Median BIS-index for the transition between awake and asleep and vice versa differed significantly. It was not possible, however, to establish any threshold value or zone for discriminating between wakefulness and LOR due to the large inter-individual variations in BIS-index. No volunteer could explicitly recall any of the stimuli presented during the period of
wakefulness. CONCLUSION: The BIS-index decreases with increasing sedation but because of the large individual variations, the real-time BIS-index for the individual subject cannot reliably discriminate wakefulness from unconsciousness during propofol infusion. Propofol causes such profound amnesia that lack of postoperative recall does not assure that episodes of awareness have not occurred during propofol-induced hypnosis.

[0469]
What makes recovered-memory testimony compelling to jurors?
Law Hum Behav 2001 Aug;25(4):317-38 (ISSN: 0147-7307)
Coleman BL; Stevens MJ; Reeder GD
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Little is known about how jurors arrive at verdicts in cases involving recovered memories of childhood sexual abuse. Study 1 investigated mock jurors' reactions to the recovered-memory testimony of an alleged victim when a therapist intervened with hypnosis, suggestion, or symptom management. When a therapist used hypnosis, jurors viewed the victim's recovered-memory testimony as particularly accurate and credible, and favored the victim in their verdicts. In Study 2, mock jurors were presented with a therapist who was sued for allegedly influencing a client's recall of false memories of abuse. In this case, however, jurors viewed therapists who used hypnosis or suggestion as more likely to have created false memories, more responsible for having caused harm, and less competent, and tended not to favor these therapists in their verdicts. We discuss these seemingly contradictory findings in terms of how culturally formed expectancies about hypnosis produce different causal explanations depending on the focus of a trial.

[0470]
Somatosensory event-related potential and autonomic activity to varying pain reduction cognitive strategies in hypnosis
De Pascalis V; Magurano MR; Bellusci A; Chen AC
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OBJECTIVES: The issues of differential effects among cognitive strategies during hypnosis in the control of human pain are under active debate. This study, which employs measures of pain perception, electrocortical and autonomic responses, was aimed at determining these pain-related modulations. METHODS: Somatosensory event-related potentials (SERPs) to noxious stimuli under an odd-ball paradigm were recorded at the frontal, temporal and parietal regions in 10 high, 9 mid, and 10 low hypnotizable right-handed young women, at waking baseline, varying cognitive strategies (deep relaxation, dissociative imagery, focused analgesia) in hypnosis and placebo conditions. The phasic heart rate (HR) and skin conductance response were also recorded. The analysis was focused on the frequent standard trials of the odd-ball SERPs. Repeated measures analysis of variance was conducted to examine the experimental effects. RESULTS: Focused analgesia induced the largest reduction in pain rating, more in the high than low hypnotizable subjects. In high hypnotizable subjects, the N2 amplitude was greater over frontal and temporal scalp sites than over parietal and central sites, whereas in moderately and low hypnotizable subjects, N2 was greater over temporal sites than over frontal, parietal, and central sites. These subjects also displayed a larger N2 peak over temporal sites during focused analgesia than in the other conditions. The P3 amplitude was smaller under deep relaxation, dissociative imagery and focused analgesia in the high hypnotizable subjects. For these subjects, the smallest P3 peaks were obtained for dissociated imagery and focused analgesia over frontal and temporal sites. In contrast, for the P3 peak, low hypnotizable subjects failed to show significant condition effects. In all of the subjects, the skin conductance and HR were smaller during hypnotic suggestions than in the waking state. CONCLUSIONS: The effect of pain modulation is limited to high hypnotizable subjects rather than low hypnotizable ones. Higher frontal-temporal N2 and smaller posterior parietal P3 may indicate active inhibitory processes during cognitive strategies in hypnotic analgesia. These inhibitory processes also regulate the autonomic activities in pain perception.

[0471]
Cortical representation of the sensory dimension of pain
Hofbauer RK; Rainville P; Duncan GH; Bushnell MC
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It is well accepted that pain is a multidimensional experience, but little is known of how the brain represents these dimensions. We used positron emission tomography (PET) to indirectly measure pain-evoked cerebral activity before and after hypnotic suggestions were given to modulate the perceived intensity of a painful stimulus. These techniques were similar to those of a previous study in which we gave suggestions to modulate the perceived unpleasantness of a noxious stimulus. Ten volunteers were scanned while tonic warm and noxious heat stimuli were presented to the hand during four experimental conditions: alert control, hypnosis control, hypnotic suggestions for increased-pain intensity and hypnotic suggestions for decreased-pain intensity. As shown in previous brain imaging studies, noxious thermal stimuli presented during the alert and hypnosis-control conditions reliably activated contralateral structures, including primary somatosensory cortex (S1), secondary somatosensory cortex (S2), anterior cingulate cortex, and insular cortex. Hypnotic modulation of the intensity of the pain sensation led to significant changes in pain-evoked activity within S1 in contrast to our previous study in which specific modulation of pain unpleasantness (affect), independent of pain intensity, produced specific changes within the ACC. This double dissociation of cortical modulation indicates a relative specialization of the sensory and the classical limbic cortical areas in the processing of the sensory and affective dimensions of pain.
Hypnotic intervention can be integrated with a Rapid Smoking treatment protocol for smoking cessation. Reported here is a demonstration of such an integrated approach, including a detailed description of treatment rationale and procedures for such a short-term intervention. Of 43 consecutive patients undergoing this treatment protocol, 39 reported remaining abstinent at follow-up (6 months to 3 years posttreatment).

Treating adolescent conversion disorders: are hypnotic techniques reusable?

When treating disabling conversion disorders in hospitalized adolescents, clinicians must act to restore function as rapidly as possible. After attempting to rule out physical causes for the symptoms and trying to find persuasive psychological reasons that the patient will accept and use to resolve the condition, the inpatient staff of a multidisciplinary therapeutic milieu must seek additional approaches to the care of these seriously ill individuals. This clinical forum reports the author's experience treating 2 young patients, a 12-year-old girl and a 15-year-old boy, with hypnosis. Therapists of every experience level find hypnotic techniques that work for them in a variety of patients, but are hypnotic techniques really reusable? The author reports what he learned once again.

Information processing during hypnotically suggested sex change

During hypnotically suggested sex change, 36 real (12 virtuoso and 24 high hypnotizable) and 18 simulating (low hypnotizable) individuals listened to a story involving a male and a female character. They subsequently reported their experience and recall of the story. Virtuosos were less likely than highs and simulators to identify with the character consistent with their suggested sex. However, virtuosos recalled more information about the character consistent with their suggested sex than did highs and simulators. The authors discuss the findings in terms of attention and the selective processing of information during hypnosis. They conclude that character identification was not the major factor that influenced the recall of virtuosos and suggest that virtuosos may have processed aspects of the information in a more self-referential way and thus encoded and recalled it more effectively.

Hypnotically induced emotional numbing

This study investigated the utility of a hypnotic suggestion to inhibit emotional response. High and low hypnotizable participants (N = 53) were administered a hypnotic induction, and half the participants were then administered a suggestion for emotional numbing. Participants were then presented with slides depicting neutral or disfigured faces. Participants who received the emotional numbing suggestion reported less responsivity to the disfigured faces than did those in the control condition, and this pattern was stronger for high than for low hypnotizable participants. Highs in the numbing condition displayed less overall distress in their facial expressions in response to the disfigured slides relative to those in the control condition. These findings suggest that hypnotic emotional numbing may be a useful paradigm in which to explore processes in emotion inhibition.

Hypnotherapy in adolescents with trichotillomania: three cases

Trichotillomania is not rare in adolescence. Psychotherapy is often ineffective, and cognitive behavioral therapy in combination with serotonin-specific reuptake inhibitors seems to be the treatment of choice. Some cases are resistant to all therapy. This paper reports on three adolescents with pure trichotillomania who responded to the imaginative hypnotherapy technique with Ericksonian suggestions. The patients described their hair as weak and vulnerable and needy of protection. In therapy, the patient was assigned the role of "patron of the hair" thereby giving him/her control of the situation. Hair pulling was significantly reduced, and the improvement was sustained throughout the 6-month follow-
up. These cases suggest that imaginative techniques may be effective in adolescents with trichotillomania. Further controlled studies in adolescent population are needed to confirm this assumption.

[0477] Dyspepsia as a somatic expression of guilt: a case report
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Gastroenterology, Hadassah University Hospital, Jerusalem, Israel 91 120

A 58-year-old woman developed chronic, severe symptoms of heartburn, epigastric pain, and regurgitation that persisted for 2 years. She underwent a thorough evaluation and no organic cause was identified. Therefore, a diagnosis of dyspepsia was made. Her symptoms were refractory to pharmacological treatment. Upon further probing, the patient reported that the onset of her symptoms coincided with the death of her son of cancer 2 years earlier. She blamed herself for the death of her son and admitted to a need for self-punishment. A brief course of treatment using metaphors and hypnosis resulted in a complete resolution of her symptoms, which did not recur during a follow-up of 12 years. This is the first published report of the treatment of dyspepsia using hypnotic methods.

[0478] Source localization of EEG activity during hypnotically induced anxiety and relaxation
Isotani T; Tanaka H; Lehmann D; Pascual-Marqui RD; Kochi K; Saito N; Yagyu T; Kinoshita T; Sasada K
The KEY Institute for Brain-Mind Research, University Hospital of Psychiatry, Lenggstrasse 31, CH-8029, Zurich, Switzerland

The engagement of different brain regions which implement subjectively experienced emotional states in normals is not completely clarified. Emotional states can conveniently be induced by hypnosis-based suggestions. We studied brain electric activity during hypnotically induced anxiety and relaxation in 11 right-handed normals (5 males, 6 females, mean age 26.5+/-7.6 years). After induction of light hypnosis, anxiety and then relaxation was suggested using a standardized text (reverse sequence in half of the subjects). Nineteen-channel, eyes-closed EEG (20 artifact-free s/subject) was analyzed (source localization using FFT approximation and low resolution electromagnetic tomography, LORETA). Global tests revealed the strongest difference (P<0.005) between EEG source gravity center locations during the two emotional states in the excitatory beta-2 EEG frequency band (18.5-21 Hz). Post hoc tests showed that the sources were located more right during anxiety than during relaxation (P=0.01). LORETA specified that anxiety showed maximally stronger activity than relaxation in right Brodmann area 10, and relaxation showed maximally stronger activity than anxiety in left Brodmann area 22. Clearly, the two induced emotional states were associated with activity of different neural populations. Our results agree with reports on brain activity shifted to the right (especially fronto-temporal) during negative compared with positive emotions, and support the role of beta-2 EEG frequency in emotional states.

[0479] Is the hypnotized subject complying
Int J Clin Exp Hypn 2001 Apr;49(2):83-94 (ISSN: 0020-7144)
Kinnunen T; Zamansky HS; Nordstrom BL
Harvard School of Dental Medicine, Department of Oral Health Policy and Epidemiology, 31 State St., Boston, MA 02109, USA

To examine the role of compliance in responses to hypnotic suggestions, the authors administered a number of suggestions in the standard hypnotic manner and, also, with urging to comply. Participants' overt behavioral responses were noted, and they were questioned about their subjective experience of the suggestions, with electrodermal skin conductance responses providing a measure of the truthfulness of their reports. Results indicated that, although behavioral and verbal responses were consistent with the hypnotic suggestions under both instructional sets, responses in the standard hypnotic setting appeared to be experienced as genuine. That is, reports of subjective experiences met the criterion for truthfulness, whereas reports of suggested experiences administered with urging to comply did not meet the criterion for truthfulness.

[0480] The Stanford Hypnotic Susceptibility Scale, Form C: normative data of a Dutch student sample
Int J Clin Exp Hypn 2001 Apr;49(2):139-45 (ISSN: 0020-7144)
Naring GW; Roolofs K; Hoogduin KA
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Norms for the Dutch language version of the Stanford Hypnotic Susceptibility Scale, Form C (SHSS:C; Weitzenhoffer & Hilgard, 1962) are presented. These norms are based upon a sample of 135 students at a Dutch university. Generally, the psychometric properties of the Dutch version of the SHSS:C are similar to other language versions. However, the mean score was somewhat lower than that found in the original norming studies at Stanford University.

[0481] The effect of Rapid Induction Analgesia on subjective pain ratings and pain tolerance
The effect of Rapid Induction Analgesia (RIA) on pain tolerance and ratings of mechanically induced pain in the pain-sensitized forearm was investigated in 58 undergraduates. Posthypnotic suggestions of relaxation and analgesia did not influence pain ratings or tolerance, but relaxation ratings increased after RIA. When suggestions for analgesia were made throughout pain testing, ratings of pain unpleasantness at the pain tolerance point decreased more in the RIA group than in the attention control group. However, RIA did not influence pain threshold or tolerance. It was concluded that RIA was more effective in reducing subjective reports of pain (particularly the affective component) than in altering pain tolerance, and that maintenance of hypnotic suggestions was more effective than posthypnotic suggestions of comfort and relaxation in alleviating the affective component of pain.

[0482]
Complementary therapies for cancer patients: what works, what doesn't, and how to know the difference
Tex Med 2001 Feb;97(2):68-73 (ISSN: 0040-4470)
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Cancer patients, with their multiple symptoms and layers of suffering, are presenting many challenges to the treating physician and are turning to complementary mind-body therapies in increasing numbers. The utilization of mind-body medicine and other complementary therapies is growing at rates faster than Western medicine, and physicians are more commonly being questioned about potential benefits and risks of these therapies. This article discusses hypnosis and mind-body approaches in the care of the cancer patient, and offers suggestions regarding the evaluation of complementary medicine therapies.

[0483]
The wreathing protocol: the imbrication of hypnosis and EMDR in the treatment of dissociative identity disorder and other dissociative responses. Eye Movement Desensitization Reprocessing
Am J Clin Hypn 2001 Jan-Apr;43(3-4):275-90 (ISSN: 0002-9157)
Fine CG; Berkowitz AS

Dissociative Identity Disorder (DID), a chronic childhood onset posttraumatic stress disorder, is currently recognized as a treatable condition. It is considered the paradigmatic dissociative condition and carries with it extreme posttraumatic symptomatology. Therapists skilled in the treatment of DID are typically fluent in the uses of hypnosis for stabilization, affect management, building a safe place and grounding to name of few. EMDR, which has come to the forefront of clinical awareness in the last ten years, seems aptly suited for the treatment of trauma, but can be destabilizing. This paper proposes a protocol, called Wreathing Protocol, for the imbricated use of EMDR and hypnosis in the treatment of not only DID (though this will be the primary focus of the paper), but also Dissociative Disorder Not Otherwise Specified (DDNOS) and chronic Posttraumatic Stress Disorder (PTSD). This protocol is useful to advanced clinicians skilled in both modalities independently. The sequential steps of the Wreathing Protocol will be described and illustrated by a clinical vignette on DID. The clinical implications of the use of the Wreathing Protocol will be discussed in DID as well as the chronic post traumatic spectrum.

[0484]
Integrative psychotherapy: combining ego-state therapy, clinical hypnosis, and eye movement desensitization and reprocessing (EMDR) in a psychosocial developmental context
Am J Clin Hypn 2001 Jan-Apr;43(3-4):233-45 (ISSN: 0002-9157)
Wade TC; Wade DK

The principles of this conceptual framework are: (1) personality organization is dissociative as well as associative, consisting of ego states, and progresses through stages of psychosocial development; (2) inappropriately activated ego states cause dysfunction, which is habitual or due to the intense affect of disrupted development or unresolved grief or trauma; (3) completely overcoming dysfunction requires therapy with both individual ego states and the personality system; (4) clinical hypnosis provides techniques to enhance accessing ego states; and (5) EMDR combines ego-state therapy with eye movements (EMs) to produce a powerful psychotherapy method. During assessment, ego states responsible for dysfunctional emotional reactions and behavior are identified together with those that could be appropriate instead. Included in the treatment protocol, EMs and clinical hypnosis promote: (1) corrective developmental experiences; (2) resolution of grief and trauma; (3) acquisition of skills and abilities; (4) co-consciousness; and (5) negotiation among ego states. The outcome is an integrated "family of self" that has effectively overcome developmental crises, grief, and trauma, is aware of essential inner resources, and can consciously activate appropriate ego states.

[0485]
Complementary and alternative medicine for children: does it work?
Arch Dis Child 2001 Jan;84(1):6-9 (ISSN: 1468-2044)
Kemper KJ
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Paediatric use of complementary and alternative medicine is common and increasing, particularly for the sickest children. This review discusses the various options available including dietary supplements, hypnosis, massage, chiropractic, and acupuncture.

[0486] Psychological interventions and the immune system: a meta-analytic review and critique
Health Psychol 2001 Jan;20(1):47-63 (ISSN: 0278-6133)
Miller GE; Cohen S
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This article reviews evidence for the hypothesis that psychological interventions can modulate the immune response in humans and presents a series of models depicting the psychobiological pathways through which this might occur. Although more than 85 trials have been conducted, meta-analyses reveal only modest evidence that interventions can reliably alter immune parameters. The most consistent evidence emerges from hypnosis and conditioning trials. Disclosure and stress management show scattered evidence of success. Relaxation demonstrates little capacity to elicit immune change. Although these data provide only modest evidence of successful immune modulation, it would be premature to conclude that the immune system is unresponsive to psychological interventions. This literature has important conceptual and methodological issues that need to be resolved before any definitive conclusions can be reached.

[0487] Neurophysiological processes underlying the phantom limb pain experience and the use of hypnosis in its clinical management: an intensive examination of two patients
Rosen G; Willoch F; Bartenstein P; Berner N; Rosjo S
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In a pilot study with 2 patients suffering from phantom limb pain (PLP), hypnotic suggestions were used to modify and control the experience of the phantom limb, and positron emission tomography (PET) was used to index underlying pathways and areas involved in the processing of phantom limb experience (PLE) and PLP. The patients’ subjective experiences of pain were recorded in a semistructured protocol. PET results demonstrated activation in areas known to be responsible for sensory and motor processing. The reported subjective experiences of PLP and movement corresponded with predicted brain activity patterns. This work helps to clarify the central nervous system correlates of phantom limb sensations, including pain. It further suggests that hypnosis can be incorporated into treatment protocols for PLP.

[0488] Is a capacity for negative priming correlated with hypnotizability?: a preliminary study
Int J Clin Exp Hypn 2001 Jan;49(1):30-7 (ISSN: 0020-7144)
David D; King BJ; Borkardt JJ
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Hypnotic responsiveness may depend upon the ability to inhibit the irrelevant stimuli that evoke responses that are incompatible with current goals (or the mapping between an irrelevant/disruptive stimulus and its response) in order to actively maintain task-relevant information. In a simple correlation design, the authors investigated the relationship between cognitive inhibition (negative priming) and hypnotic responsiveness. A statistically significant correlation was obtained between the extent of negative priming (measured in time latency) and hypnotic responsiveness (r = .491). Limitations of this preliminary study and implications for future work are discussed.

[0489] [John Bjorkhem and hypnosis]
[Hypnos i svensk 1900-tals medicin speglad genom John Bjorkhems liv och verksamhet]
Sven Med Tidskr 2001;5(1):45-60 (ISSN: 1402-9071)
Bjorkhem L; Stolt CM

Hypnosis has been recognised for thousands of years and is believed to have originated from shamanic trance methods. It has always been controversial in medical science. The biography of the Swedish physician John Bjorkhem and the history of hypnosis in Swedish medicine during the 20th century is intimately related to each other. Bjorkhem devoted most of his professional life to the phenomenon of hypnosis. He had a unique background for his studies as a priest, physician and psychologist. He always regarded hypnosis to have a great potential both as a therapeutic and as a diagnostic tool. He was fascinated by the mystic undertones in his results from the hypnotic experiments and he devoted great time to parapsychology. In this essay we describe an outsider in medicine, both with respect to person and topic. In the case of Bjorkhem the situation was particular complicated because of his multidisciplinary activities with three different faculties involved. Finally the essay deals with the condition of a pioneer, and his struggle for acceptance and understanding. Only future can tell if the visions that Bjorkhem had about hypnosis as an efficient therapeutic tool in medicine will come true.
[0490] Hypno-analysis: On the integration of hypnotic elements in individual uncovering psychotherapy in patients with anxiety disorder

[0491] Hypnotherapy in a specialist palliative care unit: evaluation of a pilot service

[0492] Etiology, diagnosis, and treatment of nonepileptic seizures

[0493] Trance and suggestion: timeless interventions and implication for nurses in the new millennium

[0494] Representation of acute and persistent pain in the human CNS: potential implications for chemical intolerance

Following a short history of the development of the therapeutic techniques of psychoanalysis as derived from the basic rules of hypnosis, the apparent contradictions between the two approaches are called into question, with particular reference to the importance and efficacy of suggestion and suggestibility in both methods. How the integration of hypnotic interventions can both intensify and at the same time shorten the process of analytic therapy is demonstrated by two vignettes. The range of indications for the use of hypnosis as a complementary measure is currently restricted to the analysis of resistance and of the making conscious of past traumatic experiences that are involved in the psychogenesis of anxiety disorders. Particular importance is attached to the careful establishment of the indication and then psychoanalytic working-through of the accompanying transference-countertransference-dynamics following the completion of the hypno-analytic phase and in the course of the ongoing uncovering therapeutic process.

Hypnotherapy in a specialist palliative care unit: evaluation of a pilot service

There is evidence that hypnotherapy may have an application in the palliative care setting by relieving stress and helping patients to cope with their illness and the prospect of dying. It may also be of benefit to health professionals working in this sometimes stressful field. This article reports on the audit of a pilot hypnotherapy service for patients, carers and staff at a specialist palliative care unit. The audit explored the demand for hypnotherapy, the practicalities of providing the service and identified benefits as perceived by the clients and the therapist. Evaluation methods included questionnaires for quantifiable and qualitative data. The study was conducted over 5 months and involved 11 clients (seven staff and four patients). The main findings depicted unanimous positive coping and relaxation benefits to the clients. At the end of the therapy, 82% felt it had assisted in improving the presenting problem and 91% felt it had been of benefit in general. Further issues are discussed such as the therapeutic relationship, non-attendance and the environment used during the sessions.

Etiology, diagnosis, and treatment of nonepileptic seizures

Psychogenic nonepileptic seizures (NES) can be classified into five categories. This review focuses on NES associated with emotional conflict, by far the most common and important group. Etiology is speculative, but the background histories of these patients are often similar. The presence of a trauma history, depression, post-traumatic stress symptoms, and the use of dissociation plus cognitive dysfunction possibly point to an organic etiology. The presentation of NES in children and adults is discussed, along with the differential diagnosis. The diagnostic differential is lengthy, with epileptic seizures of frontal lobe origin presenting a unique challenge. Diagnostic procedures are reviewed with an emphasis on the utility of hypnosis with seizure induction. Presenting the diagnosis to the patient, the role of the neurologist, and the role of the mental health consultant are reviewed. Issues in the doctor-patient relationship are also addressed, as well as the overall prognosis.

Trance and suggestion: timeless interventions and implication for nurses in the new millennium

Trance is a normal psychophysiological phenomenon. Suggestion is the purposeful use of that phenomenon and the heart of hypnosis. Suggestion deepens and enriches trance and promotes beneficial changes, or healing, within the individual. This article addresses the traditional historical and cultural roots of the hypnotic experience and use of "trance" and "suggestion". How nurses often unknowingly use these phenomena and can intentionally use trance and suggestion in their practices is explored.

Representation of acute and persistent pain in the human CNS: potential implications for chemical intolerance
The treatment of patients with Irritable Bowel Syndrome has not been very successful because of the number of

Universidad de Belgrano, Facultad de Humanidades

Garcia Islas P; Bustos Fernandez D


[Paciente con sindrome de intestino irritable. Un paciente dificil?]

[The patient with irritable bowel syndrome. A difficult patient?]

Csikszentmihalyi's principle of flow, in that it involves engagement in a subjectively meaningful, skill-based activity.

This approach to induction bears similarity to "active-alert" procedures but may be more importantly related to Mihaly game Tetris) permitted the experience of a highly focused but relaxed state that was conducive to therapeutic interaction.

to as scary feelings. It was found that his performance of a previously learned skilled activity (the playing of the computer asthma since infancy and seizure disorder from the age of eight. In early sessions it was discovered that conventional intervention in NUD.

This paper describes a hypnotherapeutic intervention for a brain damaged 36-year-old male who has suffered from [0497]


The treatment of patients with Irritable Bowel Syndrome has not been very successful because of the number of

Professional Hypnosis Databank - page 111 of 889 - by Alberto Torelli, hypnologist
variations that are associated with the illness. Some of them are: Depression and Anxiety, intensity of the symptoms and colonic hypersensitivity, all this, added to the unknown etiology of the illness. This review expects to bring a global vision of the difficulty that has existed for Medicine or psychology to bring the best treatment to these patients. Diverse investigations had obtained successful results with different psychotherapeutic approaches (Hypnotherapy, Psychoanalysis, cognitive therapy, multicomponent therapy, etc.). Nevertheless these present methodological errors that put in doubt those results. It is thought that interdisciplinary treatment would be a good option for these patients.

[0498]
Skin reactions to histamine of healthy subjects after hypnotically induced emotions of sadness, anger, and happiness
Allergy 2001 Aug;56(8):734-40 (ISSN: 0105-4538)
Zachariae R; Jorgensen MM; Egekvist H; Bjerring P
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BACKGROUND: The severity of symptoms in asthma and other hypersensitivity-related disorders has been associated with changes in mood but little is known about the mechanisms possibly mediating such a relationship. The purpose of this study was to examine the influence of mood on skin reactivity to histamine by comparing the effects of hypnotically induced emotions on flare and wheal reactions to cutaneous histamine prick tests. METHODS: Fifteen highly hypnotically susceptible volunteers had their cutaneous reaction to histamine measured before hypnosis at 1, 2, 3, 4, 5, 10, and 15 min after the histamine prick. These measurements were repeated under three hypnotically induced emotions of sadness, anger, and happiness presented in a counterbalanced order. Skin reactions were measured as change in histamine flare and wheal area in mm² per minute. RESULTS: The increase in flare reaction in the time interval from 1 to 3 min during happiness and anger was significantly smaller than flare reactions during sadness (P<0.05). No effect of emotion was found for wheal reactions. Hypnotic susceptibility scores were associated with increased flare reactions at baseline (r=0.56; P<0.05) and during the condition of happiness (r=0.56; P<0.05). CONCLUSION: Our results agree with previous studies showing mood to be a predictor of cutaneous immediate-type hypersensitivity and histamine skin reactions. The results are also in concordance with earlier findings of an association between hypnotic susceptibility and increased reactivity to an allergen.

[0499]
Efficacy of induction and difficulty level in durability of post-hypnotic suggestions
Calandrino JG; Kurtz RM; Strube MJ
Washington University, USA

We examined whether participants instructed to reenter a hypnotic state as part of the post-hypnotic suggestion (PHS) show less decay in responding over an 8-week period than participants who do not receive such instructions. We also attempted to replicate Trussell, Kurtz, and Strube's (1996) finding on impact of difficulty level of suggestion on response curve. Fifty-nine highly susceptible participants were selected by the Stanford Hypnotic Susceptibility Scale: Form C (SHSS-C) and were assigned to one of four groups (two levels of Difficulty [easy-hard] x two levels of Condition [hypnotic PHS, non-hypnotic PHS]). Participants were tested for PHS at 1, 3, 6, and 8 weeks. A 2 x 2 x 4 (Difficulty x Condition x Time) factorial ANOVA was conducted, with Time as a repeated-measure. The outcome variable at each time was either pass or fail for relevant suggestion. None of the effects containing Condition as a term were significant indicating there is no advantage to using Berrigan, Kurtz, Stabile, and Strube's (1991) atypical induction technique to influence the durability of PHS. We found a significant Time effect but failed to replicate Trussell et al.'s findings for Difficulty level. The differing results found in these three recent studies (Berrigan et al., Trussell et al., and the current study) suggest the effects for durability of PHS may be quite fragile in spite of rigorous experimental controls used in all three studies.

[0500]
Identification of higher brain centres that may encode the cardiorespiratory response to exercise in humans
J Physiol 2001 Jun 15;533(Pt 3):823-36 (ISSN: 0022-3751)
Thornton JM; Guz A; Murphy K; Griffith AR; Pedersen DL; Kardos A; Leff A; Adams L; Casadei B; Paterson DJ
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1. Positron emission tomography (PET) was used to identify the neuroanatomical correlates underlying 'central command' during imagination of exercise under hypnosis, in order to uncouple central command from peripheral feedback. 2. Three cognitive conditions were used: condition I, imagination of freewheeling downhill on a bicycle (no change in heart rate, HR, or ventilation, V(I)); condition II, imagination of exercise, cycling uphill (increased HR by 12 % and V(I) by 30 % of the actual exercise response); condition III, volitionally driven hyperventilation to match that achieved in condition II (no change in HR). 3. Subtraction methodology created contrast A (II minus I) highlighting cerebral areas involved in the imagination of exercise and contrast B (III minus I) highlighting areas activated in the direct volitional control of breathing (n = 4 for both; 8 scans per subject). End-tidal P(CO(2)) (P(ET,CO(2))) was held constant throughout PET scanning. 4. In contrast A, significant activations were seen in the right dorso-lateral prefrontal cortex, supplementary motor areas (SMA), the right premotor area (PMA), superolateral sensorimotor areas, thalamus, and bilaterally in the cerebellum. In contrast B, significant activations were present in the SMA and in lateral sensorimotor cortical areas. The SMA/PMA, dorso-lateral prefrontal cortex and the cerebellum are concerned with volitional/motor control, including that of the respiratory muscles. 5. The neuroanatomical areas activated suggest that a significant component of the respiratory response to 'exercise', in the absence of both movement feedback and an increase in CO(2) production, can be generated by what appears to be a behavioural response.
[0501]
Complementary therapies in palliative cancer care
Cancer 2001 Jun 1;91(11):2181-5 (ISSN: 0008-543X)
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BACKGROUND: Complementary medicine has become an important aspect of palliative cancer care. This overview is primarily aimed at providing guidance to clinicians regarding some commonly used complementary therapies. METHODS: Several complementary therapies were identified as particularly relevant to palliative cancer care. Exemplary studies and, where available, systematic reviews are discussed. RESULTS: Promising results exist for some treatments, e.g. acupuncture, enzyme therapy, homeopathy, hypnotherapy, and relaxation techniques. Unfortunately, the author finds that the evidence is not compelling for any of these therapies. CONCLUSION: These results point to some potential for complementary medicine in palliative care. They also demonstrate an urgent need for more rigorous research into the value (or otherwise) of such treatments in palliative and supportive cancer care. [Copyright 2001 American Cancer Society.]

[0502]
Sedation-analgesia in the pediatric intensive care unit
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The provision of sedation and analgesia is an integral aspect of the care of PICU patients. A careful systems approach to the provision of sedation and analgesia can minimize complications and maximize benefit to patients. Vigilance in monitoring and adherence to published guidelines are important for safety. Physicians must define the goals in clearly devising a plan and tailor the prescription to those goals rather than use a regimented protocol for all patients.

[0503]
The use of dental anxiety questionnaires: a survey of a group of UK dental practitioners
Br Dent J 2001 Apr 28;190(8):450-3 (ISSN: 0007-0610)
Dailey YM; Humphris GM; Lennon MA
Department of Clinical Dental Sciences, University of Liverpool

AIM: To determine the frequency of use of dental anxiety assessment questionnaires and factors associated with their use in a group of UK dental practitioners. METHOD: A postal questionnaire to all 328 dentists whose names appear in the British Society for Behavioural Sciences in Dentistry Directory. Information collected for each practitioner included gender, year of qualification, type of practice in which anxious dental patients were treated, treatment used to manage anxious dental patients, type and frequency of use of dental anxiety assessment indices. RESULTS: Questionnaires were returned from 275 (84%) practitioners, 269 were analyzed. Only 54 practitioners (20%) used adult dental anxiety assessment questionnaires and only 46 (17%) used child dental anxiety assessment questionnaires. Male practitioners were more likely to report questionnaire use in comparison with females (P< 0.05), when treating dentally anxious adults (26% v 14%). In addition, practitioners providing intravenous sedation were more likely to use an adult dental anxiety questionnaire (P < 0.04) than those who did not use intravenous sedation (29% v 15%). The type of treatment provided had a significant association with the use of child dental anxiety. Those providing general anaesthesia (P = 0.03) and hypnosis (P = 0.01) for dentally anxious children were more inclined to use a questionnaire. CONCLUSION: The use of pre-treatment dental anxiety assessment questionnaires was low in this group of dentists. Male practitioners and those providing intravenous sedation, general anaesthesia or hypnosis seem more likely to use dental anxiety assessment questionnaires.

[0504]
Hypnotizability in acute stress disorder
Am J Psychiatry 2001 Apr;158(4):600-4 (ISSN: 0002-953X)
Bryant RA; Guthrie RM; Moulds ML
School of Psychology, University of New South Wales, Sydney, NSW 2052 Australia

OBJECTIVE: This study investigated the relationship between acute dissociative reactions to trauma and hypnotizability. METHOD: Acutely traumatized patients (N=61) with acute stress disorder, subclinical acute stress disorder (no dissociative symptoms), and no acute stress disorder were administered the Stanford Hypnotic Clinical Scale within 4 weeks of their trauma. RESULTS: Although patients with acute stress disorder and patients with subclinical acute stress disorder displayed comparable levels of nondissociative psychopathology, acute stress disorder patients had higher levels of hypnotizability and were more likely to display reversible posthypnotic amnesia than both patients with subclinical acute stress disorder and patients with no acute stress disorder. CONCLUSIONS: The findings may be interpreted in light of a diathesis-stress process mediating trauma-related dissociation. People who develop acute stress disorder in response to traumatic experience may have a stronger ability to experience dissociative phenomena than people who develop subclinical acute stress disorder or no acute stress disorder.
The purpose of this investigation was to hypnotically manipulate effort sense during dynamic exercise and determine whether cerebral cortical structures previously implicated in the central modulation of cardiovascular responses were activated. Six healthy volunteers (4 women, 2 men) screened for high hypnotizability were studied on 3 separate days during constant-load exercise under three hypnotic conditions involving cycling on a 1) perceived level grade, 2) perceived downhill grade, and 3) perceived uphill grade. Ratings of perceived exertion (RPE), heart rate (HR), blood pressure (BP), and regional cerebral blood flow (rCBF) distributions for several sites were compared across conditions using an analysis of variance. The suggestion of downhill cycling decreased both the RPE [from 13 +/- 2 to 11 +/- 2 (SD) units; P &lt; 0.05] and rCBF in the left insular cortex and anterior cingulate cortex, but it did not alter exercise HR or BP responses. Perceived uphill cycling elicited significant increases in RPE (from 13 +/- 2 to 14 +/- 1 units), HR (+16 beats/min), mean BP (+7 mmHg), right insular activation (+7.7 +/- 4%), and right thalamus activation (+9.2 +/- 5%). There were no differences in rCBF for leg sensorimotor regions across conditions. These findings show that an increase in effort sense during constant-load exercise can activate both insular and thalamic regions and elevate cardiovascular responses but that decreases in effort sense do not reduce cardiovascular responses below the level required to sustain metabolic needs.
Many pharmacologic and nonpharmacologic strategies are available to treat sleep disorders successfully. Conventional stimulants and the new stimulant modafinil have roles to play in the management of narcolepsy and idiopathic hypersomnia. Knowledge of the properties and clinical effects of these drugs allows adequate doses of medications to be used with the goal of attaining as maximal alertness as possible. A range of dopaminergic agents is available to treat restless legs syndrome; other medications such as opiates, benzodiazepines, and anticonvulsants can also be used. Successful use of the dopaminergic agents depends on an understanding of the phenomena of augmentation, rebound, and tolerance. Arousal parasomnias can be treated with behavioral methods such as hypnosis and drug therapy. Clonazepam provides relief of the symptoms in most patients with REM sleep behavior disorder.

[0509] Local and remote effects of hypnotic suggestions of analgesia
Pain 2001 Jan;89(2-3):167-73 (ISSN: 0304-3959)
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The present study was designed to further characterize hypnotic analgesia and particularly to examine whether the effects are due to a selective alteration of pain perception and are organized somatotopically. Thirty-two healthy volunteers participated in this study. Thermal detection thresholds for warmth and cool stimuli and heat pain thresholds were measured at both the upper and lower left limbs by means of a thermostest. Measurements were performed before, during and after a hypnotic session during which the subjects were administered a French adaptation of the Stanford Hypnotic Susceptibility Scale and then standardized suggestions of analgesia limited to the left foot. Heat pain thresholds were significantly increased at both the lower and upper limbs. Changes at the foot were positively correlated with the hypnotic susceptibility score, while, unexpectedly, changes at the hand were negatively correlated with the susceptibility score. Mean detection thresholds for warmth and cool stimuli were also altered at both the lower and upper limbs during hypnosis, but these modifications were correlated neither with susceptibility nor with the changes in heat pain threshold. These results indicate that hypnotic suggestions can selectively and somatotopically alter pain sensation in highly susceptible subjects. It is also suggested, however, that suggestions of analgesia can induce selective alterations of pain perception in poorly susceptible subjects, although these effects did not appear to be localized ‘appropriately’.

[0510] Phenomenological experiences associated with hypnotic susceptibility
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Following the administration of a Hungarian translation of the Stanford Hypnotic Susceptibility Scale, Form C (SHSS:C), 104 Hungarian subjects completed the Hungarian translation of the Phenomenology of Consciousness Inventory (PCI). Subjects had also been administered the Harvard Group Scale of Hypnotic Susceptibility, Form A (HGS:SA) about 1 week to 2 months before the SHSS:C. The pattern of correlations between hypnotizability (as measured by the HGS:SA and the SHSS:C) and the 5 factors of the PCI was quite similar to that of previous work carried out using the English language versions on subjects in the United States. SHSS:C and HGS:SA scores correlated significantly with the PCI factors of dissociated control, positive affect, and attention to internal processes factors. In addition, the SHSS:C score correlated significantly with the visual imagery factor, as found in previous work.

[0511] EEG source localization and global dimensional complexity in high- and low- hypnotizable subjects: a pilot study
Neuropsychobiology 2001;44(4):192-8 (ISSN: 0302-282X)
Isotani T; Lehmann D; Pascual-Marqui RD; Kochi K; Wackermann J; Saito N; Yagyu T; Kinoshita T; Sasada K
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Individuals differ in hypnotizability. Information on hypnotizability-related EEG characteristics is controversial and incomplete, particularly on intracerebral source localization and EEG dimensionality. 19-channel, eyes-closed resting EEGs from right-handed, healthy, 8 high- and 4 low-hypnotizable subjects (age: 26.7 +/- 7.3 years) were analyzed. Hypnotizability was rated after the subjects’ ability to attain a deep hypnotic stage (amnesia). FFT Dipole Approximation analysis in seven EEG frequency bands showed significant differences (p &lt; 0.04) of source gravity center locations for theta (6.5-8 Hz, more posterior and more left for highs), beta-1 and beta-2 frequencies (12.5-18 and 18.5-21 Hz; both more posterior and more right for highs). Low Resolution Electromagnetic Tomography (LORETA) specified the cortical anteriorization of beta-1 and beta-2 in low hypnotizables. Power spectral analysis of Global Field Power time series (curves) showed no overall power differences in any band. Full-band Global Dimensional Complexity was higher in high-hypnotizable subjects (p &lt; 0.02). Thus, before hypnosis, high and low hypnotizables were in different brain electric states, with more posterior brain activity gravity centers (excitatory right, routine or relaxation left) and higher dimensional complexity (higher arousal) in high than low hypnotizables. [Copyright 2001 S. Karger AG, Basel].
Experimental production of illusory (false) memories in reconstructions of narratives: effect size and potential mediation by right hemispheric stimulation from complex, weak magnetic fields
Int J Neurosci 2001;106(3-4):195-207 (ISSN: 0020-7454)
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This experiment was designed to discern the proportion of false, inferential and verbatim memories that would be included in the reconstruction, one week later, of a 5 min narrative containing ambiguous but emotional content about a little boy. After 48 subjects were administered Spiegel's Hypnosis Induction Profile, they listened to the narrative, were exposed to one of four applications of transcerebral weak, complex magnetic fields for 30 min and then given either an accurate or inaccurate short summary of the story. One week later the group who received the erroneous summary reported more false memories about the original story than did the reference group; this treatment accommodated about 40% of the variance in numbers of false memories. Only an indicator of electrical lability within the temporal lobes (but not hypnotizability) was strongly associated with the numbers of inferential memories but not the numbers of false memories. The group that received transcerebral stimulation over the right hemisphere by a complex magnetic field and the erroneous summary reported three times the numbers of false memories compared to the other groups. Whereas verbatim memories showed a strong primacy effect inferential memories exhibited a strong recency effect (eta(2) = .66).

Biopsychosocial approaches to the treatment of chronic pain
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BACKGROUND: Biopsychosocial treatments address the range of physical, psychological, and social components of chronic pain. OBJECTIVE: This review sought to determine how effective unimodal and multimodal biopsychosocial approaches are in the treatment of chronic pain. METHODOLOGY: The literature search identified three systematic reviews of the literature and 21 randomized controlled trials to provide the evidence for this review. RESULTS: The systematic reviews and 12 randomized controlled trials reported on chronic low back pain. Other randomized controlled trials studied fibromyalgia (three trials) and back or other musculoskeletal disorders (five trials). Biopsychosocial components reviewed were electromyogram feedback and hypnosis as unimodal approaches, and behavioral and cognitive-behavioral treatments and back school, or group education, as multimodal approaches for chronic low back pain. For other chronic pain disorders, cognitive-behavioral treatments were reviewed. Comparisons were hindered by studies with heterogeneous subjects, varied comparison groups, different cointerventions and follow-up times, variable outcomes, and a range of analytic methods. CONCLUSIONS: Multimodal biopsychosocial treatments that include cognitive-behavioral and/or behavioral components are effective for chronic low back pain and other musculoskeletal pain for up to 12 months (level 2). There is limited evidence (level 3) that electromyogram feedback is effective for chronic low back pain for up to 3 months. The remaining evidence of longer-term effectiveness and of effectiveness of other interventions was inadequate (level 4a) or contradictory (level 4b). Future studies of cognitive-behavioral treatments should be condition specific, rather than include patients with different pain conditions.

Benzodiazepines in the intensive care unit
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The effects of BZ drugs result from interaction at the GABAA receptor within the CNS, producing anxiolysis, hypnosis, and amnesia in a dose-dependent fashion. These sedative effects are best titrated to reproducible clinical endpoints, using scoring systems such as the Ramsay scale. All BZs exhibit similar pharmacologic effects, but the important differences in pharmacokinetics and pharmacodynamics should be recognized to use these drugs safely and effectively within the ICU. Diazepam is the classic anxiolytic, amnestic, and sedative agent, but the presence of long-acting active metabolites that depend on the kidneys for elimination limits its use in many ICU patients. Lorazepam is the most potent BZ used in the ICU; it has stable pharmacokinetics and relatively low cost. This drug is best reserved for situations in which rapid onset is not essential and long-term sedation is anticipated. Midazolam has the shortest t1/2 of the commonly used BZs, generates few active metabolites, and is water soluble at physiologic pH. Thus, it is well suited for continuous infusion in the ICU, and the recent introduction of generic formulations of midazolam has decreased the drug-acquisition cost for many hospitals. Optimal sedation for ICU patients often requires BZ and concomitant therapy with drugs such as haloperidol, dexmedetomidine, opioids, and so forth, to reduce untoward side effects and, perhaps, overall drug costs. Flumazenil, a specific BZ antagonist, can be used for diagnostic or therapeutic reversal of BZ agonists when appropriate. Most experienced intensivists recommend an individualized approach to sedation and titration of anxiolysis to maximize efficacy, minimize side effects, and optimize cost effectiveness in the ICU. New CNS monitors of the EEG, such as the BIS or entropy EEG monitors, may refine titration algorithms further in the near future.

Is there a false memory syndrome? A review of three cases
The controversy over recovered memories of childhood sexual abuse (CSA) is whether such experiences can be forgotten for long periods and retrieved later in therapy or in response to cues or triggers from the environment. False memory syndrome (FMS) is caused by memories of a traumatic experience—most frequently CSA—which are objectively false, but in which the person strongly believes. Personality factors often play a role in the development of FMS. Because CSA is such a devastating experience, false accusations of sexual abuse have enormous, if not shattering, consequences for families. We present three case reports to illustrate features of the FMS. FMS should be listed for further study to establish valid criteria for making the diagnosis under the category of "factitious disorders," and a subcategory of "false memories/beliefs of abuse," with a further subdivision of "induced by therapy." The FMS controversy occurred in the context of a general moral panic about sexual abuse in the early 1980s. Psychiatrists should have a high degree of scepticism to moral panics.

[0517]
Interventions for vaginismus
Cochrane Database Syst Rev 2001;(2):CD001760 (ISSN: 1469-493X)
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BACKGROUND: Vaginismus is involuntary vaginal muscle contraction which makes sexual intercourse difficult or impossible. It is one of the more common female psychosexual problems. Various therapeutic strategies for vaginismus, such as sex therapy and desensitization, have been considered in uncontrolled studies. OBJECTIVES: The aim of this review is to determine the clinical effectiveness of treatments for vaginismus and also to examine the role of partner participation in the effectiveness of the treatment. SEARCH STRATEGY: The Cochrane Collaboration Depression, Anxiety &amp; Neurosis Controlled Trials Register (Issue 3, 2000), the Cochrane Controlled Trials Register (Cochrane Library, Issue 2, 2000), MEDLINE (1966 to Apr 2000), EMBASE (1980 to Apr 2000), PsycINFO (1967 to April 2000) and CINAHL (1982 to Mar 2000) were searched. The Journal of Sex Research (1974 to 1999), Sexual &amp; Marital Therapy (1986 to 1999), Sexual Dysfunction (1998 to 1999) and the Journal of Sex and Marital Therapy (1974 to 1999) were handsearched. Reference lists and conference abstracts were searched. Experts in the field were contacted regarding unpublished material. SELECTION CRITERIA: Controlled trials comparing treatments for vaginismus with another treatment, a placebo treatment, treatment as usual or waiting list control. DATA COLLECTION AND ANALYSIS: The reviewers extracted data which were verified with the trial investigator. MAIN RESULTS: Two controlled trials were identified although data were only available from one trial. The second trial compared two forms of systematic desensitization and reported no discernible differences between them. REVIEWER'S CONCLUSIONS: In spite of encouraging results reported from uncontrolled series of patients there is very limited evidence from controlled trials concerning the effectiveness treatments for vaginismus. Further trials are needed to compare therapies with waiting list control and with other therapies.

[0516]
[Severe bladder dysfunction in the child abuse victim. Hinman syndrome]
[Dysfonctionnements vesicaux graves chez l'enfant victime de maltraitance. Le syndrome de Hinman]
Presse Med 2001 Dec 22-29;30(39-40 Pt 1):1918-23 (ISSN: 0755-4982)
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OBJECTIVES: The existence of a relationship between urinary disorders without neurological cause or obstructed miction and sexual violence is a recent concept, known as Hinman's syndrome. Seven observations of this syndrome are reported. OBSERVATIONS: Seven children were examined for symptoms such as nocturnal and diurnal incontinence, recurrent urinary infection, constipation and encopresis. A particular psychological profile, an unfavourable socioeconomic context and sexual abuse were revealed in these children. Multidisciplinary care (paediatricians, paediatric urologists, chiropractors and paediatric psychologists) always led to improvement. COMMENTS: Knowledge on severe vesicular dysfunction of psychogenic origin, with severe repercussions on the upper urinary tract, is recent. In 1973 Franck Hinman and Franz Bauman reported the first series of 14 children with neurological vesicular symptomatology without any known organic cause. The series of urinary, digestive and psychological symptoms observed in all the patients responded well to re-education and hypnosis techniques. Other authors, such as Allen in 1977, reported similar observations and demonstrated severe vesicular-sphincter dyssynergy. For the first time in 1995, Ellsworth established a relationship between these particular functional profiles and a history of sexual abuse. We diagnosed Hinman's syndrome in 7 children. The particularity of this syndrome can be found in the self-inflicted origin of the urinary disorders, with dosing of the perineal sphincters, related to the psychological disorders in these children, victims of abuse.

[0518]
The recovery of cognitive function after general anesthesia in elderly patients: a comparison of desflurane and sevoflurane
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We evaluated the cognitive recovery profiles in elderly patients after general anesthesia with desflurane or sevoflurane. After IRB approval, 70 ASA physical status I-III consenting elderly patients (&gt; or =65 yr old) undergoing total knee or hip replacement procedures were randomly assigned to one of two general anesthetic groups. Propofol and fentanyl were administered for induction of anesthesia, followed by either desflurane 2%-4% or sevoflurane 1%-1.5% with nitrous oxide 65% in oxygen. The desflurane (2.5 +/- 0.6 MAC, h) and sevoflurane (2.7 +/- 0.5 MAC, h) concentrations were adjusted to maintain comparable depths of hypnosis using the electroencephalogram bispectral index monitor. The Mini-Mental State (MMS) test was used to assess cognitive function preoperatively and postoperatively at 1, 3, 6, and 24-h intervals. The use of desflurane was associated with a more rapid emergence from anesthesia (6.3 +/- 2.4 min versus 8.0 +/- 2.8 min) and a shorter length of stay in the postanesthesia care unit (213 +/- 66 min versus 241 +/- 87 min). However, there were no significant differences between the Desflurane and the Sevoflurane groups when the MMS scores were compared preoperatively, and postoperatively at 1, 3, 6, and 24 h. Compared with the preoperative (baseline) MMS scores, the values were significantly decreased at 1 h postoperatively (27.8 +/- 1.7 versus 29.5 +/- 0.5 in the Desflurane group, and 27.4 +/- 1.7 versus 29.2 +/- 1.0 in the Sevoflurane group, respectively). However, the MMS scores returned to preoperative baseline levels within 6 h after surgery. At 1 h and 3 h after surgery, 51% and 11% (versus 57% and 9%) of patients in the Desflurane (versus Sevoflurane) Group experienced cognitive impairment. In conclusion, desflurane is associated with a faster early recovery than sevoflurane after general anesthesia in elderly patients. However, recovery of cognitive function was similar after desflurane and sevoflurane-based anesthesia. IMPLICATIONS: Desflurane was associated with a faster early recovery than sevoflurane after general anesthesia in elderly patients. However, recovery of cognitive function was similar with both volatile anesthetics.

[0519]
Alternative psychotherapy approaches for social anxiety disorder
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Alternative therapies and therapy modalities for SAD are needed because: Established treatments (CBT and pharmacologic) do not help everyone who seeks help. Established treatments provide only partial decrease in symptoms for many patients. Patients may experience recurrence of symptoms in long-term follow-up. CBT does not reach enough patients in need. Alternative treatment approaches and modalities may also be needed to address the successful outcomes of CBT. Success in overcoming social anxiety symptoms can generate a whole new set of challenges. For example, a 31-year-old man who overcomes his fear of dating and begins his first romantic relationship may need a less symptomatically focused therapy to deal with issues that arise in this relationship. Likewise, a woman whose decreased social anxiety enables her to get a long-awaited promotion may need to deal with the stress of adjusting to her new responsibilities. An individual who overcomes phobia of public speaking and still has mild anxiety may need to graduate to a forum such as Toastmasters to provide continued exposure to further develop confidence and skills in public speaking.

[0520]
Intellect and somatic health: associations with hypochondriacal concerns, perceived threat and fainting
Psychother Psychosom 2001 Nov-Dec;70(6):319-27 (ISSN: 0033-3190)
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BACKGROUND: Compared to the other domains of the Big 5, intellect has been relatively underresearched with regard to somatic health outcomes. It is argued that this, in part, is because specific hypotheses concerning intellect and somatic health have not been formulated. It is argued that intellect is related to both alexithymia and hypnotic ability. As such the High Risk Model of Threat Perception forms one useful theoretical framework for generating hypotheses about intellect and somatic health. On this basis it is hypothesised that intellect should show a U-shaped relationship to hypochondriacal concerns, a positive association with appraisals of threat and loss, and a negative association with levels of self-reported vasovagal syncope (feelings of faintness). METHODS: Two cross-sectional studies, using student samples (n = 205, 179), examined the relationships between intellect and hypochondriacal concerns as well as intellect and appraisals of threat and loss. A third prospective study, using a sample of blood donors (n = 373), examined the relationship between levels of self-reported vasovagal syncope and intellect. RESULTS: Compared to the other domains of the Big 5, intellect demonstrated a U-shaped association with hypochondriacal concerns, a positive association with perceived threat and loss and a negative association with fainting. The negative association with fainting remained once incidence of previous fainting, the number of previous blood donations and emotional stability were held as covariates. CONCLUSIONS: Intellect is associated in a number of important ways with a variety of psychosomatic variables. [Copyright 2001 S. Karger AG, Basel].

[0521]
New perspectives in EEG/MEG brain mapping and PET/ fMRI neuroimaging of human pain
Int J Psychophysiol 2001 Oct;42(2):147-59 (ISSN: 0167-8760)
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With the maturation of EEG/MEG brain mapping and PET/ fMRI neuroimaging in the 1990s, greater understanding of pain...
processing in the brain now elucidates and may even challenge the classical theory of pain mechanisms. This review scans across the cultural diversity of pain expression and modulation in man. It outlines the difficulties in defining and studying human pain. It then focuses on methods of studying the brain in experimental and clinical pain, the cohesive results of brain mapping and neuroimaging of noxious perception, the implication of pain research in understanding human consciousness and the relevance to clinical care as well as to the basic science of human psychophysiology. Non-invasive brain studies in man start to unveil the age-old puzzles of pain-illusion, hypnosis and placebo in pain modulation. The neurophysiological and neurohemodynamic brain measures of experimental pain can now largely satisfy the psychophysicologist's dream, unimaginable only a few years ago, of modelling the body-brain, brain-mind, mind-matter duality in an inter-linking 3-P triad: physics (stimulus energy); physiology (brain activities); and psyche (perception). For neuropsychophysiologist greater challenges lie ahead: (a) how to integrate a cohesive theory of human pain in the brain; (b) what levels of analyses are necessary and sufficient; (c) what constitutes the structural organisation of the pain matrix; (d) what are the modes of processing among and across the sites of these structures; and (e) how can neural computation of these processes in the brain be carried out? We may envision that modular identification and delineation of the arousal-attention, emotion-motivation and perception-cognition neural networks of pain processing in the brain will also lead to deeper understanding of the human mind. Two foreseeable impacts on clinical sciences and basic theories from brain mapping/neuroimaging are the plausible central origin in persistent pain and integration of sensory-motor function in pain perception.

[0522]
What every nurse needs to know about nocturnal sleep-related eating disorder
J Psychosoc Nurs Ment Health Serv 2001 Aug;39(8):14-20 (ISSN: 0279-3695)
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This article provides information about a bizarre pattern of eating while asleep called nocturnal sleep-related eating disorder. People with this disorder, which has begun to be studied only recently, demonstrate features of both a sleep disorder and an eating disorder. Many clients are reluctant to initiate discussions regarding this condition because of feelings of powerlessness and shame. Other clients do not discuss their symptoms because nurses and other clinicians fail to gather accurate assessment data due to lack of knowledge within the professional community regarding the disorder. This review includes the historical background, definition of terms, and clinical manifestations of nocturnal sleep-related eating. In addition, emphasis on assessment and clinical management are included. Safety issues, the need to educate health care providers, and the role of the nurse in advocating for appropriate diagnosis, treatment, and referral are addressed.

[0523]
Assessing pain responses during general anesthesia
AANA J 2001 Jun;69(3):218-22 (ISSN: 0094-6354)
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Major technical and pharmacological achievements in recent years have greatly influenced the practice of anesthesia. Clinical signs related to the main aspects of anesthesia, i.e., hypnosis, analgesia, and muscular relaxation, are increasingly obtainable from variables supplied by the monitoring equipment. It is not known, however, to what extent more indirect, patient-associated clinical signs of pain/depth of anesthesia are still considered of importance and relied on in the intraoperative management of surgical patients. The aims of the present study were to assess what clinical signs, indirect as well as monitor-derived, are considered indicative of intraoperative pain or depth of anesthesia by nurse anesthetists during general anesthesia. In connection with anesthetic management of surgical patients, Swedish nurse anesthetists (N = 40) were interviewed about clinical signs that they routinely assessed and were asked if the observed signs were considered indicative mainly of intraoperative pain or depth of anesthesia by nurse anesthetists during general anesthesia. It was found that skin-associated responses (temperature, color, moisture/stickiness) were commonly considered to indicate intraoperative pain rather than depth of anesthesia. Respiratory movements, eye reactions, and circulatory responses were considered to be indicative of either pain or insufficient depth of anesthesia. The present data indicate that indirect physiological signs are still considered of major importance by anesthesia nurses during the anesthetic management of surgical patients.

[0524]
Psychological assessment and treatment of patients with neuropathic pain
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Studies on the psychological assessment and treatment of neuropathic pain conditions, including postherpetic neuralgia (PHN), diabetic neuropathy, complex regional pain syndrome, post spinal cord injury, post amputation, and AIDS-related neuropathy, are reviewed. Although limited information is currently available, the findings are consistent with the larger literature on chronic pain and indicate that the assessment of neuropathic pain needs to include measurement of multiple dimensions of quality of life. Mood, physical and social functioning, and pain-coping strategies such as catastrophizing and social support are all important domains. Clinical trials of psychological interventions have not been reported in the scientific literature. Case series of successful treatment of neuropathic pain are reported, primarily in the area of biofeedback. As with other chronically painful conditions, it is likely that cognitive-behavioral interventions will improve the
The relationship between medicine and the arts, literature in particular, has many aspects. One of the most obvious relations is the use of literature as a source for historical studies. Jean-Martin Charcot and his school often appear in French literature at the end of the 19th century. Several aspects will be highlighted in this study, including (1) the ideas about degenerative diseases in the work of Emile Zola, the main author of the naturalistic movement; (2) decadence and spiritism in two "transitional" novels by Joris Karl Huysmans, who, once supporter of the naturalistic movement, changed his ideas following observations of disease and cure that could not be explained in a scientific way. Charcot's work on hysteria and hypnosis, as well as Brown-Sequard's rejuvenation experiments with testicular extracts played an important role with this respect; (3) Charcot's relationship with the Daudets, in particular his treatment of Alphonse's tabes dorsalis and the ambivalent attitude of his son Leon Daudet towards Charcot; (4) the influence of the lectures at the Salpetriere on the work of Guy de Maupassant, who attended the lessons in the mid-1880s. The reading of novels and biographies of these authors provides a part of the social context and the cultural atmosphere in Paris at the "fin-de-siecle" when Charcot and his school played an important role in medicine. Moreover, it shows the influence of medicine and science on society as recorded by writers.

Role of spirituality in patients with sickle cell disease
J Am Board Fam Pract 2001 Mar-Apr;14(2):116-22 (ISSN: 0893-8652)
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BACKGROUND: Patients with sickle cell disease cope with their disease in various ways, such as psychological counseling, hypnosis, medication, and prayer. Spirituality is a coping mechanism in a variety of diseases. This study evaluates the role of spirituality in patients coping with the pain of sickle cell disease. METHODS: Seventy-one patients from the Georgia Sickle Cell Clinic completed a questionnaire addressing their ability to cope with the pain of sickle cell disease and their degree of spirituality. A descriptive cross-sectional design was used. Correlation and multiple regression analyses were calculated for the relation between coping with the pain of sickle cell disease and spirituality. RESULTS: The questionnaire provided several scales with high internal consistency for measuring spiritual well-being and its two components, existential well-being and religious well-being, that show a correlation between high levels of spirituality and life control. The study population exhibited high levels of spirituality and religiosity, but the influence of these feelings on coping with sickle cell disease was variable. Spiritual well-being was correlated with life-control but not with perceived pain severity. CONCLUSIONS: Existential well-being was associated with general coping ability. Spiritual well-being is important for some patients who must cope with the pain of sickle cell disease.

Longitudinal follow-up of naturalistic treatment outcome in patients with trichotillomania
J Clin Psychiatry 2001 Feb;62(2):101-7 (ISSN: 0160-6869)
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BACKGROUND: Little is known about the longitudinal course of treatment outcome in patients with trichotillomania. The authors conducted a second follow-up assessment on a cohort of hair pullers previously studied. METHOD: Forty-four subjects completed a hair-pulling questionnaire and paper-and-pencil measures of hair-pulling severity and impact, psychosocial functioning, depression, anxiety, and self-esteem. Mean time elapsed between the first and second follow-up assessment was 2.5 years (index evaluation to first follow-up = 3.5 years). RESULTS: Twenty-seven subjects (61.4%) had active treatment since the first follow-up. No significant changes in hair pulling, depression, anxiety, or psychosocial functioning were reported from first to second follow-up. Self-esteem scores significantly worsened during this period (p = .000). A trend toward worsening also existed for psychosocial impact scores. Comparison of scores at index evaluation with second follow-up still showed significant improvement over time for hair pulling (p = .001) but significant worsening in self-esteem (p = .000). Treatment and responder status were unrelated to clinical functioning, with the exception of depression and psychosocial impact. CONCLUSION: Although hair pullers exhibit initial improvement with treatment, scale scores plateau or worsen by second follow-up. Significant worsening in self-esteem at second follow-up may be related to the absence of further improvements in hair-pulling severity. Future research should focus on the interrelations among self-esteem, depression, and hair pulling during treatment for this disorder.

Managing adolescent and adult victims of extra-familial rape soon after aggression
Encephale 2001 Jan-Feb;27(1):1-7 (ISSN: 0013-7006)
Brazchard M; Robin M; Mauriac F; Waddington A; Noirot MN; Devynck C; Bisson F; Kannas S; Polge C
Acute effects of whole-body exposure to static magnetic fields and 50-Hz electromagnetic fields on muscle microcirculation in anesthetized mice
Bioelectrochemistry 2001 Jan;53(1):127-35 (ISSN: 1567-5394)
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Acute microhemodynamic effects of static and alternating magnetic fields at a threshold level were investigated on modulating the muscle capillary microcirculation in pentobarbital-anesthetized mice. The skin in a tibialis anterior was circularly removed with 1.5 mm diameter for intravital-microscopic recording of the capillary blood velocity in the tibialis anterior muscle. Fluorescein isothiocyanate (FITC)-labeled dextran (MW 150 kDa) was used for an in vivo fluorescent plasma marker of the muscle capillaries. Following a bolus injection of FITC-dextran solution into the caudal vein, the peak blood velocity in the muscle capillaries was measured prior to, during, and following exposure to static magnetic fields (SMF) or 50-Hz electromagnetic fields (EMF) using a fluorescence epi-illumination system. The whole body of experimental animals, placed on the observing stage of a fluorescence microscope, was exposed to SMF (0.3, 1 and 10 mT) or 50-Hz EMF (0.3 and 1 mT) for 10 min using a specially devised electromagnet. For sham exposure, the electromagnet was not energized. During exposure and post-exposure to SMF of 10 mT, the peak blood velocity significantly increased as compared to sham exposure. After the withdrawal of SMF and 50-Hz EMF of 1 mT, significant effects on the blood velocity were present or enhanced. These findings suggest that field intensity of 1 mT might be considered as a threshold level for enhancing muscle microcirculation under pentobarbital-induced hypnosis.

Eur J Pain 2002;6(1):1-16 (ISSN: 1090-3801)
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The present study investigates the effectiveness of Erickson hypnosis and Jacobson relaxation for the reduction of osteoarthritis pain. Participants reporting pain from hip or knee osteoarthritis were randomly assigned to one of the following conditions: (a) hypnosis (i.e. standardized eight-session hypnosis treatment); (b) relaxation (i.e. standardized eight sessions of Jacobson's relaxation treatment); (c) control (i.e. waiting list). Overall, results show that the two experimental groups had a lower level of subjective pain than the control group and that the level of subjective pain decreased with time. An interaction effect between group treatment and time measurement was also observed in which beneficial effects of treatment appeared more rapidly for the hypnosis group. Results also show that hypnosis and relaxation are effective in reducing the amount of analgesic medication taken by participants. Finally, the present results suggest that individual differences in imagery moderate the effect of the psychological treatment at the 6 month follow-up.
but not at previous times of measurement (i.e. after 4 weeks of treatment, after 8 weeks of treatment and at the 3 month follow-up). The results are interpreted in terms of psychological processes underlying hypnosis, and their implications for the psychological treatment of pain are discussed. [Copyright 2002 European Federation of Chapters of the Association for the Study of Pain].

[0531]
Behavioral treatment of migraine in children and adolescents
Paediatr Drugs 2002;4(9):555-61 (ISSN: 1174-5878)
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Behavioral interventions, particularly biofeedback and relaxation therapy, have demonstrated their effectiveness in the treatment of both adults and older children with migraine in controlled trials. The physiological basis for their effectiveness is unclear, but data from one trial suggest that levels of plasma beta-endorphin can be altered by relaxation and biofeedback therapies. The data supporting the effectiveness of behavioral therapies are less clear-cut in children than in adults, but that is also true for the data supporting medical treatment. This is due in part to methodological issues, especially the lack of a specific test for migraine, which has hampered research and helped lead to an inappropriate de-emphasis on care for childhood headache. In addition, migraine headaches in children are often briefer and have a higher rate of spontaneous remission than those experienced by adults, making it difficult to separate effective from ineffective treatments. While it is widely believed that stress is a major factor in childhood migraine, well-designed studies have had difficulty developing data to support this viewpoint. Many clinicians utilize 'confident reassurance', reassuring the family that the child is not seriously ill, in the belief that having migraine headaches can be stressful. They also modify behaviors that are believed to trigger migraine headaches, such as poor sleep habits or irregular meal times. Relaxation therapies use techniques such as progressive relaxation, self-hypnosis, and guided imagery. Several studies have found relaxation therapies to be as effective, or more effective, in reducing the frequency of migraine headaches than modest doses of a beta-blockade medication, although one study found relaxation therapy to be no more effective than a control program. Several studies have demonstrated that these therapies can be taught to children in a low cost but effective manner. Biofeedback therapies commonly use an apparatus to demonstrate a physiological effect. Most commonly in pediatrics, children are taught to raise the temperature of one of their fingers. This can be done with or without a thermometer. Several groups have shown that these techniques can be taught to children and that their use is associated with fewer and briefer migraine headaches. People who experience migraines can also experience episodic headaches throughout life. An important consideration is preparing children to deal with future headaches, allowing them to feel in control of their health. Behavioral therapies have the potential to do this, giving the child access to a technique that can be easily resumed without a medical visit or prescription.

[0532]
Brief presurgery hypnosis reduces distress and pain in excisional breast biopsy patients
Montgomery GH; Weltz CR; Seltz M; Bovbjer DH
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Each year, hundreds of thousands of women undergo excisional breast biopsies for definitive diagnosis. Not only do these patients experience pain associated with the procedure, but they also endure distress associated with the threat of cancer. Hypnosis has been demonstrated as effective for controlling patients' pain in other surgical settings, but breast surgery patients have received little attention. To determine the impact of brief presurgical hypnosis on these patients' postsurgery pain and distress and to explore possible mediating mechanisms of these effects, 20 excisional breast biopsy patients were randomly assigned to a hypnosis or control group (standard care). Hypnosis reduced postsurgery pain and distress. Initial evidence suggested that the effects of hypnosis were mediated by presurgery expectations.

[0533]
Hypnotizability and trauma symptoms after burn injury
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This study investigated the association of trauma symptoms and hypnotizability in 43 hospitalized survivors of burn injury. Three to 17 days after the injury, participants rated the frequency of intrusive and avoidance symptoms and were interviewed with the posttraumatic stress disorder module of the Structured Clinical Interview for the Diagnostic and Statistical Manual of Mental Disorders-III-R. The Hypnotic Induction Profile was also administered at the postburn, hospital stage of recovery. Results indicated that when participants were divided into low, mid-range, and high hypnotizability categories, high hypnotizability was associated with more intrusive, avoidance, and arousal symptoms. Although causal relations cannot be assessed in this cross-sectional study, these results suggest that, as compared to the low and mid-range categories, high hypnotizables may experience a greater frequency of trauma symptoms after burn injury.

[0534]
Hypnotic susceptibility scales: are the mean scores increasing?
Int J Clin Exp Hypn 2002 Jan;50(1):5-16 (ISSN: 0020-7144)
The Stanford Hypnotic Susceptibility Scale, Form C (SHSS:C), developed and named 37 years ago, is arguably the "gold standard" of hypnotic susceptibility scales. However, it has been the impression of several researchers that means obtained on the SHSS:C are higher now than in previous years. The authors comprehensively review studies using the SHSS:C over a 4-decade period. The findings demonstrate a significant linear trend between year and SHSS:C scores, with higher obtained means in more recent work. The authors also report a similar analysis of research with the Harvard Group Scale of Hypnotic Susceptibility, Form A. Although the mechanisms underlying this trend can only be speculated upon at present, these findings underscore the importance of using local control groups in research on hypnotizability.

Cultural scripts, memories of childhood abuse, and multiple identities: a study of role-played enactments
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This study compared the reports of satanic, sexual, and physical abuse of persons instructed to role-play either dissociative identity disorder (DID) (n = 33), major depression (n = 33), or a college student who experienced minor adjustment problems ("normal") (n = 33) across a number of trials that included role-played hypnosis. As hypothesized, more of the participants who were asked to role-play DID reported at least one instance of satanic ritual abuse and sexual abuse compared with those who role-played depression or a college student with minor adjustment problems. DID role-players reported more incidents of sexual abuse and more severe physical and sexual abuse than did the major depression role-players. Further, the DID role-players differed from the normal role-players on all the measures of frequency and severity of physical and sexual abuse. Participants in all groups reported more frequent and severe incidents of physical abuse after role-played hypnosis than they did prior to it.

Motor imagery during hypnotic arm paralysis in high and low hypnotizable subjects
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Previous research suggests that conversion disordered patients with hand/arm paralysis exhibit slowed reaction times for mental hand-rotation tasks that correspond to their affected arm when the tasks are explicitly instructed and not when they are implicitly cued. Because of the many similarities between hypnotic phenomena and conversion symptoms, the authors tested whether similar motor imagery impairment would occur among normal high hypnotizable subjects when paralysis is suggested. Nine high and 8 low hypnotizable subjects were administered an implicit and an explicit mental hand-rotation task during hypnotically suggested paralysis of the right arm. On the implicit task, there were no significant reaction time (RT) differences between highs and lows. On the explicit task, only highs showed a significantly larger RT increase per degree of rotation with the paralyzed arm, compared to the normal arm. These preliminary findings suggest that the motor imagery impairment observed in conversion paralysis can be induced in highs using hypnosis.

Hypnosis and neuroscience: a cross talk between clinical and cognitive research
Arch Gen Psychiatry 2002 Jan;59(1):85-90 (ISSN: 0003-980X)
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Despite its long use in clinical settings, the checkered reputation of hypnosis has dimmed its promise as a research instrument. Whereas cognitive neuroscience has scantily fostered hypnosis as a manipulation, neuroimaging techniques offer new opportunities to use hypnosis and posthypnotic suggestion as probes into brain mechanisms and, reciprocally, provide a means of studying hypnosis itself. We outline how the hypnotic state can serve as a way to tap neurocognitive questions and how cognitive assays can in turn shed new light on the neural bases of hypnosis. This cross talk should enhance research and clinical applications.

Hypnosis increases heat detection and heat pain thresholds in healthy volunteers
Reg Anesth Pain Med 2002 Jan-Feb;27(1):43-6 (ISSN: 1098-7339)
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BACKGROUND AND OBJECTIVES: Hypnosis has been reported to induce analgesia and to facilitate anesthesia. To date, hypnotic-induced analgesia has had little explanation and it has even been questioned. The current study was thus designed to investigate the effect of hypnotic suggestion on thermal-detection thresholds, heat pain, and heat-pain tolerance thresholds. METHODS: In 15 healthy volunteers, enrolled in a randomized cross-over study, thermal thresholds were investigated in 2 sequences of measurements, under waking and hypnotic states, using a thermal stimulator.
RESULTS: Heat detection and heat-pain thresholds were increased under hypnosis (from 34.3 +/- 0.9 degrees C to 36.0 +/- 2.9 degrees C and 45.0 +/- 3.7 degrees C to 46.7 +/- 2.7 degrees C, respectively, P <.05), whereas heat-pain tolerance and cold-detection thresholds were not statistically changed. CONCLUSION: These results indicate that hypnosis may partly impair the detection of A delta and C fibers stimulation, potentially explaining its analgesic effect.

[0539]
The role of hypnotizability assessment in treatment
Am J Clin Hypn 2002 Jan-Apr;44(3-4):185-97 (ISSN: 0002-9157)
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Disparate opinions about the importance of the assessment of hypnotizability reflect very different ideas about what hypnosis is, the relevance of hypnotizability to psychotherapy and treatment outcome, and the importance of gathering scientific data to document treatment effectiveness and the presence of hypnotic effects. In this article, we argue that in recent years important developments have occurred in the conceptualization, assessment, and technical aspects of hypnotic intervention that imply that clinicians who eschew the use of hypnotizability assessment ought to reconsider their position. In making this argument, we will discuss reasons for assessing hypnotizability, the relation between hypnotizability and treatment outcome, and practical considerations in the assessment of hypnotizability.

[0540]
A historical overview of hypnotizability assessment
Am J Clin Hypn 2002 Jan-Apr;44(3-4):199-208 (ISSN: 0002-9157)
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The development of scales for assessing hypnotic suggestibility is reviewed. Nineteenth century origins are discussed along with examples of scales. Next, research measures developed and published in the first half of the 20th century are reviewed, followed by an overview of scales in current use. This overview attempts to show how past conceptions and scales have influenced current measurement methodology.

[0541]
Scales, scales and more scales
Am J Clin Hypn 2002 Jan-Apr;44(3-4):209-19 (ISSN: 0002-9157)
Weitzenhoffer AM

This article examines the nature, uses, and limitations of the large variety of existing, so-called, hypnosis scales; that is, instruments that have been proposed for the assessment of hypnotic behavior. Although the major aim of most of the scales ostensibly seems to be to assess several aspects of hypnotic states, they are found generally to say little about these and much more about responses to suggestions. The greatest application of these scales is to be found in research, but they also have a limited place in clinical work.

[0542]
The efficacy of the Waterloo-Stanford Group Scale of hypnotic susceptibility: form C
Am J Clin Hypn 2002 Jan-Apr;44(3-4):221-30 (ISSN: 0002-9157)
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This study explored whether the Waterloo-Stanford Group Scale of Hypnotic Susceptibility Form: C (WSGC) approximates the predictive power of the individually administered Stanford Hypnotic Susceptibility Scale: Form C (SHSS: C). Seventy-one undergraduates were administered the WSGC in a group setting and then tested individually on the SHSS: C. The participants were then hypnotized and tested on four types of targeted hypnotic behaviors sampled from the Revised Stanford Profile Scale of Hypnotic Susceptibility: I & II (RSPSHS: I & II). The following four factors were chosen: (a) cognitive distortion; (b) positive hallucination; (c) negative hallucination, and (d) dreams and regression. The items from these factors were matched on difficulty level. A series of multiple regression and logistic regression analyses were performed. The Waterloo: C was found to match the SHSS: C on predictive power for only one of the four hypnotic factors: "dreams and regression." On the other three factors, the SHSS: C was clearly superior in predictive efficacy. These results mirror previous research (Kurtz & Strube, 1996) that examined other group scales of hypnotic susceptibility in relation to the individually administered SHSS: C. In general, group scales such as the WSGC are poor substitutes for the SHSS: C.

[0543]
Defining hypnosis as a trance vs. cooperation: hypnotic inductions, suggestibility, and performance standards
Am J Clin Hypn 2002 Jan-Apr;44(3-4):231-40 (ISSN: 0002-9157)
Lynn SJ; Vanderhoff H; Shindler K; Stafford J
Psychology Department, State University of New York at Binghamton, Binghamton, NY 13902, USA

We compared participants' responsiveness to a standard administration of a hypnotic suggestibility scale (CURSS; Spanos, Radtke, Hodgins, Bertrand, Stam, & Moretti, 1983) that defined the ability to experience hypnosis in terms
of cooperation (SI; standard induction, N = 27) with a version of the same scale administered with all references to cooperation removed (CR; cooperation removed, N = 34) and with a version of the scale with the "induction" removed (NI; no induction, N = 35). In a fourth condition, participants were informed that the ability to experience hypnosis depended on their ability to achieve an altered state of consciousness or "trance" (AS; altered state, N = 33). Removing instructions for cooperation had an effect on objective (CR & SI) but not on subjective hypnotic responding. Removing the hypnotic induction had no appreciable effect on any dimension of hypnotic responsivity. Consistent with predictions derived from performance standards theory (Lynn & Rhue, 1991), participants who received the altered state set responded to fewer suggestions than did participants who received the standard induction (SI). Estimates of suggestions passed that were assessed before and after test suggestions were administered were, respectively, weakly to moderately correlated with objective and subjective measures of hypnotic suggestibility.

[0544]
Operationalizing trance II: clinical application using a psychophenomenological approach
Am J Clin Hypn 2002 Jan-Apr;44(3-4):241-55 (ISSN: 0002-9157)
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Although many clinicians use the word "trance" to describe the subjective effects associated with being hypnotized, heretofore there has been no means to operationalize that concept. In a prior paper (Pekala &amp; Kumar, 2000) the authors operationalized the notion of trance by using a retrospective, self-report instrument, the Phenomenology of Consciousness Inventory (PCI), to quantify the subjective experience of being hypnotized. Trance was operationalized in terms of: hypnotic depth via a pHGS (predicted Harvard Group Scale) score (derived from regression analysis using subdimensions of the PCI) that gives a quantitative measure of subjective trance depth; and trance typology profiles (derived from cluster and discriminant analyses of the PCI dimensions and subdimensions) that give a qualitative measure of empirically derived clusters of subjective trance experiences. These measures, when used in conjunction with data on the individual PCI dimensions and subdimensions, provide the clinician with specific information on phenomenological events experienced by the client during hypnosis which can be used in better adapting hypnotic suggestions to the client's phenomenological world. Two clinical cases are presented in which use of the above approach has been helpful in facilitating treatment planning.

[0545]
Assessment of response to clinical hypnosis: development of the Hypnotic State Assessment Questionnaire
Am J Clin Hypn 2002 Jan-Apr;44(3-4):257-72 (ISSN: 0002-9157)
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This study describes the development and preliminary psychometric properties of a scale for measuring hypnotic response in clinical hypnosis sessions. The Hypnotic State Assessment Questionnaire (HSAQ), a brief, multidimensional measure of hypnotic response during clinical sessions of hypnosis, is intended to facilitate supervision of hypnosis trainees and to document subjects' response in clinical hypnosis sessions. Results indicate that most HSAQ subscales have good interrater and internal consistency reliability. Furthermore, HSAQ observations correlated with post-hypnotic behaviors and subjective experiences of hypnosis. Use of the HSAQ in hypnosis training settings allows supervisors to obtain standardized data describing hypnosis sessions conducted by trainees. This data may also be used to document clinical response for record keeping or research.

[0546]
Conversational assessment of hypnotic ability to promote hypnotic responsiveness
Am J Clin Hypn 2002 Jan-Apr;44(3-4):273-82 (ISSN: 0002-9157)
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In this article, hypnotic responsiveness is conceptualized as the byproduct of hypnotic ability, which is largely unalterable, plus hypnotic participation, which is highly subject to manipulation in the therapeutic context. This framework constitutes the basis of a model for the conversational assessment of hypnotic ability and hypnotic participation, as well as the subsequent tailoring of therapeutic interventions based on that assessment. Specific clinical steps for implementing activities implied by the model are explained and then demonstrated by way of a case example.

[0547]
Complementary and alternative medicine use among health plan members. A cross-sectional survey
Eff Clin Pract 2002 Jan-Feb;5(1):17-22 (ISSN: 1099-8128)
Gray CM; Tan AW; Pronk NP; O'Connor PJ
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CONTEXT. Many health plans have started to cover the cost of complementary and alternative medicine (CAM). National survey data indicate that CAM use is highly prevalent among adults. However, little is known about CAM use among health plan members. OBJECTIVE: To describe CAM users, the prevalence of CAM use, and how CAM use relates to utilization of conventional preventive services and health care satisfaction among health plan members. DESIGN: Cross-sectional mail survey in 1997. SETTING: Managed care organization in Minnesota. SAMPLE: Random sample of health
This review focuses on the mechanisms and sites of action underlying beta-adrenergic antagonism in perioperative medicine. A large body of knowledge has recently emerged from basic and clinical research concerning the mechanisms of the life-saving effects of beta-adrenergic antagonists (beta-AAs) in high-risk cardiac patients. This article re-emphasizes the mechanisms underlying beta-adrenergic antagonism and also illuminates novel rationales behind the use of perioperative beta-AAs from a biological point of view. Particularly, it delineates new concepts of beta-adrenergic signal transduction emerging from transgenic animal models. The role of the different characteristics of various beta-AAs is discussed, and evidence will be presented for the selection of one specific agent over another on the basis of individual drug profiles in defined clinical situations. The salutary effects of beta-AAs on the cardiovascular system will be described at the cellular and molecular levels. Beta-AAs exhibit many effects beyond a reduction in heart rate, which are less known by perioperative physicians but equally desirable in the perioperative care of high-risk cardiac patients. These include effects on core components of an anesthetic regimen, such as analgesia, hypnosis, and memory function. Despite overwhelming evidence of benefit, beta-AAs are currently under-utilized in the perioperative period because of concerns of potential adverse effects and toxicity. The effects of acute administration of beta-AAs on cardiac function in the compromised patient and strategies to counteract potential adverse effects will be discussed in detail. This may help to overcome barriers to the initiation of perioperative treatment with beta-AAs in a larger number of high-risk cardiac patients undergoing surgery.

Utilizing Ericksonian hypnosis in psychiatric-mental health nursing practice
Perspect Psychiatr Care 2002 Jan-Mar;38(1):15-22 (ISSN: 0031-5990)
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TOPIC: Ericksonian hypnosis conceptual framework. PURPOSE: To acquaint psychiatric-mental health nurses with hypnotic principles and how these can be integrated into their practice. SOURCES: Published literature and author's clinical experience. CONCLUSIONS: Ericksonian hypnosis offers an array of potential interventions for psychiatric-mental health nurses to integrate into their practices in a framework familiar to nurses: holism, honoring and respecting individuality, and capitalizing on an individual's strengths.

Modulation of beta-adrenergic receptor subtype activities in perioperative medicine: mechanisms and sites of action
Br J Anaesth 2002 Jan;88(1):101-23 (ISSN: 0007-0912)
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This review focuses on the mechanisms and sites of action underlying beta-adrenergic antagonism in perioperative medicine. A large body of knowledge has recently emerged from basic and clinical research concerning the mechanisms of the life-saving effects of beta-adrenergic antagonists (beta-AAs) in high-risk cardiac patients. This article re-emphasizes the mechanisms underlying beta-adrenergic antagonism and also illuminates novel rationales behind the use of perioperative beta-AAs from a biological point of view. Particularly, it delineates new concepts of beta-adrenergic signal transduction emerging from transgenic animal models. The role of the different characteristics of various beta-AAs is discussed, and evidence will be presented for the selection of one specific agent over another on the basis of individual drug profiles in defined clinical situations. The salutary effects of beta-AAs on the cardiovascular system will be described at the cellular and molecular levels. Beta-AAs exhibit many effects beyond a reduction in heart rate, which are less known by perioperative physicians but equally desirable in the perioperative care of high-risk cardiac patients. These include effects on core components of an anesthetic regimen, such as analgesia, hypnosis, and memory function. Despite overwhelming evidence of benefit, beta-AAs are currently under-utilized in the perioperative period because of concerns of potential adverse effects and toxicity. The effects of acute administration of beta-AAs on cardiac function in the compromised patient and strategies to counteract potential adverse effects will be discussed in detail. This may help to overcome barriers to the initiation of perioperative treatment with beta-AAs in a larger number of high-risk cardiac patients undergoing surgery.

CAM use is highly prevalent among health plan members. CAM users report more physical and emotional limitations than do nonusers. CAM does not seem to be a substitute for conventional preventive health care.

Irregular bowel syndrome: pathophysiology and (future) treatment options
Het prikkelbarearmsyndroom: pathofysiologie en (toekomstige) behandelingmogelijkheden
Ned Tijdschr Geneeskd 2002 Jan 5;146(1):12-7 (ISSN: 0028-2162)
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Abnormalities of intestinal motility, altered visceral perception and psychological influences are the most important factors in the pathogenesis of irritable bowel syndrome. Current pharmacological treatment options are limited and lack specificity. In the future, it is likely that a number of therapeutic agents with stronger spasmylytic effects (selective muscarinic receptor antagonists), more specific colokinetic properties (5-hydroxytryptamine (5HT)4 agonists) and a positive influence on visceral perception (serotonin (5HT3) receptor antagonists, kappa-agonists) will become available.

Functional gastrointestinal diseases. Psychotherapy is an efficient complement to drug therapy
Funktionele mag-tarmsjukdom. Psykoterapi effektivt komplement till den medicinska behandlingen
Lakartidningen 2002 Jan 17;99(3):172-4 (ISSN: 0023-7205)
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An emerging body of data support the efficacy of psychological treatments in functional gastrointestinal disorders. Twenty-two studies that used a controlled design to compare psychological treatment with conventional medical treatment and/or supportive therapy were reviewed. Most of the research to date has focused on irritable bowel syndrome. In terms of reduction of bowel symptoms, 19 studies showed statistically significant superiority of psychological over conventional treatment at the end of treatment and/or at follow-up. Of 12 studies with follow-up data, 8 showed superiority of psychological treatment. Another 8 studies with follow-up data only for those who received psychotherapy, showed further improvement or that gains were maintained after completion of treatment. In conclusion, psychological treatment appears superior to conventional treatment. Successful outcomes have been observed with dynamic psychotherapy, hypnosis, cognitive-behavior therapy, and relaxation training. Differences in outcomes based on specific treatment techniques have not been studied. Thus, given the current state of knowledge, psychotherapists should use the technique with which they are most experienced.

[0552]
Cost analysis of adjunct hypnosis with sedation during outpatient interventional radiologic procedures
Radiology 2002 Feb;222(2):375-82 (ISSN: 0033-8419)
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PURPOSE: To compare the cost of standard intravenous conscious sedation with that of sedation with adjunct self-hypnotic relaxation during outpatient interventional radiologic procedures. MATERIALS AND METHODS: Data were reviewed from a prospective randomized study in which patients undergoing vascular and renal interventional procedures underwent either standard sedation (n = 79) or sedation with adjunct hypnosis (n = 82). These data were used to construct a decision analysis model to compare the cost of standard sedation with the cost of sedation with adjunct hypnosis. Multiple sensitivity analyses were performed to assess the applicability of these results to other institutions with different cost structures with respect to the following variables: cost of the hypnosis provider, cost of room time for interventional radiologic procedure, hours of observation after the procedure, and frequency and cost of complications associated with over- or undersedation. RESULTS: According to data from this experience, the cost associated with standard sedation during a procedure was $638, compared with $300 for sedation with adjunct hypnosis, which resulted in a savings of $338 per case with hypnosis. Although hypnosis was known to reduce room time, hypnosis remained more cost-effective even if it added an additional 58.2 minutes to the room time. CONCLUSION: Use of adjunct hypnosis with sedation reduces cost during interventional radiologic procedures.

[0553]
Relaxation therapies for asthma: a systematic review
Thorax 2002 Feb;57(2):127-31 (ISSN: 0040-6376)
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BACKGROUND: Emotional stress can either precipitate or exacerbate both acute and chronic asthma. There is a large body of literature available on the use of relaxation techniques for the treatment of asthma symptoms. The aim of this systematic review was to determine if there is any evidence for or against the clinical efficacy of such interventions. METHODS: Four independent literature searches were performed on Medline, Cochrane Library, CISCOM, and Embase. Only randomised clinical trials (RCTs) were included. There were no restrictions on the language of publication. The data from trials that statistically compared the treatment group with that of the control were extracted in a standardised predefined manner and assessed critically by two independent reviewers. RESULTS: Fifteen trials were identified, of which nine compared the treatment group with the control group appropriately. Five RCTs tested progressive muscle relaxation or mental and muscular relaxation, two of which showed significant effects of therapy. One RCT investigating hypnotherapy, one of autogenic training, and two of biofeedback techniques revealed no therapeutic effects. Overall, the methodological quality of the studies was poor. CONCLUSIONS: There is a lack of evidence for the efficacy of relaxation therapies in the management of asthma. This deficiency is due to the poor methodology of the studies as well as the inherent problems of conducting such trials. There is some evidence that muscular relaxation improves lung function of patients with asthma but no evidence for any other relaxation technique.

[0554]
Hypnotically induced emotional numbing: a real-simulating analysis
J Abnorm Psychol 2002 Feb;111(1):203-7 (ISSN: 0021-843X)
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This study compared 20 real, hypnotized and 20 simulating, unhypnotized participants who were administered a hypnotic induction and then presented with emotionally distressing and neutral visual images. Half were administered a hypnotic suggestion for emotional numbing. Reals and simulators who received the emotional numbing suggestion reported comparably less responsibility to distressing stimuli than others. Whereas emotionally numb reals displayed little change in electromyographic (EMG) activity during the distressing stimuli, simulators displayed marked reduction in EMG activity. Reals (not simulators) displayed a dissociation between their affective response and awareness of the negative content of the stimuli following the numbing suggestion.
The purpose was to compare patterns of brain activation during imagined handgrip exercise and identify cerebral cortical structures participating in "central" cardiovascular regulation. Subjects screened for hypnotizability, five with higher (HH) and four with lower hypnotizability (LH) scores, were tested under two conditions involving 3 min of 1) static handgrip exercise (HG) at 30% of maximal voluntary contraction (MVC) and 2) imagined HG (I-HG) at 30% MVC. Force (kg), forearm integrated electromyography, rating of perceived exertion, heart rate (HR), mean blood pressure (MBP), and differences in regional cerebral blood flow distributions were compared using an ANOVA. During HG, both groups showed similar increases in HR (+13 +/- 5 beats/min) and MBP (+17 +/- 3 mmHg) after 3 min. However, during I-HG, only the HH group showed increases in HR (+10 +/- 2 beats/min; P &lt; 0.05) and MBP (+12 +/- 2 mmHg; P &lt; 0.05). There were no significant increases or differences in force or integrated electromyographic activity between groups during I-HG. The rating of perceived exertion was significantly increased for the HH group during I-HG, but not for the LH group. In comparison of regional cerebral blood flow, the LH showed significantly lower activity in the anterior cingulate (-6 +/- 2%) and insular cortices (-9 +/- 4%) during I-HG. These findings suggest that cardiovascular responses elicited during imagined exercise involve central activation of insular and anterior cingulate cortices, independent of muscle afferent feedback; these structures appear to have key roles in the central modulation of cardiovascular responses.

A randomised controlled clinical trial on the additional effect of hypnosis in a comprehensive treatment programme for in-patients with conversion disorder of the motor type
Psychother Psychosom 2002 Mar-Apr;71(2):66-76 (ISSN: 0033-3190)
Moene FC; Spinhoven P; Hoogduin KA; van Dyck R
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BACKGROUND: The primary aim of this study was threefold: (1) to examine the additional effects of hypnosis aimed at symptom reduction, using symptom-oriented and expression- and insight-oriented techniques in a comprehensive clinical treatment programme for in-patients with a persistent conversion disorder of the motor type; (2) to assess whether the level of hypnotisability was predictive of treatment outcome, and (3) to explore the efficacy of the total clinical treatment programme. METHODS: The study population consisted of 45 in-patients between 18 and 65 years of age meeting the DSM-III-R criteria for conversion disorder of the motor type or somatisation disorder with motor conversion symptoms. A randomised controlled clinical trial was undertaken. The primary outcome measures were the Video Rating Scale for Motor Conversion Symptoms, the Di(abilities) code items from the International Classification of Impairments, Disabilities and Handicaps and the Symptom Checklist-90. Measures of the credibility of treatment and patient expectations of treatment outcome were used as manipulation checks. Hypnotisability was measured using the Stanford Hypnotic Clinical Scale. RESULTS: Significant treatment results for all outcome measures were found for the total sample. These effects proved to be clinically significant. The use of hypnosis had no additional effect on treatment outcome. Hypnotisability was not predictive of treatment outcome. CONCLUSION: A comprehensive treatment programme, either with or without hypnosis, can be worthwhile for patients with long-standing conversion symptoms. [Copyright 2002 S. Karger AG, Basel]
Coping with a hypersensitive gag reflex can be a cause for concern for both the patient and the operator. This report describes a case of blood phobia directed solely towards the oral cavity, linked with the inability to tolerate dentures due to a hypersensitive gag reflex. Management by hypnotherapy using a systematic desensitization technique allowed for extraction of teeth and permanent elimination of the gagging problem.

Immediate and persisting effects of misleading questions and hypnosis on memory reports
Scoboria A; Mazzoni G; Kirsch I; Milling LS
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Immediate and persisting effects of misleading questions and hypnosis on memory reports were assessed. After listening to a story, 52 highly suggestible students and 59 low and medium suggestible students were asked misleading or neutral questions in or out of hypnosis. All participants were then asked neutral questions without hypnosis. Both hypnosis and misleading questions significantly increased memory errors, and misleading questions produced significantly more errors than did hypnosis. The two effects were additive, so that misleading questions in hypnosis produced the greatest number of errors. There were no significant interactions with level of hypnotic suggestibility. Implications of these findings for the exclusion of posthypnotic testimony are discussed.

The duality of the brain and the multiplicity of minds: can you have it both ways?
Hist Psychiatry 2002 Mar;13(49 Pt 1):3-17 (ISSN: 0957-154X)
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Multiple Personality Disorder (MPD), now known as Dissociative Identity Disorder (DID), has been of great interest to the public for over a century. Case histories of MPD can be found in the literature as far back as the eighteenth century; nevertheless, publications from the latter part of the nineteenth century best describe this disorder as we know it today. This paper traces the case history literature of DID (MPD) from the earliest period to the present. This is done in such a way as to illuminate the basic theoretical and epistemological issues that are necessary to understand the process of dissociation (both normal, and abnormal aspects) and the role of hypnosis and its relationship to organic and 'hysterical epilepsy'. The theories of Fanet, Prince and Sidis are the major authorities discussed. The paper concludes with a discussion of the danger inherent in fostering a deterministic or reductionistic theory of consciousness.

How practitioners (and others) can make scientifically viable contributions to clinical-outcome research using the single-case time-series design
Borckardt JJ; Nash MR
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Although clinicians typically possess considerable interest in research, especially about which interventions do and do not work, all too often they dismiss the notion that they themselves can make viable scientific contributions to the outcome literature. This derives from an unfortunate assumption that the only true experiment is a between-groups experiment. There is another form of true experiment that is perfectly compatible with real-world clinical practice: the single-case time-series design. Intensive and systematic tracking of one or a few patients over time can yield viable inferences about efficacy, effectiveness, and, under some circumstances, mechanism of change. This paper describes how clinicians working with hypnosis can carry out such research. The rationale and essential features of time-series studies are outlined; each design is illustrated with actual studies from the hypnosis literature; and new methods of statistical analysis, well within the statistical competence of practitioners, are described.

The efficacy of hypnosis in the treatment of pruritus in people with HIV/AIDS: a time-series analysis
Int J Clin Exp Hypn 2002 Apr;50(2):149-69 (ISSN: 0020-7144)
Rucklidge JJ; Saunders D
The Toronto Hospital, Canada
Pruritus, or generalized itch, is a source of serious discomfort and distress in a significant minority of people living with AIDS. Anecdotal reports suggest hypnosis might be a useful treatment, leading to reductions in distress and improvements in the condition. But empirical examination of the question is notably lacking. This time-series study reports results of a 6-session self-hypnosis treatment (relaxation, deepening, imagery, and home practice) for 3 HIV-positive men suffering from pruritus, related to disease progression and/or HIV medications. Posttreatment, all 3 patients reported significant reductions in daily itch severity and extent of sleep disturbance due to itch. One patient also evidenced significantly less itch distress. Another also experienced significantly less time bothered by itch. For the 2 patients on which 4-month follow-up data were available, treatment benefit across variables was stable or further improved.
Hypnosis for the control of HIV/AIDS-related pain
Langenfeld MC; Cipani E; Borckardt JJ
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This intensive case study used an A-B time-series analysis design to examine whether 5 adult patients with various AIDS-related pain symptoms benefited from a hypnosis-based pain management approach. The 3 dependent variables in this study were: (a) self-ratings of the severity of pain, (b) self-ratings of the percentage of time spent in pain, and (c) amount of p.r.n. pain medication taken. Data were collected over a period of 12 weeks, including a 1-week baseline period and an 11-week treatment period. Autoregressive integrated moving-average (ARIMA) models were used to determine the effects of the hypnotic intervention over and above autoregressive components in the data. All 5 patients showed significant improvement on at least 1 of the 3 dependent variables as a result of the hypnotic intervention. Four of the 5 patients reported using significantly less pain medication during the treatment phase.

Case study examining the efficacy of a multi-modal psychotherapeutic intervention for hypertension
Int J Clin Exp Hypn 2002 Apr;50(2):189-201 (ISSN: 0020-7144)
Borckardt JJ
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This study examines the effectiveness of a multimodal psychotherapeutic approach using hypnosis in the treatment of a single case of hypertension. A systematic eclectic conceptualization and treatment approach was implemented using psychodynamic, behavioral, and cognitive-behavioral elements. Hypnosis was used to support each of the treatment modalities. Time-series analysis procedures indicate that the psychological interventions were associated with significantly reduced diastolic blood pressure. Additionally, the effect of the psychological interventions was significant over and above traditional pharmacological interventions. However, psychotherapeutic interventions had no substantial impact on systolic pressure. The flexibility of hypnosis as a therapeutic tool is discussed in terms of potential advantages in treatment.

Salient findings in the hypnosis literature: April 2002
Int J Clin Exp Hypn 2002 Apr;50(2):202-7 (ISSN: 0020-7144)
Nash MR
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Four important investigations were reported during the latter part of 2001. All address the biological impact of hypnotic interventions. Three of these studies focus specifically on if and how hypnotic interventions affect immune functions. A range of immune assays is employed, from allergic response to blood-based assays of immune functioning during nonlaboratory periods of stress. In all 3 cases, measurable shifts in immune functioning are associated with hypnotic interventions. A 4th compares the pattern of event-related brain potentials (ERPs) associated with hypnotic analgesia interventions and standard distraction protocols during exposure to pain.

Healing the heart: integrating complementary therapies and healing practices into the care of cardiovascular patients
Prog Cardiovasc Nurs 2002 Spring;17(2):73-80 (ISSN: 0889-7204)
Kreitzer MJ; Snyder M
Center for Spirituality and Healing, University of Minnesota, Minneapolis, MN 55455

Complementary therapies and healing practices have been found to reduce stress, anxiety, and lifestyle patterns known to contribute to cardiovascular disease. Promising therapies include imagery and hypnosis, meditation, yoga, tai chi, prayer, music, exercise, diet, and use of dietary supplements. Many of these complementary approaches to healing have been within the domain of nursing for centuries and can readily be integrated into the care of patients with cardiovascular disease. While individual complimentary modalities hold considerable merit, it is critical that the philosophy underlying these therapies—caring, holism, and harmony—also be understood and honored. (c)2002 CHF, Inc.

Hypnotherapy in irritable bowel syndrome: a large-scale audit of a clinical service with examination of factors influencing responsiveness
Am J Gastroenterol 2002 Apr;97(4):954-61 (ISSN: 0002-9270)
Gonsalkorale WM; Houghton LA; Whorwell PJ
Department of Medicine, University Hospital of South Manchester, United Kingdom

OBJECTIVES: Hypnotherapy has been shown to be effective in the treatment of irritable bowel syndrome in a number of previous research studies. This has led to the establishment of the first unit in the United Kingdom staffed by six therapists that provides this treatment as a clinical service. This study presents an audit on the first 250 unselected patients treated, and these large numbers have also allowed analysis of data in terms of a variety of other factors, such as gender and bowel habit type, that might affect outcome. METHODS: Patients underwent 12 sessions of hypnotherapy over a 3-month period and were required to practice techniques in between sessions. At the beginning and end of the
course of treatment, patients completed questionnaires to score bowel and extracolonic symptoms, quality of life, and anxiety and depression, allowing comparisons to be made. RESULTS: Marked improvement was seen in all symptom measures, quality of life, and anxiety and depression (all ps < 0.001), in keeping with previous studies. All subgroups of patients appeared to do equally well, with the notable exception of males with diarrhea, who improved far less than other patients (p < 0.001). No factors, such as anxiety and depression or other prehypnotherapy variables, could explain this lack of improvement. CONCLUSIONS: This study clearly demonstrates that hypnotherapy remains an extremely effective treatment for irritable bowel syndrome and should prove more cost-effective as new, more expensive drugs come on to the market. It may be less useful in males with diarrhea-predominant bowel habit, a finding that may have pathophysiological implications.

[0568]
Observations from Ground Zero at the World Trade Center in New York City, Part II: Theoretical and clinical considerations
Acosta JK; Levenson RL

Part I of this series discussed our observations of Ground Zero of the World Trade Center (WTC) immediately after the attack on September 11, 2001, as well as the stress-response of police officers on site. This paper offers a variety of clinical techniques for emergency mental health practitioners and first responders for use with victims of critical incidents. The suggested interventions are based on the theory and clinical practice of Emergency Medical Hypnosis, Neuro-Linguistic Programming, and Ericksonian Psychotherapy. Specific examples of how they were applied with police personnel following the World Trade Center attack are provided along with specific clinical guidelines. These interventions are designed to augment and enhance standard CISM, mental health, and medical practice in the field.

[0569]
Hypnotic susceptibility in patients with conversion disorder
J Abnorm Psychol 2002 May;111(2):390-5 (ISSN: 0021-843X)
Roelofs K; Hoogduin KA; Keijser GP; Naring GW; Moene FC; Sandijck P
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Conversion disorder has been associated with hypnotic susceptibility for over a century and is currently still believed to be a form of autohypnosis. There is, however, little empirical evidence for the relation between hypnotic susceptibility and conversion symptoms. The authors compared 50 patients with conversion disorder with 50 matched control patients with an affective disorder on measures of hypnotic susceptibility, cognitive dissociation, and somatoform dissociation. Conversion patients were significantly more responsive to hypnotic suggestions than control patients. In addition, conversion patients showed a significant correlation between hypnotic susceptibility and the number of conversion complaints. These results provide the first evidence of a relationship between hypnotic susceptibility and the presence and number of conversion symptoms.

[0570]
Posthypnotic amnesia for autobiographical episodes: a laboratory model of functional amnesia?
Psychol Sci 2002 May;13(3):232-7 (ISSN: 0956-7976)
Barnier AJ
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Extreme variation in the accessibility of autobiographical memory is a major characteristic of functional amnesia. On the basis of its ability to temporarily disrupt the retrieval of memory material, posthypnotic amnesia (PHA) has been proposed as a laboratory analogue of such amnesia. However, most PHA research has focused on relatively simple, nonpersonal information learned during hypnosis. This experiment extended PHA to autobiographical memory by examining high- and low-hypnotizable subjects' explicit and implicit memory of two autobiographical episodes, one of which was targeted by a PHA suggestion. The effects of PHA were consistent with the major features of functional amnesia: PHA disrupted retrieval of autobiographical information, produced a dissociation between implicit and explicit memory, and was reversible. The nature of PHA's effect on autobiographical memory and the potential utility of a PHA paradigm for investigating functional amnesia are discussed.

[0571]
Psychological factors in the etiology and treatment of severe nausea and vomiting in pregnancy
Am J Obstet Gynecol 2002 May;185(Suppl Understanding):S210-4 (ISSN: 0002-9378)
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The assumption is frequently made that women with severe nausea and vomiting during pregnancy are transforming psychological distress into physical symptoms. Psychoanalytic theory supporting this assumption is reviewed, along with the few methodologically flawed empirical studies that have been conducted. Little support can be found for the hypothesis that nausea and vomiting during pregnancy is such a conversion disorder, but there are suggestions that psychological responses to the physiologic condition(s) underlying this problem may become entrenched, or conditioned. This possibility is supported by findings that psychological treatments, such as hypnosis, can be effective. This implies that psychological responses can interact with the physiology of nausea and vomiting during pregnancy to exacerbate the
This article discusses various alternative methods of treating the patient who encounters problems with local anesthetics.

[0572]
Medical, social, and legal implications of treating nausea and vomiting of pregnancy
Am J Obstet Gynecol 2002 May;185(5 Suppl Understanding):S262-6 (ISSN: 0002-9378)
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This article will deal with medical, social, and legal implications of treating nausea and vomiting of pregnancy (NVP). Clinical problems occur when the symptoms become exaggerated and result in debilitation, dehydration, and hospitalization. The treatment of NVP in its early stages has the implication that it will prevent the more serious complications, including hospitalization. Therapeutic modalities discussed in this conference that have been used or are being tested are primarily symptomatic treatments (antihistamines, Bendectin (Merrell Dow; Cincinnati, Ohio), phenothiazines, hypnosis, accupressure, relaxation behavioral modification, audiogenic feedback training, newer medications, diet, and nutritional support). Bendectin is probably the most studied medication with regard to its reproductive effects, and the studies clearly demonstrate that therapeutic doses of Bendectin have no measurable reproductive risks to the mother or the fetus. In spite of Bendectin's record of safety, numerous nonmeritorious congenital malformation lawsuits were filed and went to trial, and that junk science was presented at these trials. The Bendectin era focused our attention on the area of nonmeritorious litigation and junk science, which could have an effect on any new or less well-studied therapies, because such a high percentage of women are treated for NVP. Because 3% of the offspring will be affected with birth defects, the potential for litigation is immense. The solutions are (1) for legal problems, the medical community should focus their attention on junk scientists and their junk science, over which physicians should have some authority, and (2) for the treatment problem, it would seem most logical that a major research effort should be directed toward brain receptors that are involved in these physiologic effects. Furthermore, it would be imperative to study the array of molecules, both natural and manufactured, that can interact with these receptors for the amelioration of nausea. Until we understand the mechanism and specific therapy for NVP, it would appear that the reintroduction of Bendectin is the logical intermediate course to follow. We should also accompany the introduction of Bendectin with an educational campaign with regard to the lack of reproductive risks for this medication. The Food and Drug Administration has set the stage for the reintroduction of Bendectin by republishing their conclusion that Bendectin does not represent an increase in reproductive risks to the fetuses of pregnant women.

[0573]
[Psychiatric disorders in intensive care units]
[Les troubles psychiatriques en service de reanimation]
Encephale 2002 May-Jun;28(3):191-9 (ISSN: 0013-7006)
Ampelas JF; Pochard F; Consoli SM
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The diagnosis and treatment of psychiatric disorders in intensive care patients have been for a long time neglected. They are nowadays better recognized and managed. These disorders are mainly: delirium; anxiety disorders, from simple anxiety to panic disorder with agitation; adaptation disorders with depressive mood; brief psychotic disorders with persecution ideas. The manifestations of psychiatric disorders occur not only during the stay in intensive care unit (ICU) but also after transfer from ICU and several months after discharge from hospital. Part of psychiatric disorders is caused by organic or toxic causes (metabolic disturbances, electrolyte imbalance, withdrawal syndromes, infection, vascular disorders and head trauma). Nevertheless some authors estimate that they are due to the particular environment of ICU. The particularities of these units are: a high sound level (noise level average between 50 and 60 dBA), the absence of normal day-night cycle, a sleep deprivation, a sensory deprivation, the inability for intubated patients to talk, the pain provoked by some medical procedures, the possibility to witness other patients' death. Although most patients feel secure in ICU, of them perceive ICU's environment as threatening. Simple environmental modifications could prevent the apparition of some psychiatric manifestations: efforts should be made to decrease noise generated by equipment and staff conversations, to provide external windows, visible clocks and calendar, to ensure adequate sleep with normal day-night cycle and to encourage more human contact. Psychotropic drugs are useful but a warm and empathetic attitude can be very helpful. Some authors described specific psychotherapeutic interventions in ICU (hypnosis, coping strategies,). To face anxiety, many patients have defense attitudes as psychological regression and denial. Patient's family is suffering too. Relative's hospitalization causes a crisis in family. Unpredicted illnesses often force family members to reorganize in order to regain their equilibrium. Every family should be proposed a psychological support. Caregivers can be distressed as well. This stress is due to their high responsibility and the fact that they face disease and death. Simple measures can lessen stress'effect and prevent the burn-out syndrome. In conclusion, the importance of a liaison psychiatrict-intensive care physician collaboration must be emphasized in order that patients and their family have a better psychological support. Psychological management should be proposed during the hospitalization and after discharge from hospital.

[0574]
Managing patients with local anesthetic complications using alternative methods
Pa Dent J (Harrisb) 2002 May-Jun;69(3):22-9 (ISSN: 0031-4439)
Lu DP
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This article discusses various alternative methods of treating the patient who encounters problems with local anesthetics.
Those alternative methods include: acupuncture, hypnosis, sedation, general anesthesia, and antihistamines as a substitute for local anesthetics with more of a focus in using antihistamines as an effective local anesthetic agent. Although not frequently encountered in the clinical setting, allergic reactions to local anesthetics do occur. Various surveys indicate the number of deaths attributed to local anesthesia range from 1:1,500,000 to 1:4,000,000, with oral surgery offices having higher mortality rates than general dentistry offices. This occurs despite clinicians’ attention to patient medical histories, aspiration of the local anesthetic syringe during injections, and minimizing the dosage of local anesthetic solutions. Generally speaking, local anesthetics can be divided into two groups: ester of benzoic and aminobenzoic derivatives (cocaïne, benzocaine, procaine, tetracaine, butacaine, etc.) or amide-derivatives of xylidine and toluidine groups (lidoïcaine, mepivacaine, prilocaine a.k.a. Citanest, etc.). Adverse effects include allergic or toxic reactions, as well as negative effects of any vasoconstrictors contained within the local anesthetic solution. This article will concentrate on how to successfully manage patients who have previously encountered allergic reactions.

[0575]
Psychological management of pain
Disabil Rehabil 2002 May 20;24(8):416-22 (ISSN: 0963-8288)
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PURPOSE: In this article an overview is given on the attempts of understanding and treating chronic pain from the psychodynamic view and the perspective of behavioural medicine. ISSUE: Pain cannot be reliably measured. Assessment of pain depends on verbal description, nonverbal expressions, specific tests and our empathy. From this perspective pain is a matter of subjective experience and communication. Several phenomena (e.g. phantom limb pain, stress analgesia, the pain-relieving effects of relaxation, hypnosis, placebo, etc., pain in spite of a non-existing injury) obviously show that psychological factors like distraction, relaxation, fear, depression, former pain experiences as well as family and cultural influences modulate the way pain is experienced. Different parts of the CNS are involved in the modulation of pain-experience. Referring to cognitive and emotional processes, the importance of the the neocortex and the limbic system are to be underlined. CONCLUSION: Chronic pain (as a category of ICD-10) presupposes a continuous, torturing pain, which sometimes even cannot be explained sufficiently by an organic damage. Psychosocial problems such as emotional conflicts, misleading thoughts, etc. are recognizable and can be brought into connection with the pain the patient experiences.

[0576]
The effectiveness of adjunctive hypnosis with surgical patients: a meta-analysis
Anesth Analg 2002 Jun;94(6):1639-45, table of contents (ISSN: 0003-2999)
Montgomery GH; David D; Winkel G; Silverstein JH; Bovbjerg DH
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Hypnosis is a nonpharmacologic means for managing adverse surgical side effects. Typically, reviews of the hypnosis literature have been narrative in nature, focused on specific outcome domains (e.g., patients’ self-reported pain), and rarely address the impact of different modes of the hypnosis administration. Therefore, it is important to take a quantitative approach to assessing the beneficial impact of adjunctive hypnosis for surgical patients, as well as to examine whether the beneficial impact of hypnosis goes beyond patients’ pain and method of the administration. We conducted meta-analyses of published controlled studies (n = 20) that used hypnosis with surgical patients to determine: 1) overall, whether hypnosis has a significant beneficial impact, 2) whether there are outcomes for which hypnosis is relatively more effective, and 3) whether the method of hypnotic induction (live versus audiotape) affects hypnosis efficacy. Our results revealed a significant effect size (D = 1.20), indicating that surgical patients in hypnosis treatment groups had better outcomes than 89% of patients in control groups. No significant differences were found between clinical outcome categories or between methods of the induction of hypnosis. These results support the position that hypnosis is an effective adjunctive procedure for a wide variety of surgical patients. IMPLICATIONS: A meta-analytical review of studies using hypnosis with surgical patients was performed to determine the effectiveness of the procedure. The results indicated that patients in hypnosis treatment groups had better clinical outcomes than 89% of patients in control groups. These data strongly support the use of hypnosis with surgical patients.

[0577]
Psychological aspects of asthma
J Consult Clin Psychol 2002 Jun;70(3):691-711 (ISSN: 0022-006X)
Lehrer P; Feldman J; Giardino N; Song HS; Schmaling K
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Asthma can be affected by stress, anxiety, sadness, and suggestion, as well as by environmental irritants or allergens, exercise, and infection. It also is associated with an elevated prevalence of anxiety and depressive disorders. Asthma and these psychological states and traits may mutually potentiate each other through direct psychophysiological mediation, nonadherence to medical regimen, exposure to asthma triggers, and inaccuracy of asthma symptom perception. Defensiveness is associated with inaccurate perception of airway resistance and stress-related bronchoconstriction. Asthma education programs that teach about the nature of the disease, medications, and trigger avoidance tend to reduce asthma morbidity. Other promising psychological interventions as adjuncts to medical treatment include training in symptom perception, stress management, hypnosis, yoga, and several biofeedback procedures.
A quantitative and qualitative pilot study of the perceived benefits of autogenic training for a group of people with cancer

Eur J Cancer Care (Engl) 2002 Jun;11(2):122-30 (ISSN: 0961-5423)
Wright S; Courtney U; Crowther D
ARC Cancer Support Centre, Dublin

This paper describes the application of autogenic training (AT), a technique of deep relaxation and self-hypnosis, in patients diagnosed with cancer, with the aim of increasing their coping ability, and reports the results of a questionnaire survey performed before and after an AT course. A reduction in arousal and anxiety can help individuals to perceive their environment as less hostile and threatening, with implications for improved perceived coping ability. Complementary therapies are considered useful in enhancing symptom relief, overall well-being and self-help when used as adjuvant therapies to allopathic medical interventions. The present study aimed to validate, in an Irish context, the effectiveness of AT as a complementary therapy for patients with cancer. Each participant completed a Hospital Anxiety and Depression Scale and Profile of Mood States questionnaire before and after a 10-week AT course. The results indicated a significant reduction in anxiety and increase in 'fighting spirit' after compared with before training, with an improved sense of coping and improved sleep being apparent benefits of AT practice.

[Hypnosis to treat nausea and vomit: here it works!]
[L’hypnose pour traiter les nausées et vomissements: ça marche!]
Rev Med Liege 2002 Jun;57(6):382-4 (ISSN: 0370-629X)
Marchand P; Moulin JL; Merle JC
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We report a case of uncontrollable vomits in a 76-year-old patient, for which hypnosis was effective. Described vomits became initiated by administration of morphine per os, lasted three months and stood up to usual medication as well attempts of nutrition by ballasted micro-tube. Somatic etiology search was unsuccessful; the growing significance of hypnosis in the field of anaesthesia led to use relational and oriented solution therapy. The situation was rapidly and constantly solved.

Acceptability of treatments for trichotillomania. Effects of age and severity
Behav Modif 2002 Jul;26(3):378-99 (ISSN: 0145-4455)
Elliott AJ; Fuqua WR
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Based on the literature, trichotillomania (TTM, chronic hair pulling) in children and adults appears to be responsive to behavioral interventions such as habit reversal. However, some have questioned the generality and acceptability of such procedures. This study compared the acceptability ratings of four interventions targeting TTM (habit reversal, hypnosis, medication, and punishment). In the study, 233 college students read case vignettes in which the age of the analogue client and the severity of the hair pulling were manipulated. Results showed significant differences between the four treatment conditions, with hypnosis and habit reversal being rated most acceptable. Age of the analogue client and severity of TTM did not significantly influence acceptability ratings.

Hypnotic responsivity from a developmental perspective: insights from young children
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Evidence indicates that hypnotic responsivity in children younger than 8 years of age differs significantly from that of older children and adults. The sudden increase in responsiveness around age 8, differing patterns of item difficulty for young children, specific problems with hypnotic dream and age regression items, and the lack of conceptual distinction between volition and nonvolition argue for a fundamental discontinuity between young children and adults regarding responsivity. These differences result from underlying developmental processes that characterize young childhood, including limitations in executive cognitive functioning, more overt forms of involvement, and reliance on authoritative others for direction, regulation, and support. The unique features of young children's hypnotic responsivity offer the opportunity to reconsider hypnosis within a developmental context.

Hypnosis, the brain, and sports: Salient Findings July 2002
Nash MR
University of Tennessee, Knoxville, USA

Three particularly noteworthy articles addressing hypnosis have been published during the early portion of 2002. All, to a degree, address biological aspects of hypnotic response. One of these articles is a thoughtful summary and synthesis of
neuroscience/hypnosis research to date, describing how neuroimaging techniques offer new opportunities to use hypnosis as a manipulation and to provide a means of studying hypnosis itself. A second article focuses on the physiology of sports and the usefulness of hypnosis in the practice of sport and exercise psychology. Finally, the third article describes a study of brain activation during actual and imagined handgrip during hypnosis.

[0583]
The role of hypnosis in the detection of psychogenic seizures
Am J Clin Hypn 2002 Jul;45(1):11-20 (ISSN: 0002-9157)
Martinez-Taboas A
Carlos Albizu University

In this preliminary clinical investigation, hypnosis was used in the differential diagnosis of epileptic versus psychogenic seizures (PS). Eight patients with a clinical profile suggesting the presence of PS were given a hypnotic suggestion in which they had to go back in time to the exact moment of their last seizure. They were then asked to concentrate their attention on any unusual feeling or bodily sensation. All 8 patients presented a PS during the age regression protocol. In 6 cases, independent testimony from family members corroborated the morphological similarity of the induced attack and the ones presented in their natural environment. Also, the seizures ended abruptly after a command was given to stop them. A control group of 5 epileptic subjects did not present any signs of discomfort or seizure behavior during the hypnotic protocol. It is argued that a simple procedure as the one described in this investigation can be useful as a diagnostic tool in the differentiation of epileptic from PS attacks.

[0584]
The search for Bridey Murphy: implications for modern hypnosis
Am J Clin Hypn 2002 Jul;45(1):3-10 (ISSN: 0002-9157)
Gravitz MA
George Washington University, Washington, DC, USA

The 1956 publication of The Search for Bridey Murphy was a noteworthy event for the field of hypnosis. This internationally best selling book, written for lay readers, described several recorded sessions of alleged time-regression to a prior life nearly two centuries before 1956. While subsequent investigations disproved that claim, there were a number of important implications for the science and practice of hypnosis. Although it was concluded that the Bridey Murphy interviews were products of cryptomnesia, the book was a significant factor associated with a resurgence of public and professional interest in the modality.

[0585]
Medical hypnosis and quadruplets: a case report
Brown DC; Massarelli E

This case report presents a new association reaction and a new treatment for quadruplet pregnancies. The hypnotic interventions can increase clinical management of quadruplet pregnancy. It illustrates new insights into the treatment of quadruplet pregnancies, and it suggests useful future research.

[0586]
Hypnosis provoked pseudoseizures: a case report and literature review
Zalsman G; Dror S; Gadoth N

Only a few studies have been reported in which suggestion was used to provoke pseudoseizures (PS). In these studies PS were video EEG monitored, and saline injections were administered as placebo. This method may be somewhat unethical and carries a low success rate. The authors, two child psychiatrists (GZ and DS) and a neurologist (NG), applied hypnosis to provoke PS which were monitored by video-EEG. Pre-, intra- and post-ictal serum prolactin levels were determined. The first hypnotic session was diagnostic and for this reason featured controlled attempts to determine whether there might be childhood trauma material. The following sessions easily provoked PS during which the EEG was normal and pre-, intra- and post-ictal serum prolactin levels were identical and within normal values. We conclude that hypnosis (with informed consent) for PS monitored by video-EEG telemetry, seems to be an ethical, cheap and quite easy way to demonstrate PS.

[0587]
Psychosocial treatment of posttraumatic stress disorder: A practice-friendly review of outcome research
Solomon SD; Johnson DM
National Institutes of Health

A review of the treatment research indicates that several forms of therapy appear to be useful in reducing the symptoms of posttraumatic stress disorder (PTSD). Strongest support is found for the treatments that combine cognitive and behavioral techniques. Hypnosis, psychodynamic, anxiety management, and group therapies also may produce short-term symptom reduction. Still unknown is whether any approach produces lasting effects. Imaginal exposure to trauma
memories and hypnosis are techniques most likely to affect the intrusive symptoms of PTSD, while cognitive and psychodynamic approaches may address better the numbing and avoidance symptoms. Treatment should be tailored to the severity and type of presenting PTSD symptoms, to the type of trauma experience, and to the many likely comorbid diagnoses and adjustment problems. [Copyright 2002 Wiley Periodicals, Inc. J Clin Psychol/In Session 58: 947-959, 2002.]

[0588] No link between hypnotizability and the Self-Monitoring Scale Am J Clin Hypn 2002 Jul;45(1):21-30 (ISSN: 0002-9157) Bachner-Melman R; Ebstein R Hebrew University of Jerusalem, Pesach Lichtenberg, Hadassah Medical School, Israel

Socio-cognitive theorists have often claimed that hypnotizability is in part a function of social role-playing. We thus expected to find an association between a measure of hypnotizability (SHSS:C) and the Self-Monitoring Scale-Revised, a purported measure of sensitivity to social cues. The data failed to reveal any significant correlations, and therefore cannot be said to provide any support for the socio-cognitive position. Nevertheless, as hypothesized, we found that the hypnotist tended to consider subjects who were high but not low on the Other-Directedness subscale to be more deeply hypnotized than the subjects themselves felt.


The current study describes the successful administration of hypnotherapy with a subject suffering from refractory Irritable Bowel Syndrome (IBS) and Generalized Anxiety Disorder (GAD). The subject had suffered from IBS for 30 years and had unsuccessfully pursued multiple psychological treatments, both traditional and non-traditional. He was referred to the Center for Stress and Anxiety Disorders and commenced hypnotherapy directed primarily at the IBS symptoms. After 6 treatment sessions, his IBS symptomatology had improved 53%. He stopped treatment at that point and continued autohypnosis with the aid of treatment audiotapes provided by his therapist. Follow-up at 6 months indicated continued improvement (70%). A 2-year follow-up revealed an improvement of 38% in IBS symptomatology. Concurrent levels of depression and anxiety had also substantially decreased. Hypnotherapy is shown to be a viable, palatable, and enduring treatment option for an individual who had been refractory to many previous therapies.

[0590] Driving on the motorway: the effect of alternating speed on driver’s activation level and mental effort Ergonomics 2002 Jul 15;45(9):605-18 (ISSN: 0014-0139) Tejero P; Choliz M Departamento de Psicologia Basica, Universidad de Valencia, Avda. Blasco Ibanez, 21, 46010-Valencia, Spain

When most of the driving tasks are performed automatically, a driver’s level of alertness may decline, as has been pointed out in the study of the phenomenon called ‘highway hypnosis’. One possible countermeasure is to periodically vary the speed (Wertheim 1978), but the authors have not found any studies that directly assess the effectiveness of this countermeasure. The objective of our study has been to provide empirical evidence regarding the effects of this strategy on the level of driver activation on a motorway route in real traffic. In the present study activation level as indexed by a relative measure based on slow EEG activity tended to be significantly higher when speed was modified periodically than when it remained constant. In addition, this index tended to be progressively higher when the speed was constant during the first part of the route, while the same thing did not occur when the speed was modified periodically. Finally, no significant differences between the constant and varying speed conditions were obtained with respect to any of the cardiovascular indices related to the effort put into driving and the stress experienced in the situation.


The notion of consciousness is at the core of an ongoing debate on the existence and nature of hypnotic states. Previously, we have described changes in brain activity associated with hypnosis (Rainville, Hofbauer, Paus, Duncan, Bushnell, & Price, 1999). Here, we replicate and extend those findings using positron emission tomography (PET) in 10 normal volunteers. Immediately after each of 8 PET scans performed before (4 scans) and after (4 scans) the induction of hypnosis, subjects rated their perceived level of "mental relaxation" and "mental absorption," two of the key dimensions describing the experience of being hypnotized. Regression analyses between regional cerebral blood flow (rCBF) and self-ratings confirm the hypothesized involvement of the anterior cingulate cortex (ACC), the thalamus, and the ponto-mesencephalic brainstem in the production of hypnotic states. Hypnotic relaxation further involved an increase in occipital rCBF that is consistent with our previous interpretation that hypnotic states are characterized by a decrease in cortical arousal and a reduction in cross-modality suppression (disinhibition). In contrast, increases in mental absorption
during hypnosis were associated with rCBF increases in a distributed network of cortical and subcortical structures previously described as the brain's attentional system. These findings are discussed in support of a state theory of hypnosis in which the basic changes in phenomenal experience produced by hypnotic induction reflect, at least in part, the modulation of activity within brain areas critically involved in the regulation of consciousness.

[0592]
Jules Bernard Luys: a singular figure of 19th century neurology
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Jules Bernard Luys was a highly industrious and dedicated French investigator who made important contributions to the fields of neuroanatomy and neuropsychiatry in the second half of the 19th century. His name is still eponymically attached to the subthalamic nucleus and the centre median nucleus, two structures that are at the center of our current thinking about the functional organization of the basal ganglia and the pathophysiology of Parkinson's disease. While developing a highly original view of the anatomical and functional organization of the human brain, Luys contributed significantly to our knowledge of the neuropathological and clinical aspects of mental illnesses. Luys devoted the last part of his career to hysteria and hypnosis, engaging himself in experiments as extravagant as the action of medication at distance. In doing so, he became perhaps the most highly caricatured example of the fascination that hysteria exerted upon various renowned neurologists at the end of the 19th century. This paper briefly summarizes the contribution of this remarkable figure of the history of neurology.

[0593]
A 3-year comparison of dental anxiety treatment outcomes: hypnosis, group therapy and individual desensitization vs. no specialist treatment
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Outcomes of hypnotherapy (HT), group therapy (GT) and individual systematic desensitization (SD) on extreme dental anxiety in adults aged 19-65 yr were compared by regular attendance behaviors, changes in dental anxiety and changes in beliefs about dentists and treatment after 3 yr. Treatment groups were comparable with a static reference control group of 65 anxious patients (Dental Anxiety Scale &gt; or = 15) who were followed for a mean of nearly 6 yr. After 3 yr, 54.5% of HT patients, 69.6% of GT patients and 65.5% of SD patients were maintaining regular dental care habits. This was better than the 46.1% of the reference group, who reported going regularly to the dentist again within the cohort follow-up period, and 38.9% of a control subgroup with observation for 3 yr. Women were better regular attenders than men at 3 yr. Specialist-treated regular attenders were significantly less anxious and had more positive beliefs than regular attenders from reference groups. There were few differences between HT, GT and SD after 3 yr. It was concluded that many patients can, on their own, successfully start and maintain regular dental treatment habits with dentists despite years of avoidance associated with phobic or extreme anxiety. However, it also appears that these patients had less success in reducing dental anxiety and improving beliefs about dentists long-term than did patients who were treated at the specialist clinic with psychological strategies.

[0594]
Suggestibility and negative priming: two replication studies
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Research suggests that inhibiting the effect of irrelevant stimuli on subsequent thought and action (cognitive inhibition) may be an important component of suggestibility. Two small correlation studies were conducted to address the relationship between different aspects of suggestibility and individual differences in cognitive inhibition, operationalized as the degree of negative priming generated by to-be-ignored stimuli in a semantic categorization task. The first study found significant positive correlations between negative priming, hypnotic suggestibility, and creative imagination; a significant negative correlation was obtained between negative priming and interrogative suggestibility, demonstrating the discriminant validity of the study results. The second study replicated the correlation between negative priming and hypnotic suggestibility, using a different suggestibility measurement procedure that assessed subjective experience and hypnotic involuntariness as well as objective responses to suggestions. These studies support the notion that the ability to engage in cognitive inhibition may be an important component of hypnotic responsivity and maybe of other forms of suggestibility.

[0595]
Autonomic reactivity to cognitive and emotional stress of low, medium, and high hypnotizable healthy subjects: testing predictions from the high risk model of threat perception
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This study tested hypotheses derived from Wickramasekera's High Risk Model of Threat Perception (HRMTP) by comparing autonomic and affective responses to a cognitive and an emotional stress task in high, medium, and low hypnotizables. Electrodermal activity (EDA) was used as a measure of sympathetic activity, and the high frequency (HF) spectral component of heart rate variability as a measure of parasympathetic activity. High hypnotizables exhibited greater EDA at baseline and slower EDA recovery following both tasks than did medium and lows. Medium hypnotizables responded with greater decreases in normalized HF power than did highs and lows during the emotional stress task. The results suggest diminished EDA variability in high hypnotizables and the potential for HF power as an indicator of autonomic dysregulation in low and high hypnotizables, compared to mediums. The results are discussed in relation to predictions based on the HRMTP.

[0596]
The "big five" and hypnotic suggestibility
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A recent approach to personality measurement argues that the essential personality traits are encompassed by 5 basic factors: openness/intellect, conscientiousness, neuroticism, agreeableness, and extraversion. This study used the Big Five Inventory to test the hypothesis that 1 or more of the 5 factors underlie hypnotic suggestibility. No meaningful relationships between hypnotic suggestibility and any of the 5 factors were found.

[0597]
Irritable bowel syndrome: a little understood organic bowel disease?
Lancet 2002 Aug 17;360(9332):555-64 (ISSN: 0140-6736)
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Irritable bowel syndrome affects 10% of adults with an unexplained female predominance. Although only a few people see their family doctor, the disease causes reduced quality of life and represents a multi-billion pound health-care problem. The disorder clusters in families, which is possibly because of intra-familial learning and a genetic predisposition. Visceral hypersensitivity is a key feature in most patients. Results of imaging studies of regional cerebral blood flow during rectal distension suggest underlying disturbances of central processing of afferent signals, though this is not unique to the disorder, since it is seen in other chronic pain syndromes. Environmental factors that are strongly implicated in at least some patients include gastrointestinal infection and inflammation and chronic stress. Diagnosis is based on positive symptoms and absence of any alarm indicators. Treatment remains unsatisfactory and hinges on an excellent doctor-patient relationship, with drugs for symptom exacerbations. Cognitive behavioural treatment, psychotherapy, and hypnosis could provide long-lasting benefit in some patients. Tricyclic antidepressants in low doses seem to be the most effective class of drugs for the disorder on the basis of limited data.

[0598]
A multidisciplinary approach to nonpharmacologic pain management
J Am Osteopath Assoc 2002 Sep;102(9 Suppl 3):S1-5 (ISSN: 0098-6151)
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The multidisciplinary pain management team is the optimal method for delivery of comprehensive treatment to patients in pain. The biopsychosocial model of pain considers multiple factors for assessment, diagnosis, and treatment of pain. A structured approach to nonpharmacologic pain management includes medical and psychological interventions to educate and to empower patients to manage pain. Relaxation training, biofeedback, hypnosis, imagery, and cognitive-behavioral therapy are nonpharmacologic treatment modalities recommended by multidisciplinary pain management teams for effective pain control.

[0599]
Tension-type headache
Am Fam Physician 2002 Sep 1;66(5):797-804 (ISSN: 0002-838X)
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Tension-type headache typically causes pain that radiates in a band-like fashion bilaterally from the forehead to the occiput. Pain often radiates to the neck muscles and is described as tightness, pressure, or dull ache. Migraine-type features (unilateral, throbbing pain, nausea, photophobia) are not present. All patients with frequent or severe headaches need careful evaluation to exclude any occult serious condition that may be causing the headache. Neuroimaging is not needed in patients who have no worrisome findings on examination. Treatment of tension-type headache typically involves the use of over-the-counter analgesics. Use of pain relievers more than twice weekly places patients at risk for progression to chronic daily headache. Sedating antihistamines or antiemetics can potentiate the pain-relieving effects of standard analgesics. Analgesics combined with butalbital or opiates are often useful for tension-type pain but have an
increased risk of causing chronic daily headache. Amitriptyline is the most widely researched prophylactic agent for frequent headaches. No large trials with rigorous methodologies have been conducted for most non-medication therapies. Among the commonly employed modalities are biofeedback, relaxation training, self-hypnosis, and cognitive therapy.

What we can learn from shamanic healing: brief psychotherapy with latino immigrant clients
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The author, a medical anthropologist and licensed psychotherapist, draws on a database of 700 Latino immigrant families whom she has treated to demonstrate concepts and techniques of psychotherapeutic intervention that are derived from shamanic roots in the immigrant's original culture. Congruences may exist between the shamanic techniques of the coastal and Amazonian regions of Peru and 3 Western psychotherapy techniques-hypnosis, behavior modification, and cognitive restructuring. By using historic links with Hispanic culture and the techniques discussed in the commentary, psychotherapists can acquire cultural competence that will enable them to effectively reduce mental illness symptoms presented by US Latino immigrants in clinical practice.

1784
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This article details the atmosphere surrounding the scientific community in France in 1784, the year of the Franklin Commission's report on Mesmer. The end of the 18th century heralded a victory of observation over systems and theories. Animal magnetism found itself in the midst of a conflict between the Old and the New World. The Franklin Commission, like so many other commissions at the time, was looking for measurable and quantifiable phenomena, the sole basis of progress in the health sciences. Mesmer and his system failed the test and were publicly denigrated. The Commission can be seen as the stepping stone to a more empirically based approach to the phenomenon of hypnosis, which would follow in the 19th century.

A critique of the Franklin Commission Report: hypnosis, belief, and suggestion
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This article critiques the landmark Report of the Commissioners Charged by the King to Examine Animal Magnetism, now widely known as the "Franklin Report." The authors mount a defense of D'Eslon, the disciple of Mesmer who conducted the "experiments," designed by the Commissioners that debunked animal magnetism as the mechanism responsible for dramatic alterations in behavior and medical cures following the application of Mesmer's procedures. The authors identify deficiencies in the commissioners' methods, discuss difficulties inherent in drawing strong inferences from the experiments they conducted, and contend that the commissioners missed an opportunity to elucidate the manifold ways in which mesmerism mapped onto important psychological constructs and phenomena. The authors adopt a fanciful approach by couching their critique in a sympathetic response to D'Eslon, who appears to one of the authors in a dream and voices his reservations about the commissioners' efforts.

The Franklin Commission Report, in light of past and present understandings of hypnosis
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Hypnosis has a formal history of more than 2 centuries, and over this period various metaphors have been coined to point to what investigators perceived as its most essential characteristic. The Franklin Commission Report on Animal Magnetism rejected Mesmer's procedures despite his successes. The Commission argued, on the basis of a number of experiments, that these improvements could be accounted for in terms of imagination, imitation, and touch. In current theorizing, the role of imagination in hypnotic outcomes is still widely recognized, but following the theorizing of J. R. Hilgard, Sarbin and Coe, and Sutcliffe, absorbed imagination looks to be the more appropriate conceptualization. The only blemish on the Commission's report is its conclusion that because Animal Magnetism did not exist, then the techniques associated with it could not have therapeutic effects.

Mesmer minus magic: hypnosis and modern medicine
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The implications and effects of the French commission that passed judgment on Mesmer's work is examined in light of the pioneering role of hypnosis as the first Western conception of a psychotherapy, the ancient philosophical debate between idealism and empiricism, and the conflict in modern medicine between biotechnological emphasis on cure and the need for care as many previously terminal illnesses are converted to chronic diseases. The panel's report is interpreted as negative about the literal theory of animal magnetism but actually supportive of the potential therapeutic power of suggestion and "positive thinking." This aspect of hypnosis is described as a forerunner of modern cognitive therapies of depression and other illnesses. The panel exerted a constructive effect in applying scientific method and rigorous evaluation to hypnotic treatment, an application of Enlightenment philosophy that presaged the Flexner era in modern medicine. Both hypnosis and medicine ultimately benefited.

[0605]
Mesmer, the Franklin Commission, and hypnosis: a counterfactual essay
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The author reviews the social and scientific context for both Mesmer's theory of animal magnetism and the evaluation of that theory by the Franklin Commission. If Mesmer had never lived, someone else would have introduced magnets into medicine; and if the Franklin Commission had never met, someone else would have found the theory of animal magnetism invalid. Mesmer's theory was an imperfect analogy conditioned by the scientific vocabulary of his time, and the Franklin Commission's debunking of his theory left Mesmer's effects both unchallenged and unexplained. Both Mesmer and the Franklin Commission suffered from the fact that in their time scientific psychology was not merely unavailable but considered impossible.

[0606]
Psychological approaches during conscious sedation. Hypnosis versus stress reducing strategies: a prospective randomized study
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Stress reducing strategies are useful in patients undergoing surgery. Hypnosis is also known to alleviate acute and chronic pain. We therefore compared the effectiveness of these two psychological approaches for reducing perioperative discomfort during conscious sedation for plastic surgery. Sixty patients scheduled for elective plastic surgery under local anesthesia and intravenous sedation (midazolam and alfentanil upon request) were included in the study after providing informed consent. They were randomly allocated to either stress reducing strategies (control: CONT) or hypnosis (HYP) during the entire surgical procedure. Both techniques were performed by the same anesthesiologist (MEF). Patient behavior was noted during surgery by a psychologist, the patient noted anxiety, pain, perceived control before, during and after surgery, and postoperative nausea and vomiting (PONV). Patient satisfaction and surgical conditions were also recorded. Peri- and postoperative anxiety and pain were significantly lower in the HYP group. This reduction in anxiety and pain were achieved despite a significant reduction in intraoperative requirements for midazolam and alfentanil in the HYP group (alfentanil: 8.7±0.9 μg kg⁻¹ h⁻¹ vs. 19.4±2 μg kg⁻¹ h⁻¹, P<0.001; midazolam: 0.04±0.003 mg kg⁻¹ h⁻¹ vs. 0.09±0.01 mg kg⁻¹ h⁻¹, P<0.001). Patients in the HYP group reported an impression of more intraoperative control than those in the CONT group (P<0.001). PONV were significantly reduced in the HYP group (6.5% vs. 30.8%, P<0.001). Surgical conditions were better in the HYP group. Less signs of patient discomfort and pain were observed by the psychologist in the HYP group (P<0.001). Vital signs were significantly more stable in the HYP group. Patient satisfaction score was significantly higher in the HYP group (P<0.004). This study suggests that hypnosis provides better perioperative pain and anxiety relief, allows for significant reductions in alfentanil and midazolam requirements, and improves patient satisfaction and surgical conditions as compared with conventional stress reducing strategies support in patients receiving conscious sedation for plastic surgery.

[0607]
Different strategies of modulation can be operative during hypnotic analgesia: a neurophysiological study
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Noxious electrical stimuli were applied to the sural nerve during hypnotically-suggested analgesia in the left lower limb of 18 highly susceptible subjects. During this procedure, the verbally reported pain threshold, the nociceptive flexion (RIII) reflex and late somatosensory evoked potentials were investigated in parallel with autonomic responses and the spontaneous electroencephalogram (EEG). The hypnotic suggestion of analgesia induced a significant increase in pain threshold in all the selected subjects. All the subjects showed large changes (i.e., by 20% or more) in the amplitudes of their RIII reflexes during hypnotic analgesia by comparison with control conditions. Although the extent of the increase in pain threshold was similar in all the subjects, two distinct patterns of modulation of the RIII reflex were observed during the hypnotic analgesia: in 11 subjects (subgroup 1), a strong inhibition of the reflex was observed whereas in the other seven subjects (subgroup 2) there was a strong facilitation of the reflex. All the subjects in both subgroups displayed similar decreases in the amplitude of late somatosensory evoked cerebral potentials during the hypnotic analgesia. No
modifications in the autonomic parameters or the EEG was observed. These data suggest that different strategies of modulation can be operative during effective hypnotic analgesia and that these are subject-dependent. Although all subjects may shift their attention away from the painful stimulus (which could explain the decrease of the late somatosensory evoked potentials), some of them inhibit their motor reaction to the stimulus at the spinal level, while in others, in contrast, this reaction is facilitated.

[0608]
Dissociation of sensory and affective dimensions of pain using hypnotic modulation
PAIN, Vol. 82 (2) (1999) pp. 159-171
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Understanding the complex nature of pain perception requires the ability to separately analyze its psychological dimensions and their interaction, and relate them to specific variables and responses. The present study, therefore, attempted to selectively modulate the sensory and affective dimensions of pain, using a cognitive intervention, and to assess the possible relationship between these psychological dimensions of pain and changes in physiological responses to the noxious stimuli. In three experiments, normal subjects trained in hypnosis rated pain intensity and pain unpleasantness produced by a tonic heat-pain stimulus (1-min immersion of the hand in 45.0-47.5°C water). Two experiments were designed to test hypnotic suggestions to decrease (Experiment one (2.5.1)), or increase and decrease (Experiment two (2.5.2)) pain affect. Suggestions in Experiment three (2.5.3) were directed towards an increase or decrease in pain sensation. In Experiments one and two (2.5.1 and 2.5.2), the significant modulation in pain unpleasantness ratings was largely independent of variations in perceived pain intensity. Moreover, in Experiment two (2.5.2), there was a significant correlation between the stimulus-evoked heart-rate increase and ratings of pain unpleasantness, but not of pain intensity, suggesting a direct functional interaction between pain affect and autonomic activation. In Experiment three (2.5.3), suggestions to modulate the sensory aspect of pain produced significant modulation of pain intensity ratings, with secondary changes in pain unpleasantness ratings. Hypnotic susceptibility (Stanford Hypnotic Susceptibility Scale form A) was specifically correlated to pain unpleasantness modulation in Experiment two (2.5.2) and to pain intensity modulation in Experiment three (2.5.3), suggesting that this factor relates to the primary process toward which hypnotic suggestions are directed. The specific pain dimension on which hypnotic suggestions act depends on the content of the instructions and is not a characteristic of hypnotic itself. Results are consistent with a successive-stage model of pain perception (e.g. JB, Dougherty LM, Archer CR, Price DD. Assessing the stages of pain processing: a multivariate analytical approach. Pain 1996;68:157-167) which provides a conceptual framework necessary to study the cerebral representation of pain perception.

[0609]
Extended, strategic therapy for recalcitrant mind/body healing: an integrative model
Am J Clin Hypn 2002 Oct;45(2):91-102 (ISSN: 0002-9157)
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The development of the power therapies, behavioral medicine, and short term interventions have reported such success even with trauma cases that it is relevant to question the justification for lengthy psychotherapy. Yet some patients with complex mind/body conditions impervious to medical treatment/hypnosis may require extended, multi-modal, integrative therapy. This paper details a single complex case of paruresis as a prototype for illustrating a holographic treatment model for recalcitrant conditions: Component features of the proposed model presented include: 1) the sequential utilization of hypnobehavioral and analytic approaches; 2) uncovering work providing access to the somatic ego state associated with the illness condition; 3) the extended treatment time frame required for deep psycho-physiological change; and 4) the stages of counter-transference expectably evoked by such patients (e.g. urgency, exuberant optimism, frustration, discouragement), and the transformation of such reactions to achieve maximum therapeutic efficacy.

[0610]
A conceptual review of the psychosocial genomics of expectancy and surprise: neuroscience perspectives about the deep psychobiology of therapeutic hypnosis
Am J Clin Hypn 2002 Oct;45(2):103-18 (ISSN: 0002-9157)
Rossi EL

This conceptual review explores some speculative associations between the neuroscience of expectancy and surprise during stress and therapeutic hypnosis. Current neuroscience is exploring how novel interactions between the organism and the environment initiate cascades of gene expression, protein synthesis, neurogenesis, and healing that operate via Darwinian principles of natural variation and selection on all levels from the molecular-genomic to the subjective states of consciousness. From a neuroscience perspective, the novel and surprising experiences of consciousness appear to have as important a role as expectancy in memory, learning and behavior change in the psychobiology of therapeutic hypnosis. This paper explores how we may integrate the psychosocial genomics of expectancy and surprise in therapeutic hypnosis as a complex system of creative adaptation on all levels of human experience from mind to gene expression.

[0611]
A spiral curriculum for hypnosis training
Although hypnosis has been used for centuries, there are few reports of systematic, professional training. The most thorough codification of instructional content is the Standards of Training in Clinical Hypnosis (SOTCH) (Elkins & Hammond, 1994), endorsed by The American Society of Clinical Hypnosis (ASCH), and The Society of Clinical and Experimental Hypnosis (SCEH) for annual workshops. This curriculum is organized around two assumptions: training is presented to adult professional who know their own objectives; and each participant has a favorite learning style that should be accommodated. The workshop follows the content and time recommendations of the SOTCH. Some content is scheduled with spaced opportunity for practice. Concepts are organized in a spiral pattern, then presented and reviewed several times, each time in more detail, and in ways that accommodate different learning styles.

[0612]
Symptom removal: the nineteenth century experience
Am J Clin Hypn 2002 Oct;45(2):129-36 (ISSN: 0002-9157)
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It has been said that traditional clinical hypnotists, essentially those practicing before 1900, made excessive use of symptom removal to the detriment of their patients. However, statements of this kind have never been documented. This article is based on a search of the relevant literature that examines the hypnotic methods and results of that era. One finding is that available clinical data support the claim that clinical hypnotists practicing before 1900 made considerable use of symptom removal. The data also indicate that they achieved substantial success without any detrimental effects. This information is considered relevant for the scientifically based practice of hypnosis.

[0613]
Shaping the experience of behavior: construct of an electronic teaching module in nonpharmacologic analgesia and anxiolysis
Acad Radiol 2002 Oct;9(10):1185-93 (ISSN: 1076-6332)
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RATIONALE AND OBJECTIVES: The authors' purpose was to develop an electronic teaching module in nonpharmacologic analgesia and anxiolysis for use in the radiology department. MATERIALS AND METHODS: The teaching document was derived from previous training courses validated by patient outcome. Skills in structured empathic attention and guidance of self-hypnotic relaxation were tested in a previous prospective, randomized study with 241 patients and shown to affect positively patients' perception of pain and anxiety. Patients undergoing hypnosis had the greatest relief and most hemodynamic stability. The skills applied also saved, on average, 17 minutes of procedure time and approximately $340 in sedation cost per case. With these validated behavioral skills, an electronic teaching module was constructed. RESULTS: The mode of teaching reflected the content of teaching, which was achieved through a multimedia format containing text, audio, video, pictures, and animation. Advanced navigation tools put the students in control of their learning experience. Inclusion of experiential components, congruity of language with Ericksonian syntax, and provision of an electronic journal catered to the development of greater biobehavioral awareness. CONCLUSION: Electronic teaching modules for biobehavioral skill training are feasible and promise to reduce the time need for life interactions with instructors.

[0614]
Visceral sensation and emotion: a study using hypnosis
Gut 2002 Nov;51(5):701-4 (ISSN: 0017-5749)
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Background and objectives: We have previously shown that hypnosis can be used to study the effect of different emotions on the motility of the gastrointestinal tract. These studies demonstrated that both anger and excitement increased colonic motility while happiness led to a reduction. The purpose of this study was to investigate the effect of hypnotically induced emotion on the visceral sensitivity of the gut. METHODS: Sensory responses to balloon distension of the rectum and compliance were assessed in 20 patients with irritable bowel syndrome (IBS) (aged 17-64 years; 17 female) diagnosed by the Rome I criteria. Patients were studied on four separate occasions in random order either awake (control) or in hypnosis, during which anger, happiness, or relaxation (neural emotion) were induced. RESULTS: Hypnotic relaxation increased the distension volume required to induce discomfort (p<0.05) while anger reduced this threshold compared with relaxation (p<0.05), happiness (p<0.01), and awake conditions (p<0.001). Happiness did not further alter sensitivity from that observed during relaxation. There were no associated changes in rectal compliance or wall tension. CONCLUSIONS: Further to our previous observations on motility, this study shows that emotion can also affect an IBS patient's perception of rectal distension and demonstrates the critical role of the mind in modulating gastrointestinal physiology. These results emphasise how awareness of the emotional state of the patient is important when either measuring visceral sensitivity or treating IBS.

[0615]
Mesmer
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This introductory article provides a brief outline of Mesmer's life and the main influences on his work. His theory, that a gravitational influence from sun and moon affected not only the tides but periodicity in physiological functioning, led him to investigate the use of magnets, which also operated at a distance and which might channel this universal fluid and lead to modification in a patient's condition. It was but a short step to discover that magnets were unnecessary because the fluid appeared to be transmissible from one person to another and to lead to a variety of therapeutic effects. His conviction in the correctness of his theory, coupled with a charismatic personality, led him to encounter enthusiasm and opposition over the course of the 10 years that elapsed between his first treatment of a patient by magnetic therapy and his denouement at the hands of the Franklin Commission.

Can devices facilitate a hypnotic induction?
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Historically, many devices were believed to have the ability to facilitate a hypnotic induction, but in time such devices proved to have no inherent facilitating properties other than a general placebo effect. To test the efficacy of a device called a "plasma ball" that may facilitate an induction by combining two sensory modalities simultaneously (visual and auditory), 42 college students who scored 6 and below on the Harvard Group Scale of Hypnotic Susceptibility, Form A (HGSHS:A) and completed a scale rating the realness of items, were selected for a second session. Participants were matched on hypnotizability scores and randomly assigned to experimental or standard eye fixation induction control condition. Although hypnotizability scores and realness ratings increased significantly from the initial session, use of the device did not produce higher hypnotizability scores or realness ratings in the experimental compared with the control condition. Results indicate that there is still no evidence that one fixation device works better as a target than any other.

The overactive gag reflex is one of the etiologic categories of psychosomatic symptoms, which most often arise from environmental stressors. If organic disturbances, anatomic anomalies, or biomechanical inadequacies of existing prostheses are not key causes, the services of trained specialists are needed to help with behavioural management of the problem. Hypnosis can provide the clinician with a set of techniques, which may be used to augment or facilitate a particular course of treatment. In the case report, the patient's history and her overactive gag reflex suggested to use hypnosis therapy. The responsibility of a dentist can be found in his possible recognition of eventually necessary psychotherapy when consulting a patient.

OBJECTIVE: Despite the fact that the assumption of a relationship between conversion disorder and childhood traumatization has a long history, there is little empirical evidence to support this premise. The present study examined this relation and investigated whether hypnotic susceptibility mediates the relation between trauma and conversion symptoms, as suggested by Janet's autohypnosis theory of conversion disorder. METHOD: A total of 54 patients with conversion disorder and 50 matched comparison patients with an affective disorder were administered the Structured Trauma Interview as well as measures of cognitive (Dissociative Experiences Scale) and somatoform (20-item Somatoform Dissociation Questionnaire) dissociative experiences. RESULTS: Patients with conversion disorder reported a higher incidence of physical/sexual abuse, a larger number of different types of physical abuse, sexual abuse of longer duration, and incestuous experiences more often than comparison patients. In addition, within the group of patients with conversion disorder, parental dysfunction by the mother -not the father- was associated with higher scores on the Dissociative Experiences Scale and the Somatoform Dissociation Questionnaire. Physical abuse was associated with a larger number of conversion symptoms (Structured Clinical Interview for DSM-IV Axis I Disorders). Hypnotic susceptibility proved to partially mediate the relation between physical abuse and conversion symptoms. CONCLUSIONS: The present results provide evidence of a relationship between childhood traumatization and conversion disorder.

Pain perception, hypnosis and 40 Hz oscillations
A number of brain regions are associated with the subjective experience of pain. This study adds to our understanding of the neural mechanisms involved in pain by considering the relation between cortical oscillations in response to pain, with and without hypnosis and hypnotic analgesia, and the subjective experience of pain. Thirty-three subjects' neural responses (EEG) were measured during the 40-540 ms period following phasic electrical stimulations to the right hand, under control and hypnosis conditions. Resultant FFT amplitudes for frequencies ranging from 8 to 100 Hz were computed. These were grouped into 7 scalp topographies, and for each frequency, relations between these topographies and pain ratings, performance and stimulus intensity measures were assessed. Gamma activity (32-100 Hz) over prefrontal scalp sites predicted subject pain ratings in the control condition ($r=0.50$, $P=0.004$), and no other frequency/topography combination did. This relation was present in both high and low hypnotizable subjects and was independent of performance and stimulus intensity measures. This relation was unchanged by hypnosis in the low hypnotizable subjects but was not present in the highs during hypnosis, suggesting that hypnosis interferes with this pain/gamma relation. This study provides evidence for the role of gamma oscillations in the subjective experience of pain. Further, it is in keeping with the view that hypnosis involves the dissociation of prefrontal cortex from other neural functions.

[0620] Self-hypnosis: alternative anesthesia for childbirth
MCN Am J Matern Child Nurs 2002 Nov-Dec;27(6):335-40; quiz 341 (ISSN: 0361-929X)
Ketterhagen D; Vande Vusse L; Berner MA
Women's Health Center, Waukesha Memorial Hospital, Waukesha, WI 53188, USA

The purpose of this article is to inform nurses about the use of self-hypnosis in childbirth. Hypnosis is a focused form of concentration. Self-hypnosis is one form of hypnosis in which a certified practitioner or therapist teaches an individual to induce his or her own state of altered consciousness. When used for childbirth pain, the primary aim of self-hypnosis is to help the woman maintain control by managing anxiety and discomfort through inducing a focused state of relaxation. Before the widespread use of pharmaceuticals for pain, hypnosis was one of the few pain relief methods available for labor. However, as new technologies for pain relief emerged, hypnosis received less attention. Most nurses have little experience with hypnosis, and there is limited information available in the literature. However, because nurses are at laboring women's bedside, it is important that nurses learn about self-hypnosis to be able to inform pregnant women fully about all pain control options and to maximize the benefits for the woman choosing hypnosis.

[0621] Hypnosis treatment for severe irritable bowel syndrome: investigation of mechanism and effects on symptoms
Palsson OS; Turner MJ; Johnson DA; Burnett CK; Whitehead WE
University of North Carolina at Chapel Hill, Chapel Hill, North Carolina 27599-7080 USA

Hypnosis improves irritable bowel syndrome (IBS), but the mechanism is unknown. Possible physiological and psychological mechanisms were investigated in two studies. Patients with severe irritable bowel syndrome received seven biweekly hypnosis sessions and used hypnosis audiotapes at home. Rectal pain thresholds and smooth muscle tone were measured with a barostat before and after treatment in 18 patients (study I), and treatment changes in heart rate, blood pressure, skin conductance, finger temperature, and forehead electromyographic activity were assessed in 24 patients (study II). Somatization, anxiety, and depression were also measured. All central IBS symptoms improved substantially from treatment in both studies. Rectal pain thresholds, rectal smooth muscle tone, and autonomic functioning (except sweat gland reactivity) were unaffected by hypnosis treatment. However, somatization and psychological distress showed large decreases. In conclusion, hypnosis improves IBS symptoms through reductions in psychological distress and somatization. Improvements were unrelated to changes in the physiological parameters measured.

[0622] The role of alternative medicine in treating postnatal depression
Complement Ther Nurs Midwifery 2002 Nov;8(4):197-203 (ISSN: 1353-6117)
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Postnatal depression is a serious and debilitating condition. Due to the perceived stigma of mental illness, the incidence of it is underreported and many mothers refuse psychiatric help either assuming postnatal depression to be normal or because of the potential consequences of having a psychiatric history. Community practitioners who are in contact with new mothers may welcome additional interventions which can enhance the supportive care they give to these women. This article discusses the evidence for a number of these interventions which mothers may find more acceptable than orthodox treatment. The aim of this article is to highlight the possible role of a number of complementary and alternative medicines as adjuncts or alternative treatments for postnatal depression. The interventions discussed in this article include Ayurvedic medicine, herbalism, homeopathy, aromatherapy, massage, hypnosis and traditional Chinese medicine (TCM). With the exception of TCM and Ayurvedic medicine, these interventions have been supported by the House of
Lord's Select Committee on Science and Technology (2000) as having an evidence base. Ayurvedic medicine and TCM have been included in this article however, because a number of clients may be using them as their main system of health care—thereby validating the need for information regarding their efficacy. This article is not exhaustive, nor a licence to practice, but is intended as a resource for practitioners with a sound understanding of postnatal depression and conventional treatments whose clients may reject these approaches and be looking for alternative interventions. The final choice of treatment should be the result of discussion between the health visitor and the client and will depend on considerations such as availability, cost and acceptability of the intervention—this article does not, therefore, suggest a 'best option' approach. In addition, it does not address the professional and legal responsibilities of practitioners since these have been well reviewed by Darley (1995), Mantle (1997), Knape (1998) and Rankin-Box (2001).

[0623] Hypnotic suggestion and the modulation of stroop interference
Arch Gen Psychiatry 2002 Dec;59(12):1155-61 (ISSN: 0003-990X)
Raz A; Shapiro T; Fan J; Posner MI
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BACKGROUND: Hypnosis has been used clinically for hundreds of years and is primarily a phenomenon involving attentive receptive concentration. Cognitive science has not fully exploited hypnosis and hypnotic suggestion as experimental tools. This study was designed to determine whether a hypnotic suggestion to hinder lexical processing could modulate the Stroop effect. METHODS: Behavioral Stroop data were collected from 16 highly suggestible and 16 less suggestible subjects; both naturally vigilant and under posthypnotic suggestion. Subjects were urged to only attend to the ink color and to impede reading the stimuli under posthypnotic suggestion. RESULTS: Whereas posthypnotic suggestion eliminated Stroop interference for highly suggestible subjects, less suggestible control subjects showed no significant reduction in the interference effect. CONCLUSIONS: This outcome challenges the dominant view that word recognition is obligatory for proficient readers, and may provide insight into top-down influences of suggestion on cognition.

[0624] Relaxation therapies in the treatment of psoriasis and possible pathophysiologic mechanisms
Winchell SA, Watts RA
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Psychologic factors play a role in many dermatologic disorders, giving rise to the possible use of psychotherapeutic modalities in treatment. Regarding psoriasis, emotional factors have a strong correlation with onset and flare-ups. The psychophysiologic mechanisms involved are not known; however, stress and its effect on the autonomic nervous system and the immune system may play a significant role in the onset and course of psoriasis. Relaxation and mere suggestion also affect the autonomic nervous system and the immune system and therefore may affect the course of the skin disorder. A few case studies have documented successful treatment of psoriasis with hypnosis and biofeedback. Further study of this process is needed, and the role of stress in dermatologic diseases must always be given consideration.

[0625] [Psychosomatic dermatology]
Dermatol Monatsschr 1990;176(12):725-33
Haustein UF, Seikowski K
Klinik und Poliklinik fur Hautkrankheiten, Bereichs Medizin, Universitat Leipzig

An appreciative cooperation among dermatology, clinical psychology and psychiatry is necessary and useful. By selected facts interactions between central and autonomous nervous system on one side and the immune system on the other side were described. As far as the neurocutaneous interrelations are concerned the cutaneous stimulation appears to be an important factor for the physical and physiologic development. In addition, the skin communicates to the environment and other people. Therefore, it plays a role in the social integration. Psychiatric diseases can affect the skin (e.g. delusions of parasitosis in schizophrenia). On the other hand primary skin diseases such as psoriasis, atopic dermatitis, acne vulgaris, chronic idiopathic urticaria and alopecia areata may induce psychologic features. The characteristics of the personalities of dermatological patients are discussed. The psychodiagnoses (personal interview, questionnaires) is followed by psychotherapeutic procedures such as personal consultations, treatment in groups, hypnotis and autogenous training. Our experiences in the psychodiagnoses and treatment are briefly reported. Finally, psychotropic drugs-antipsychotic, anti-depressant, antianxiety, and hypnotic agents - may be useful as an adjunct in the management of dermatologic disorders, if applied under precautions indications.

[0626] Stress and psoriasis
Kantor SD
Psoriasis Research Institute, Palo Alto, California 94301

Since most clinicians and researchers agree that stress affects the course of psoriasis, consideration should be given to advocating adjunctive therapies aimed at reducing psychophysiological stress. Biofeedback training, psychotherapy, and...
hypnosis are examples of adjuncts to traditional medical treatment that can reduce stress levels and have been shown to have a positive effect on the course of psoriasis.

[0627]
Effects of psychologic intervention on psoriasis: a preliminary report
Zachariae R, Oster H, Bjerring P, Kragballe K
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BACKGROUND: Case reports have indicated that psychologic treatments may have a beneficial effect on psoriasis activity. OBJECTIVE: Our purpose was to further investigate the hypothesis that psychologic intervention has a beneficial effect on psoriasis activity in a blinded, controlled manner. METHODS: Fifty-one patients with psoriasis vulgaris were randomly assigned to a treatment or a control group. Patients in the treatment group participated in seven individual psychotherapy sessions in 12 weeks. Intervention techniques included stress management, guided imagery, and relaxation. The Psoriasis Area Severity Index (PASI), Total Sign Score (TSS), and Laser Doppler Skin Blood Flow (LDBF) of a selected reference plaque was measured in a blinded fashion at baseline (week 0), week 4, week 8, and after treatment (week 12). RESULTS: Slight, but significant, changes in TSS and LDBF were found in the treatment group but not in the control group. When analyses were performed for both groups separately, the treatment group displayed significant reductions for all three psoriasis activity measures, whereas no changes were seen in the control group.

CONCLUSION: Our preliminary results suggest that psychologic intervention may have a moderate beneficial effect on psoriasis activity.

[0628]
A pilot study of hypnosis in the treatment of patients with psoriasis
Psychother Psychosom 1999;68(4):221-5
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BACKGROUND: The use of psychological therapies for patients with psoriasis has been proposed based on observations that the severity of their disease may correlate with emotional stress. The aim of this pilot study was to evaluate the effect of hypnosis as a treatment modality for patients with psoriasis. METHODS: We performed a 3-month randomized, single-blind, controlled trial of the use of hypnosis in adults with stable, chronic, plaque-type psoriasis. Highly or moderately hypnotizable subjects were randomized to receive either hypnosis with active suggestions of improvement (5 patients) or neutral hypnosis with no mention of their disease process (6 patients). After this period, the study was unblinded, and all the patients were treated for an additional 3 months with hypnosis with active suggestions of improvement. RESULTS: Highly hypnotizable subjects showed significantly greater improvement than did moderately hypnotizable subjects, independent of treatment group assignment (active suggestion or neutral hypnosis). CONCLUSION: Although this study included a very limited number of patients, the results suggest that hypnosis may be a useful therapeutic modality for highly hypnotizable subjects with psoriasis, and merits further testing in a larger patient population.

[0629]
Hypnosis in dermatology
Arch Dermatol 2000 Mar;136(3):393-9
Shenefelt PD
Department of Internal Medicine, College of Medicine, University of South Florida, Tampa 33612, USA.
pshenefe@hsc.usf.edu

BACKGROUND: Hypnosis is an alternative or complementary therapy that has been used since ancient times to treat medical and dermatologic problems. OBJECTIVE: To describe the various uses for hypnosis as an alternative or complementary therapy in dermatologic practice. METHODS: A MEDLINE search was conducted from January 1966 through December 1998 on key words related to hypnosis and skin disorders. RESULTS: A wide spectrum of dermatologic disorders may be improved or cured using hypnosis as an alternative or complementary therapy, including acne excoriee, alopecia areata, atopic dermatitis, congenital ichthyosiform erythroderma, dyshidrotic dermatitis, erythromelalgia, furuncles, glossodynia, herpes simplex, hyperhidrosis, ichthyosis vulgaris, lichen planus, neurodermatitis, nummular dermatitis, postherpetic neuralgia, pruritus, psoriasis, rosacea, trichotillomania, urticaria, verruca vulgaris, and vitiligo. CONCLUSION: Appropriately trained clinicians may successfully use hypnosis in selected patients as alternative or complementary therapy for many dermatologic disorders.

[0630]
Effects of relaxation therapy and hypnotizability in chronic urticaria
Arch Dermatol 1987 Jul;123(7):913-6
Shertzer CL, Lookingbill DP

The therapeutic results of hypnosis with relaxation therapy were evaluated in 15 patients with chronic urticaria of 7.8 years' average duration. Compared with baseline and control session values, the hypnosis session provided relief of pruritus as measured by three self-report parameters. There was no change in the number of hives. All subjects were given a standard test for hypnotizability. Assuming that the results were not biased by their preceding relaxation sessions,
we determined that six subjects were hypnotizable and nine were nonhypnotizable. Subjects in both groups improved symptomatically, but hypnotizable subjects had fewer hives and became more symptomatic during the control (testing and history taking) session. Hypnotizable subjects also more frequently related stress as a causative factor. At a follow-up examination five to 14 months after the completion of the experimental sessions, six patients were free of hives and an additional seven reported improvement.

[0631]
A preliminary study of psychological therapy in the management of atopic eczema
Br J Med Psychol 1989 Sep;62 ( Pt 3):241-8
Horne DJ, White AE, Varigos GA
Department of Psychiatry, University of Melbourne, Parkville, Victoria, Australia

This paper presents a pilot study of the treatment of atopic eczema using a cognitive-behavioural approach involving self-monitoring of eczema severity, recording both internal (cognitive) and environmental antecedent trigger stimuli to flare-ups, and relaxation using imagery and habit reversal. Three patients are presented suffering from chronic atopic eczema. Although each differed in personality, complexity and severity of atopic eczema, all three showed a post-treatment reduction in symptom severity, an increase in their ability to control the disorder and a decrease in their reliance on medication. It is argued that although the cognitive-behavioural approach used did provide a useful conceptual framework for implementing the treatments described, certain aspects of these cases could also usefully be understood in more psychodynamic terms. A controlled trial is necessary to evaluate the relative importance of the different components of treatment reported in this pilot study.

[0632]
Modulation of type I immediate and type IV delayed immunoreactivity using direct suggestion and guided imagery during hypnosis
Allergy 1989 Nov;44(8):537-42
Zachariae R, Bjerring P, Arendt-Nielsen L
Institute of Psychology, University of Aarhus, Risskov, Denmark

Cutaneous reactivity against histamine skin prick test (Type I) and purified tuberculin protein derivative (Mantoux reaction, Type IV) was studied in eight volunteers under hypnosis. Types I and IV immunoreactivity were modulated by direct suggestion (Type I) and guided imagery (Type IV). The volunteers were highly susceptible subjects, selected by means of the Harvard Group Scale of Hypnotic Susceptibility, Form A. When the volunteers underwent hypnotic suggestion to decrease the cutaneous reaction to histamine prick test, a significant (P less than 0.02) reduction of the flare reaction (area of erythema) was observed compared with control histamine skin prick tests. The wheal reaction did not respond to hypnotic suggestion. Neither wheal nor flare reaction could be increased in size by hypnotic suggestion compared with control histamine skin prick tests. A hypnotic suggestion of increasing the Type IV reaction on one arm and decreasing the reaction on the other revealed a significant difference in both erythema size (P less than 0.02) and palpable induration (P less than 0.01). In two cases the reactions were monitored by laser doppler blood flowmetry and skin thickness measurement by ultrasound. The difference between the suggested increased and decreased reaction was 19% for the laser doppler bloodflow (in favor of the augmented side), and 44% for the dermal infiltrate thickness. This study objectively supports the numerous uncontrolled case reports of modulation of immunoreactivity in allergic diseases involving both Type I and Type IV skin reactions following hypnotic suggestions.

[0633]
The effect of hypnotically induced analgesia on flare reaction of the cutaneous histamine prick test
Arch Dermatol Res 1990;282(8):539-43
Zachariae R, Bjerring P
Institute of Psychology, University of Aarhus, Risskov, Denmark

The effect of psychological pain reduction on the cutaneous inflammatory process was investigated by studying the effect of hypnotically induced analgesia on the flare reaction of cutaneous histamine prick tests. Ten highly hypnotically susceptible volunteers had their cutaneous reactivity against histamine prick tests on both arms measured before hypnosis. Their pain-related brain potentials were measured on the basis of eight argon laser stimulations. These measurements were repeated in the hypnotic condition, where subjects were given repeated suggestions of analgesia in one arm. Final measurements were performed in the post-hypnotic condition. Subjectively felt pain was measured on a visual analogue scale. Results showed a mean reduction in subjectively felt pain of 71.7% compared to the baseline condition. A significant (P less than 0.01) mean reduction of the evoked potentials was found in the hypnotic analgesic condition compared to both the pre-hypnotic (49.9%) and the post-hypnotic condition (36.9%). A significant difference was measured in the histamine flare area between the pre-hypnotic and the hypnotic analgesic condition (P = 0.01-0.02) and between the hypnotic analgesic and the post-hypnotic condition when compared with the control arm. The mean ratio of flare area between the analgesic arm and the control arm was 1.04 (SD, 0.16) in the pre-hypnotic condition, 0.78 (SD, 0.22) in the hypnotic analgesic condition, and 1.37 (SD, 0.49) in the post-hypnotic condition. The results support the hypothesis that higher cortical processes can be involved in the interaction of inflammatory and pain processes.

[0634]
Gradual increase in cutaneous threshold induced by repeated hypnosis of healthy individuals and patients with atopic eczema
Gradual increase in cutaneous pain threshold was found in healthy subjects and patients with atopic eczema during repeated hypnotic sessions with specific suggestions. This increase was less in the former than in the latter group. Repeated threshold measurements did not influence the threshold. The analgesic effect outlasted the hypnotic sessions by several months. It could be, however, suddenly reduced by appropriate hypnotic suggestion.

[0635]
Increase in cutaneous temperature induced by hypnotic suggestion of pain
Percept Mot Skills 1992 Jun;74(3 Pt 1):737-8
Hajek P, Jakoubek B, Kyhos K, Radil T
Czechoslovak Academy of Sciences, Institute of Physiology, Prague

Eight patients with atopic eczema and six healthy subjects were given hypnotic suggestion to feel pain in the upper part of the back and in one case on the palm. An average local increase in skin temperature of 0.6 degrees C (detected by thermovision) occurred under this condition. For some patients cutaneous pain threshold was increased before the experiment by means of repetitive hypnotic suggestion of analgesia. These subjects reported feeling no pain subjectively, but the local change in skin temperature was equal in both cases. The results suggest a central mechanism induced by measuring changes in pain threshold in the skin, which changes are independent of local changes in blood flow.

[0636]
Allergy: conventional and alternative concepts. Summary of a report of the Royal College of Physicians Committee on Clinical Immunology and Allergy
[Royal College of Physicians Committee]

Allergy is an exaggerated response of the immune system to external substances. It plays a role in a wide range of diseases. In some, such as summer hayfever, the symptoms are entirely due to allergy. In other conditions, particularly asthma, eczema and urticaria, allergy plays a part in some patients but not all. In these situations, allergy may either have a major role or provide just one of many triggers. In an individual patient's illness, the importance of allergy may change with time. The most common allergens (substances causing allergy) are grass and tree pollens, the house dust mite, products from pets and other animals, agents encountered in industry, wasp and bee venom, drugs, and certain foods. Food allergy presents a particularly difficult problem. Some individuals who react to food suffer from true food allergy but in others there is no evidence of an alteration in the immune system. Here the term 'food intolerance' is preferable. Conventional doctors treat allergy by allergen avoidance--where this is possible--and drugs that relieve symptoms. In a few selected cases, in which other methods have failed, immunotherapy (desensitisation or hyposensitisation) is recommended. Patients who consult practitioners of alternative allergy often do so because they are dissatisfied with the conventional approach to diagnosis and treatment, and sometimes because they have conditions which conventional doctors do not accept as having an allergic basis. There is a very wide range of alternative approaches to allergy, including the methods used by clinical ecologists, acupuncturists and homeopaths. Hypnosis may have a small role to play in asthma, and similar claims for acupuncture need to be evaluated.(ABSTRACT TRUNCATED AT 250 WORDS).

[0637]
Liver biopsy under hypnosis
Adams PC, Stenn PG
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Two patients underwent outpatient percutaneous liver biopsy under hypnosis without complications. One patient had severe anxiety about the procedure because of a previous adverse experience with liver biopsy and the other had a history of severe allergy to local anesthesia. Both patients had undergone a session of hypnosis at least once prior to the biopsy. One received no local anesthetic and the other received 1% lidocaine as a local anesthetic. Both patients were completely cooperative during the procedure with the required respiratory maneuvers. Both patients stated that they were aware of the procedure under hypnosis but described no pain and would be most willing to have the procedure done under hypnosis in the future. Hypnosis can be a useful method of preparing carefully selected patients for percutaneous liver biopsy.

[0638]
Allergy. Conventional and alternative concepts. A report of the Royal College of Physicians Committee on Clinical Immunology and Allergy
Kay AB, Lessof MH

Allergy is an exaggerated response of the immune system to external substances. It plays a role in a wide range of diseases. In some, such as summer hayfever, the symptoms are due entirely to allergy. In other conditions, particularly asthma, eczema and urticaria, allergy plays a part in some patients but not all. In these situations, allergy may have either
a major role or provide just one of many triggers. In an individual patient's illness, the importance of allergy may change with time. The most common allergens (substances causing allergy) are grass and tree pollens, the house dust mite, products from pets and other animals, agents encountered in industry, wasp and bee venom, drugs, and certain foods. Food allergy presents a particularly difficult problem. Some individuals who react to food suffer from food allergy in its strict sense but in others there is no evidence of an alteration in the immune system. Here the term 'food intolerance' is preferable. Conventional doctors treat allergy by allergen avoidance—where this is possible—and drugs that relieve symptoms. In a few selected cases, in which other methods have failed, immunotherapy (desensitisation or hyposensitisation) is recommended. Although patients who consult practitioners of alternative allergy may do so by preference, it is often also because they are dissatisfied with the conventional approach to diagnosis and treatment, or because they have conditions which conventional doctors do not accept as having an allergic basis. There is a very wide range of alternative approaches to allergy, including the methods used by clinical ecologists and other treatments such as acupuncture and homoeopathy. Hypnosis may have a small role to play in helping the asthmatic and similar effects have been suggested for acupuncture. Furthermore, it is likely that there are still many active ingredients in medicinal plants used by herbalists but these need to be clearly identified and purified before their usefulness can be evaluated properly. Apart from these situations, we have yet to be convinced by substantial evidence that any of the other alternative methods of diagnosing or treating allergic disease are of proven value. There have, however, been many false and misleading claims and serious harm may be caused by misdiagnosis or delays in appropriate treatment. The public should be warned against costly methods of diagnosis and treatment which have not been validated. (ABSTRACT TRUNCATED AT 400 WORDS).

[0639] When pharmacologic anesthesia is precluded: the value of hypnosis as a sole anesthetic agent in dentistry
Kleinhaus M, Eli I
Spec Care Dentist 1993 Jan-Feb;13(1):15-8
Section of Behavioral Sciences, The Maurice and Gabriela Goldschleger School of Dental Medicine, Tel Aviv University, Israel

Occasionally, a dental patient presents his/her dentist with a history of hypersensitivity to local anesthetic agents. The symptoms may include immediate reactions to the injection procedure (dizziness, shortness of breath, tachycardia, etc), or delayed reactions to the anesthetic (swelling, urticaria, etc). Although the true incidence of local anesthetic allergy is low, such a history often involves the patient's anxiety regarding the use of the drug in question, and the dentist's apprehension to treat the "problematic" patient. In such cases, hypnosis can play a major role in controlling pain and the associated distress. In the present article, the method concerning the implementation of hypnosis to induce local anesthesia is described and illustrated through case demonstrations.

[0640] Increase and decrease of delayed cutaneous reactions obtained by hypnotic suggestions during sensitization. Studies on dinitrochlorobenzene and diphenylcyclopropenone
Zachariae R, Bjerring P
Allergy 1993 Jan;48(1):6-11
Institute of Psychology, University of Aarhus, Denmark

Cutaneous reactivity to challenge with dinitrochlorobenzene (DNCB) and diphenylcyclopropenone (DCP) was studied in 16 volunteers following hypnotic suggestions to increase and decrease response during sensitization. The immunoreactivity to DNCB and DCP was modulated by direct suggestions and guided imagery under hypnosis. The volunteers were highly susceptible subjects selected by means of the Harvard Group Scale of Hypnotic Susceptibility, Form A. Measurement of skin reactions to the challenge 1 month after sensitization was performed double blindly. Results showed a significant (P &lt; 0.01) difference in visually scored reactions to DCP and DNCB between the group instructed to increase reaction to DCP and decrease reaction to DNCB and the group given the opposite instructions. A non-significant difference (P = 0.055) in skin thickness measured by ultrasound was found between the two groups. The study supports previous reports of experimental modulation of immunoreactivity and indicates that the specific immunological processes involved in the development of allergic reactions may be susceptible to psychological factors.

[0641] Hypnosis and the allergic response
Wyler-Harper J, Bircher AJ, Langewitz W, Kiss A
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In recent years our knowledge of the immune system and the pathogenesis of immune disorders has increased. There has been much research on the complex connections between the psyche, the central nervous system and the immune system and the effect of mood on disease processes. This paper reviews the evidence on the effects of hypnosis on the allergic skin test reaction, on allergies, particularly respiratory allergies and hayfever, and on bronchial hyperreactivity and asthma. Hypnosis, which is generally regarded as an altered state of consciousness associated with concentration, relaxation and imagination, and amongst other characteristics an enhanced responsiveness to suggestion, has long been thought to be effective in the amelioration of various bodily disorders. It has seemed that the state of hypnosis is capable of a bridging or mediating function in the supposed dualism between mind and body. There has been great variation in the experimental and clinical procedures such as type of hypnotic intervention employed, the training of subjects and the
timing of the intervention. Also, variability in the type of allergen used and its mode of application is evident. But despite these limitations, many of the studies have shown a link between the use of hypnosis and a changed response to an allergic stimulus or to a lessened bronchial hyperreactivity. There is as yet no clear explanation for the effectiveness of hypnosis, but there is some evidence for an influence on the neurovascular component of the allergic response.

[0642]
The variability of type I hypersensitivity reactions: the importance of mood
Laidlaw TM, Booth RJ, Large RG
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Immediate (Type I) hypersensitivity skin reactions to allergens or antigens have been used as immune measures that may be subject to intentional modulation. In preliminary experiments using hypnosis we encountered unacceptably large, uncontrollable variability. A method was subsequently devised in which serial, five-fold dilutions of allergen or histamine were administered to the subject's forearm and reactions were recorded photographically on slide film. Areas were determined by computer-assisted image analysis. Seven healthy volunteers were tested for eight sessions (testing included mood scales, blood pressure, pulse and skin temperature). Mean wheal size and titration gradient data from allergen reactions correlated strongly with the psychological factor of liveliness but not stress, although no manipulation of mood was involved. A stepwise regression analysis accounted for 61% of the variance of the allergen mean wheal data, and 31% was from the liveliness factor alone. Thus, the more lively the subject felt, the smaller was the allergic response.

[0643]
Effect of hypnotic suggestion on the delayed-type hypersensitivity response
JAMA 1994 Jul 6;272(1):47-52
Locke SE, Ransil BJ, Zachariae R, Molay F, Tollins K, Covino NA, Danforth D
Department of Psychiatry, Beth Israel Hospital, Boston, MA 02215

OBJECTIVE--To determine whether individuals selected for good general health, high hypnotizability, and the ability to alter skin temperature under hypnotic suggestion can influence the delayed-type hypersensitivity (DTH) response to varicella-zoster (VZ) antigen under hypnotic suggestion. DESIGN--A blinded clinical trial using a repeated measures design with subjects serving as their own controls. Subjects were randomly assigned to undergo a predetermined sequence of four different experimental conditions, occurring at weekly intervals, with each condition including VZ skin testing: (1) hypnotic suggestions to increase the DTH response to VZ antigen; (2) hypnotic suggestions to suppress the DTH response; (3) hypnotic suggestions for relaxation only; and (4) skin testing without hypnosis. SETTING--A National Institutes of Health-supported clinical research center in a teaching hospital. SUBJECTS--A stratified sample of 24 ambulatory, healthy, highly hypnotizable, volunteer college students selected for their above-average ability to alter skin temperature after hypnotic suggestions and their positive baseline responses to VZ antigen. There were 11 males and 13 females with a mean +/- SD age of 22 +/- 6 years. The mean +/- SD hypnotizability score (Harvard Group Scale of Hypnotic Susceptibility) was 11 +/- 1. INTERVENTIONS--Intradermal skin testing with VZ antigen (Mantoux method) and hypnotic suggestion. MAIN OUTCOME MEASURES--Areas of induration of the DTH response measured at 24 and 48 hours after injection of antigen. RESULTS--The area of the DTH response was not affected by the experimental interventions. The area of erythema was likewise unaffected. CONCLUSIONS--Our subjects were unable to alter their DTH responses using hypnotic suggestion.

[0644]
Immediate-type hypersensitivity reactions and hypnosis: problems in methodology
Laidlaw TM, Richardson DH, Booth RJ, Large RG
Department of Psychiatry and Behavioural Science, University of Auckland, New Zealand

Hypnosis has been used to ameliorate skin test reactivity in studies dating back to the 1930s. This study using modern methodology and statistical analyses sets out to test the hypothesis that it was possible to decrease reactions to histamine by hypnotic suggestion. Five subjects, all asthmatic and untrained in hypnosis, were given three hypnotic sessions where they were asked to control their reactions to histamine administered by the Pepys technique to forearm skin. These sessions were to be compared with three non-hypnotic sessions. The flare sizes but not wheal sizes were found to be significantly reduced after the hypnosis sessions, compared to sessions without hypnosis. Skin temperature was correlated with the size of reactions. The day upon which the sessions took place contributed significant amounts of the remaining unexplained variance, giving rise to questions about what could cause these day to day changes.

[0645]
Hypnotherapy as a treatment for atopic dermatitis in adults and children
Br J Dermatol 1995 May;132(5):778-83
Stewart AC, Thomas SE
Department of Dermatology, Barnsley District General Hospital, U.K.

Eighteen adults with extensive atopic dermatitis, resistant to conventional treatment, were treated by hypnotherapy, with statistically significant benefit (P &lt; 0.01) measured both subjectively and objectively, which was maintained at up to 2 years where results were available. Twenty children with severe, resistant atopic dermatitis were treated by hypnosis. All
but one showed immediate improvement, which was maintained at the following two clinic appointments. In 12 children, replies to a questionnaire at up to 18 months after treatment, showed that 10 had maintained improvement in itching and scratching, nine in sleep disturbance, and seven maintained improvement in itching and scratching, nine in sleep disturbance, and seven maintained improvement in mood.

[0646]
Subjective assessment of allergy relief following group hypnosis and self-hypnosis: a preliminary study
Madrid A, Rostel G, Pennington D, Murphy D
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Self-hypnosis was taught to 34 self-identified allergy patients who attended two training classes. They practiced on their own and were questioned two months later. Seventy-six percent of the subjects reported they felt an improvement in their symptoms; 86% of those who were medicated decreased their medicines. Practice was clearly related to reported improvement. "Feeling hypnnotized" was not related to improvement.

[0647]
Reduction in skin reactions to histamine after a hypnotic procedure
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This study sought to test whether a cognitive-hypnotic intervention could be used to decrease skin reactivity to histamine and whether hypnotizability, physiological variables, attitudes, and mood would influence the size of the skin weals. Thirty eight subjects undertook three individual laboratory sessions; a pretest to determine sensitivity to histamine, a control session, and an intervention session during which the subject experienced a cognitive-hypnotic procedure involving imagination and visualization. Compared with the control session, most subjects (32 of 38) decreased the size of their weals measured during the intervention session, and the differences between the weal sizes produced in the two sessions were highly significant (N = 38; t = 4.90; p &lt; .0001). Mood and physiological variables but not hypnotizability scores proved to be effective in explaining the skin test variance and in predicting weal size change. Feelings of irritability and tension and higher blood pressure readings were associated with less change in weal size (i.e., a continuation of reactivity similar to that found in the control session without the cognitive-hypnotic intervention), and peacefulness and a lower blood pressure were associated with less skin reactivity during the intervention. This study has shown highly significant results in reducing skin sensitivity to histamine using a cognitive-hypnotic technique, which indicates some promise for extending this work into the clinical area.

[0648]
Understanding allergic reactions to local anesthetics
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OBJECTIVE: To review the pharmacology and mechanisms by which local anesthetics cause allergic reactions. Recommendations concerning appropriate use of local anesthetics and alternative therapies in patients with documented local anesthetic allergies are given. DATA SOURCE: A MEDLINE search of English-language literature identified pertinent clinical studies, case reports, and reviews. The periods of review were Med1, 1990-present, and Med2, 1985-1989, using the MeSH terms drug hypersensitivity and anesthetics. References from the selected studies, case reports, and reviews were reviewed. STUDY SELECTION: Controlled and uncontrolled prospective studies and case reports pertaining to local anaesthetic allergies were reviewed. The selection focused on information pertaining to the etiology and diagnosis of allergic reactions to local anesthetics and alternative therapies for patients with local anesthetic allergies. DATA SYNTHESIS: Local anesthetics are classified as either ester or amide compounds. Esters are associated with a higher incidence of allergic reactions, due to a p-aminobenzoic acid (PABA) metabolite. Amide agents do not undergo such metabolism. However, preservative compounds (methylparaben) used in the preparation of amide-type agents are metabolized to PABA. Patients who are allergic to ester local anesthetics should be treated with a preservative-free amide local anesthetic. If the patient is not allergic to ester local anesthetics, these agents may be used in amide-sensitive patients. In the rare instance that hypersensitivity to both ester and amide local anesthetics occurs, or if skin testing cannot be performed, than alternative therapies including diphenhydramine, opioids, general analgesia, or hypnosis can be used. CONCLUSIONS: A true immunologic reaction to a local anesthetic is rare. Intradermal skin testing of local anesthetic compounds, methylparaben, and metabisulfite should be performed in patients when a thorough history does not rule out a possible allergic reaction to local anesthetics and future local anesthesia is necessary. Skin testing enables the clinician to identify autonomic responses to minor surgical procedures and toxic reactions to anesthetics so that patients are not incorrectly labeled as "caine" allergic. Diphenhydramine can be used as an alternative to ester and amide local anesthetics in minor procedures of short duration.

[0649]
Effects of relaxation on the delayed-type hypersensitivity (DTH) reaction to diphenylcycloprenone (DCP)
Allergy 1997 Jul;52(7):760-4
Delayed-type hypersensitivity (DTH) reactions to the experimental allergen diphenycyclopropenone (DCP) were measured in four groups, which either trained (+) or did not train in relaxation (-) during the sensitization and/or the challenge phase. All groups consisted of high and low hypnotic susceptible subjects. While there were no differences in erythema, the mean induration of the group which trained in relaxation in both the sensitization and the challenge phase (+/++) was significantly greater than that of the group which trained in relaxation in the challenge phase only (-/+). Significant correlations were found between induration and hypnotic susceptibility scores, and between induration and degree of perceived relaxation during challenge. High hypnotic susceptible subjects experienced a higher degree of perceived relaxation and exhibited greater indurative and erythematous DTH reactions to DCP than low hypnotic susceptible subjects in all four experimental conditions. Though the mediating mechanisms remain unclear, our results suggest that relaxation may affect the DTH reaction, and support previous findings of higher psychophysiologic reactivity of high hypnotic susceptible subjects.

[0650]
[Effect of self-hypnosis in patients with pollinosis]
Forsch Komplementarmed 1999 Feb;6 Suppl 1:47-9
Bircher A

The aim of this study in hypnosis was the exemplary verification of a regulatory intervention in patients with pollinosis. Hypnosis and self-hypnosis are established methods in medicine. 52 patients with pollinosis participated in this clinical study. It lasted over two pollen seasons. Self-hypnosis was learned quite easily. It resulted in a clear yet statistically weak beneficial effect on the subjective assessment of the pollinosis symptoms, on the consumption of drugs and on other objective findings. From a methodological point of view this study might suggest that the classical comparison of experimental groups in clinical research could hide some larger therapeutic effects in individual patients. Therefore, it would be desirable to consider also individual data analysis in all future studies dealing with psychological or psychosomatic mechanisms and in all studies which capture parameters interactive at different levels. The beneficial effect of hypnosis on the swelling of the nasal mucous membrane in a provocation test initiated a subsequent small project on the possible mode of action of hypnosis in this pollinosis study. However, the results were inconclusive.

[0651]
Making vaccines more acceptable--methods to prevent and minimize pain and other common adverse events associated with vaccines
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The growing abundance of highly immunogenic vaccines has arrived with a burden of pain, distress, and common adverse reactions that in turn may interfere with parental compliance and aggravate anti-vaccine sentiment. In a study of 150 children in each of 2 age-groups, we found that approximately 20% of the subjects suffered serious distress or worse. During the procedural phase, approximately 90% of the 15- to 18-month old children and 45% of the 4- to 6-year old children showed serious distress or worse. To address non-adherence with pediatric vaccine schedules, we must consider all of the possible issues that might prevent a parent from taking a child to a health care provider for vaccination. In that same study we identified useful predictors for both preparatory and procedural distress - predictors that might be used in identifying children who might benefit from preventive interventions. Vaccine providers might consider a variety of interventions. Attitude, empathy, instruction, and practice have all been shown to have a salutary effect upon pain and anxiety with medical procedures in general and specifically with vaccinations. Distraction has also been found to be an effective method for distress and pain prevention in children. More formal methods of clinical hypnosis which combine a deep state of relaxation with focused imagery and suggestion have also been found to be effective in helping children and adolescents prepare for, cope with, and tolerate the pain and anxiety associated with medical procedures. So-called 'sugar nipples' delivering small amounts of sucrose orally at the time of a painful procedure in an infant has been not been shown to decrease vaccination pain and studies on refrigerant topical anesthetics are mixed. Studies have found a eutectic mixture of 2.5% lidocaine and 2.5% prilocaine (EMLA) effective in providing adequate local anesthesia in children, but it suffers from problems in practical application. Studies with various injection techniques have not identified ready solutions, and although jet injection appears to provoke less anxiety and cause less immediate pain, studies also indicate a somewhat greater incidence of delayed local reactogenicity including soreness and edema. Other measures to prevent or rapidly treat other common adverse events have been shown effective and should be considered as well.

[0652]
Skin reactions to histamine of healthy subjects after hypnotically induced emotions of sadness, anger, and happiness
Allergy 2001 Aug;56(8):734-40
Zachariae R, Jorgensen MM, Egekvist H, Bjerring P
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BACKGROUND: The severity of symptoms in asthma and other hypersensitivity-related disorders has been associated with changes in mood but little is known about the mechanisms possibly mediating such a relationship. The purpose of this study was to examine the influence of mood on skin reactivity to histamine by comparing the effects of hypnotically
induced emotions on flare and wheal reactions to cutaneous histamine prick tests. METHODS: Fifteen highly hypnotically susceptible volunteers had their cutaneous reactivity to histamine measured before hypnosis at 1, 2, 3, 4, 5, 10, and 15 min after the histamine prick. These measurements were repeated under three hypnotically induced emotions of sadness, anger, and happiness presented in a counterbalanced order. Skin reactions were measured as change in histamine flare and wheal area in mm² per minute. RESULTS: The increase in flare reaction in the time interval from 1 to 3 min during happiness and anger was significantly smaller than flare reactions during sadness (P<0.05). No effect of emotion was found for wheal reactions. Hypnotic susceptibility scores were associated with increased flare reactions at baseline (r=0.56; P<0.05) and during the condition of happiness (r=0.56; P<0.05). CONCLUSION: Our results agree with previous studies showing mood to be a predictor of cutaneous immediate-type hypersensitivity and histamine skin reactions. The results are also in concordance with earlier findings of an association between hypnotic susceptibility and increased reactivity to an allergen.

[0653]
Managing patients with local anesthetic complications using alternative methods
Pa Dent J (Harrisb) 2002 May-Jun;69(3):22-9
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This article discusses various alternative methods of treating the patient who encounters problems with local anesthetics. Those alternative methods include: acupuncture, hypnosis, sedation, general anesthetics, and antihistamines as a substitute for local anesthetics with more of a focus in using antihistamines as an effective local anesthetic agent. Although not frequently encountered in the clinical setting, allergic reactions to local anesthetics do occur. Various surveys indicate the number of deaths attributed to local anesthesia range from 1:1,500,000 to 1:4,000,000, with oral surgery offices having higher mortality rates than general dentistry offices. This occurs despite clinicians’ attention to patient medical histories, aspiration of the local anesthetic syringe during injections, and minimizing the dosage of local anesthetic solutions. Generally speaking, local anesthetics can be divided into two groups: ester of benzoic and aminobenzoic derivatives (cocaine, benzocaine, procaine, tetracaine, butacaine, etc.) or amide-derivatives of xylyline and toludine groups (lidocaine, mepivacaine, prilocaine a.k.a. Citanest, etc.). Adverse effects include allergic or toxic reactions, as well as negative effects of any vasoconstrictors contained within the local anesthetic solution. This article will concentrate on how to successfully manage patients who have previously encountered allergic reactions.

[0654]
Clinical perspectives, mechanisms, diagnosis and management of irritable bowel syndrome
Aliment Pharmacol Ther 2002 Aug;16(8):1407-30
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This consensus document reviews the current status of the epidemiology, social impact, patient quality of life, pathophysiology, diagnosis and treatment of irritable bowel syndrome. Current evidence suggests that two major mechanisms may interact in irritable bowel syndrome: altered gastrointestinal motility and increased sensitivity of the intestine. However, other factors, such as psychosocial factors, intake of food and prior infection, may contribute to its development. Management of patients is based on a positive diagnosis of the symptom complex, careful history and physical examination to exclude 'red flags' as risk factors for organic disease, and, if indicated, investigations to exclude other disorders. Therapeutic choices include dietary fibre for constipation, opioid agents for diarrhoea and low-dose antidepressants or infrequent use of antispasmodics for pain, although the evidence basis for efficacy is limited or in some cases absent. Psychotherapy and hypnotherapy are the subject of ongoing study. Treatment should be tailored to patient needs and fears. Novel therapies are emerging, and drugs acting on serotonin receptors have proven efficacy and a scientific rationale and, if approved, should be useful in the overall management of patients with irritable bowel syndrome. Patient and physician education, early identification of psychosocial issues and better therapies are important strategies to reduce the suffering and societal cost of irritable bowel syndrome.

[0655]
Review article: bloating in functional bowel disorders
Aliment Pharmacol Ther 2002 Nov;16(11):1867-76
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Bloating is a frequently reported symptom in functional bowel disorders. It usually occurs in combination with other symptoms, but may also occur in isolation. The severity of bloating tends to worsen during the course of the day and improves overnight. Although frequently considered to be a subjective phenomenon, recent studies have shown that bloating is associated with a measurable increase in abdominal girth. The pathophysiology of bloating remains elusive, but the evidence supports a sensorimotor dysfunction of the bowel. The possible mechanisms include abnormal gas trapping, fluid retention, food intolerance and altered gut microbial flora. Further studies are needed to define the sensorimotor abnormalities associated with bloating, which might be segmental and transient rather than generalized and persistent. The lack of understanding of this symptom is paralleled by a limited availability of therapeutic options. Conventional medications used in functional bowel disorders are not helpful and may indeed worsen the symptoms. In future, new drugs with activity against serotonin and kappa receptors, or novel approaches such as the use of exclusion diets, probiotics and hypnotherapy, may prove to be useful.
Long-term improvement in functional dyspepsia using hypnotherapy
Gastroenterology 2002 Dec;123(6):1778-85
Calvert EL, Houghton LA, Cooper P, Morris J, Whorwell PJ
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BACKGROUND & AIMS: We have shown hypnotherapy (HT) to be effective in irritable bowel syndrome, with long-term improvements in symptomatology and quality of life (QOL). This study aimed to assess the efficacy of HT in functional dyspepsia (FD).

METHODS: A total of 126 FD patients were randomized to HT, supportive therapy plus placebo medication, or medical treatment for 16 weeks. Percentage change in symptomatology from baseline was assessed after the 16-week treatment phase (short-term) and after 56 weeks (long-term) with 26 HT, 24 supportive therapy, and 29 medical treatment patients completing all phases of the study. QOL was measured as a secondary outcome.

RESULTS: Short-term symptom scores improved more in the HT group (median, 59%) than in the supportive (41%; P = 0.01) or medical treatment (33%; P = 0.057) groups. HT also benefited QOL (42%) compared with either supportive therapy (10% [P < 0.001]) or medical treatment (11% [P < 0.001]). Long-term, HT significantly improved symptoms (73%) compared with supportive therapy (34% [P < 0.02]) or medical treatment (43% [P < 0.01]). QOL improved significantly more with HT (44%) than with medical treatment (20% [P < 0.001]). QOL did improve in the supportive therapy (43%) group, but 5 of these patients commenced taking antidepressants during follow-up. A total of 90% of the patients in the medical treatment group and 82% of the patients in the supportive therapy group commenced medication during follow-up, whereas none in the HT group did so (P < 0.001). Those in the HT group visited their general practitioner or gastroenterologist significantly less (median, 1) than did those in the supportive therapy (median, 4) and medical treatment (median, 4) groups during follow-up (P < 0.001).

CONCLUSIONS: HT is highly effective in the long-term management of FD. Furthermore, the dramatic reduction in medication use and consultation rate provide major economic advantages.

Medicaid reimbursement for alternative therapies
Altern Ther Health Med 2002 Nov-Dec;8(6):84-8
Steyer TE, Freed GL, Lantz PM

CONTEXT: A growing number of complementary and alternative therapies are eligible for reimbursement by third party payers in the United States. No studies have examined current trends in the use of public funds for the payment of complementary and alternative medicine (CAM). OBJECTIVE: To determine the reimbursement polices of state Medicaid programs for CAM.

DESIGN: Cross-sectional study. PARTICIPANTS: 46 state Medicaid reimbursement specialists.

INTERVENTION: Telephone survey. RESULTS: Of the 46 states participating in the study, 36 Medicaid programs (78.3%) provide coverage for at least 1 alternative therapy. The most commonly reimbursed therapies are chiropractic by 33 programs (71.7%), biofeedback by 10 programs (21.7%), acupuncture by 7 programs (15.2%), and hypnotherapy and naturopathy by 5 programs each (10.8%). CONCLUSIONS: Many Medicaid programs are paying for the use of CAM. Further research is needed to determine if Medicaid recipients are aware of these reimbursement policies and the extent to which recipients are using CAM for their healthcare.

The Cavendish Centre for integrated cancer care: assessment of patients’ needs and responses
Complement Ther Med 2002 Mar;10(1):33-41
Peace G, Manasse A
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The use of complementary therapies in combination with conventional medicine is increasing. In cancer care, as at the Cavendish Centre for Cancer Care in Sheffield, the range of therapies offered can include aromatherapy, massage, reflexology, shiatsu, acupuncture, homeopathy, counselling, visualization, hypnotherapy, relaxation, healing and art therapy. Before offering any therapy careful assessment of patients' needs is important as patients seeking complementary therapies may present with unrealistic hopes and expectations of benefit. There are wide variations in provision of services offering complementary cancer care throughout the United Kingdom but few offer a comprehensive assessment which is used as a baseline for both planning treatment and evaluating its outcome and which is conducted by a trained and objective practitioner who has no investment in any specific therapy. We describe the model of care developed at the Cavendish Centre with particular emphasis on the assessment process. Our model of assessment provides an opportunity for patients to tell their story, make sense of the illness experience, construct meaning from it and set realistic expectations for the chosen intervention. It also offers patients involvement and choice in decisions about their care. In addition we present evaluative data from a case series of 157 patients, 138 of whom (88%) reported improvement in their main concern on MYMOP (Measure Your Medical Outcome Profile).

Hypnosis in pediatrics: applications at a pediatric pulmonary center
BMC Pediatr 2002 Dec 3;2(1):11
Anbar RD

BACKGROUND: This report describes the utility of hypnosis for patients who presented to a Pediatric Pulmonary Center.
over a 30 month period. METHODS: Hypnotherapy was offered to 303 patients from May 1, 1998 - October 31, 2000. Patients offered hypnotherapy included those thought to have pulmonary symptoms due to psychological issues, discomfort due to medications, or fear of procedures. Improvement in symptoms following hypnosis was observed by the pulmonologist for most patients with habit cough and conversion reaction. Improvement of other conditions for which hypnosis was used was gauged based on patients' subjective evaluations. RESULTS: Hypnotherapy was associated with improvement in 80% of patients with persistent asthma, chest pain/pressure, habit cough, hyperventilation, shortness of breath, sighing, and vocal cord dysfunction. When improvement was reported, in some cases symptoms resolved immediately after hypnotherapy was first employed. For the others improvement was achieved after hypnosis was used for a few weeks. No patients' symptoms worsened and no new symptoms emerged following hypnotherapy.

CONCLUSIONS: Patients described in this report were unlikely to have achieved rapid improvement in their symptoms without the use of hypnotherapy. Therefore, hypnotherapy can be an important complementary therapy for patients in a pediatric practice.

[0660]
The origins of modern clinical research
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The single-blind or double-blind, placebo-controlled randomized clinical trial is considered the gold standard for evaluating the potential efficacy of pharmaceuticals, medical devices, and treatment protocols. The characteristic features of placebo-controlled clinical evaluations include two essential elements: a sham intervention and subject ignorance about the bogus nature of that intervention. Although it commonly is assumed that such clinical trials were developed in the 1930s, the first published report that used intentional subject ignorance and sham intervention was the result of a 1784 French royal commission investigation into mesmerism, headed by Benjamin Franklin. The strategy the Franklin commission used to debunk Franz Mesmer's assertions about health and illness served as a model for subsequent inquiries that use placebo controls and blinded assessment to arrive at their conclusions.

[0661]
Inducing and reducing false memories: a Swedish version of the Deese-Roediger-McDermott paradigm
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Participants tend to falsely remember a nonpresented critical word after having studied a list of the word's primary associates. We present here a Swedish version of the Deese-Roediger-McDermott paradigm, which provides a tractable method of experimentally inducing and investigating such illusory memories. In Experiment 1 it was demonstrated that the constructed stimulus material induced highly reliable false-recall and false-recognition effects, and, moreover, that veridical and false memories were associated with a similar phenomenological experience of remembering. The results from Experiment 2 indicated that the susceptibility to false recognition can be substantially reduced when participants are explicitly required to monitor the sources of their memories. These findings are consistent with predictions derived from the source-monitoring framework.

[0662]
Rorschach measures during depth hypnosis and suggestion of a previous life
Percept Mot Skills 2002 Dec;95(3 Pt 1):877-85
Ferracuti S, Cannoni E, De Carolis A, Gonella A, Lazzari R
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Using a procedure with suggestions to prompt false memories from an alleged previous life, we hypnotized 16 normal subjects and collected Rorschach data before and during the hypnotic induction. During hypnosis 9 subjects produced memories that they claimed to remember from a former life. The Rorschach findings bore no resemblance to the available data for other dissociative disorders. Rorschach variables during hypnotic trance remained almost unchanged from baseline. These results indicate that the Rorschach poorly reflects hypnotic trance.

[0663]
Individual personality characteristics related to suggestibility
Psychol Rep 2002 Dec;91(3 Pt 1):1007-10
Van Hook CW, Steele C
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The current study investigated the relationship between suggestibility of memory, personality characteristics identified by the Millon Index of Personality Traits, and tolerance for ambiguity measured by MacDonald's Ambiguity Tolerance-20. 85 female and 16 male college students were assigned to either an experimental group receiving the suggestive information or a control group. Suggestibility was assessed using Lindberg's suggestibility measure consisting of a short video, followed by a questionnaire used to assess memory, and a second administration one week later. Logistical regression analyses were used to construct a model of the personality characteristics predictive of suggestibility and indicated that susceptibility to suggestive information may differ across personalities for variables such as sensing, innovating, agreeing,
and low tolerance of ambiguity.

How effective are the cross-examination and expert testimony safeguards? Jurors' perceptions of the suggestiveness and fairness of biased lineup procedures
J Appl Psychol 2002 Dec;87(6):1042-54
Devenport JL, Stinson V, Cutler BL, Kravitz DA
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Mock jurors (N = 800) viewed a videotaped trial that included information about a lineup identification procedure. Suggestiveness of the eyewitness identification procedure varied in terms of foil, instruction, and presentation biases. Expert testimony regarding the factors that influence lineup suggestiveness was also manipulated. Criteria included juror ratings of lineup suggestiveness and fairness, ratings of defendant culpability, and verdicts. Jurors were sensitive to foil bias but only minimally sensitive to instruction and presentation biases. Expert testimony enhanced juror sensitivity only to instruction bias. These results have implications for the effectiveness of cross-examination and expert testimony as safeguards against erroneous convictions resulting from mistaken identifications.

Cortisol, prolactin, growth hormone and neurovegetative responses to emotions elicited during an hypnoidal state
Psychoneuroendocrinology 2003 Jan;28(1):1-17
Sobrinho LG, Simoes M, Barbosa L, Raposo JF, Pratas S, Fernandes PL, Santos MA
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The present study describes the responses of cortisol, prolactin and growth hormone (GH) to emotions elicited during sessions in which an hypnoidal state was induced. The purpose of the study was to provide answers for the following questions: 1) Do sessions with an emotional content have more hormonal surges than baseline, relaxation-only, sessions? 2) Does the induction of a fantasy of pregnancy and nursing elicit a prolactin response? 3) Are there any associations between surges of different hormones? 4) Are hormonal responses related to the intensity, type, or mode of expression of the emotions? For this purpose, thirteen volunteers and twelve patients with minor emotional difficulties were studied during sessions under hypnosis. The period of observation lasted for about three hours. Heart rate (HR), skin conductance (SC) and vagal tone (VT) were monitored. Serum cortisol, prolactin and growth hormone were sampled every 15 minutes. The volunteers had three types of sessions- "blank", consisting of relaxation only (12 sessions), "breast feeding", in which a fantasy of pregnancy and breast feeding was induced (12 sessions) and "free associations" in which the subjects were encouraged to evoke experiences or feelings (17 sessions). The patients had only sessions of free associations (38 sessions). Sessions of free associations had more hormonal surges than "blank" and "breast feeding" sessions. This was true for cortisol (8/17 v.3/24; p <0.03), prolactin (7/17 v. 3/24; p <0.05) and GH (9/17 v. 4/24; p <0.02). During the 55 sessions of free associations (volunteers plus patients) there were 32 surges of cortisol, 18 of prolactin and 28 of GH. Cortisol and prolactin surges were negatively correlated (p <0.03). GH had no significant association with either cortisol or prolactin. Visible emotions were positively associated with GH surges (p <0.05), but not with cortisol or prolactin. Cortisol surges were correlated positively with evocations of real events (p <0.01) and negatively with evocations containing defensive elements (p <0.01). Cortisol correlated positively with shock and intimidation (p <0.02) and negatively with rage (p <0.04). The AUC of the cortisol peaks during shock and intimidation was significantly higher than that of the pool of all other cortisol peaks (12.4 micromol x min x l(-1) v. 7.1 micromol x min x l(-1); p <0.005). Rage had a marginally significant positive association with prolactin surges (p=0.07). The distribution of GH surges did not show any significant association with types of emotions. The present study provides evidence that cortisol, prolactin and GH respond to psychological stress in humans. However, they are regulated differently from one another. Cortisol and prolactin surges appear to be alternative forms of response to specific emotions. GH surges depend on the intensity of the emotion, probably as a consequence of the associated muscular activity. The current paradigm of stress, implying corticotrophin-releasing hormone (CRH) as the initial step of a cascade of events, is insufficient to account for the diversity of hormonal changes observed in psychological stress in humans.

Absolut memory distortions: alcohol placebos influence the misinformation effect
Psychol Sci 2003 Jan;14(1):77-80
Assefi SL, Garry M
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Can the simple suggestion that you have consumed alcohol affect your memory for an event? Alcohol placebos affect social behaviors but not nonsocial ones, and have not previously been shown to affect memory. We investigated the effect of alcohol placebos using materials that revealed both the social and the nonsocial influences of memory Subjects drank plain tonic water, but half were told it was a vodka and tonic; then all subjects took part in an eyewitness memory experiment. Subjects who were told they drank alcohol were more swayed by misleading postevent information than were those who were told they drank tonic water, and were also more confident about the accuracy of their responses. Our results show that the mere suggestion of alcohol consumption may make subjects more susceptible to misleading information and inappropriately confident. These results also provide additional confirmation that eyewitness memory is influenced by both nonsocial and social factors.
Hypnosis, differential expression of cytokines by T-cell subsets, and the hypothalamo-pituitary-adrenal axis
Am J Clin Hypn 2003 Jan;45(3):179-96
Wood GJ, Bughi S, Morrison J, Tanavoli S, Tanavoli S, Zadeh HH
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This investigation tested the hypothesis that hypnosis can differentially modulate T-cell subsets, and that this effect is mediated by changes in hypothalamo-pituitary-adrenal (HPA) mediators. Seven healthy, highly hypnotizable volunteers participated in three one-day sessions, a baseline and two intervention sessions. Hypnosis intervention entailed a standardized induction, suggestions for ego strengthening and optimally balanced functioning of the immune and neuroendocrine systems, and post-hypnotic suggestions for stress management and continued optimal balance of bodily systems. Blood samples were drawn at five time points between 8:00 a.m. and 3:00 p.m. and were analyzed for T-cell activation and intracellular cytokine expression (Interferon (IFN)-gamma, Interleukin-2, Interleukin-4) and HPA axis mediators (ACTH, cortisol, and beta-endorphin). Following hypnosis intervention, statistically significant immunological effects were noted. Specifically, the proportion of T-cells expressing IFN-gamma (p = .0001) and IL-2 (p = .013) were lower after hypnosis. T-cell activation response to polyclonal stimulation was positively correlated with ACTH (p = .01) and beta-endorphin (p = .001) while IFN-gamma expression was correlated with levels of cortisol (p &lt; .001). Further controlled studies utilizing hypnosis with patients in treatment are warranted in order to examine whether an altered T-cell response can be replicated in the presence of disease.

[0668]
Gene expression, neurogenesis, and healing: psychosocial genomics of therapeutic hypnosis
Am J Clin Hypn 2003 Jan;45(3):197-216
Rossi EL

The historical lineage of therapeutic hypnosis in James Braid's "psychophysiology", Pierre Janet's "physiological modification", and Milton Erickson's "nururo-psycho-physiology" is extended to include current neuroscience research on activity-dependent gene expression, neurogenesis, and stem cells in memory, learning, behavior, change, and healing. Three conditions that optimize gene expression and neurogenesis—novelty, environmental enrichment, and exercise—could integrate fundamentals of the theory, research, and practice of therapeutic hypnosis. Continuing research on immediate-early, activity-dependent, behavior state-related, and clock gene expression could enhance our understanding of how relaxation, sleep, dreaming, consciousness, arousal, stress and trauma are modulated by therapeutic hypnosis. It is speculated that therapeutic and post-hypnotic suggestion could be focused more precisely with the time parameters of gene expression and neurogenesis that range from minutes and hours for synthesizing new synapses to weeks and months for the generation and maturation of new, functioning neurons in the adult brain.

[0669]
Hypnosis-facilitated relaxation using self-guided imagery during dermatologic procedures
Am J Clin Hypn 2003 Jan;45(3):225-32
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Many patients experience some degree of anxiety and/or discomfort during dermatologic procedures. For most patients this anxiety or discomfort is tolerable, but a few find it intolerable to the point of interference with the accomplishment of the procedure. A case is presented in which a 51-year-old female experienced so much anxiety that it jeopardized the continuation of a necessary procedure. When (with her consent) a trance state was induced through hypnosis, she relaxed and remained in a pleasant mental condition for the remainder of the procedure. This case illustrates the usefulness of hypnosis in selected situations where it can alleviate anxiety and discomfort associated with dermatologic procedures. Suggested trance induction, maintenance, and termination scripts are included to assist those with adequate training and experience in providing this comfort to selected patients through hypnosis.

[0670]
A systematic review of alternative therapies in the irritable bowel syndrome
Arch Intern Med 2003 Feb 10;163(3):265-74
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The irritable bowel syndrome is a common disorder associated with a significant burden of illness, poor quality of life, high rates of absenteeism, and high health care utilization. Management can be difficult and treatment unrewarding; these facts have led physicians and patients toward alternative therapies. We explored a variety of treatments that exist beyond the scope of commonly used therapies for irritable bowel syndrome. Guarded optimism exists for traditional Chinese medicine and psychological therapies, but further well-designed trials are needed. Oral cromolyn sodium may be useful in chronic unexplained diarrhea and appears as effective as and safer than elimination diets. The roles of lactose and fructose intolerance remain poorly understood. Alterations of enteric flora may play a role in irritable bowel syndrome, but supporting evidence for bacterial overgrowth or probiotic therapy is lacking.

[0671]
Clinical management of stressors perceived by patients on mechanical ventilation
Psychological and psychosocial stressors perceived by the mechanically ventilated patient include intensive care unit environmental factors, communication factors, stressful symptoms, and the effectiveness of interventions. The studies reviewed in this article showed four stressors commonly identified by mechanically ventilated patients including dyspnea, anxiety, fear, and pain. Few interventional studies to reduce these stressors are available in the literature. Four interventions including hypnosis and relaxation, patient education and information sharing, music therapy, and supportive touch have been investigated in the literature and may be helpful in reducing patient stress. The advanced practice nurse is instrumental in the assessment of patient-perceived stressors while on the ventilator, and in the planning and implementation of appropriate interventions to reduce stressors and facilitate optimal ventilation, weaning, or both.

[0672] Human hypnosis: autonomic and electroencephalographic correlates of a guided multimodal cognitive-emotional imagery
Neurosci Lett 2003 Feb 20;338(1):41-4
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The effects of a guided neutral and unpleasant imagery involving several sensory modalities were studied in hypnotized subjects. Heart rate (HR), respiratory frequency (RF), tonic skin resistance and different electroencephalographic rhythms were evaluated during a long-lasting hypnotic session including the guided suggestion of a neutral (NS) and an unpleasant (US) imagery, each preceded by a hypnotic relaxation rest period. During NS, the absence of autonomic changes, associated with electroencephalographic gamma power decrement and theta1 power increment, indicated the prevalence of relaxation on the expected task-related modifications. In contrast, US elicited HR and RF increments together with higher electroencephalographic gamma, beta3 and beta2 activities. Thus, hypnotic state appears to prevent the autonomic responses expected during the neutral stimulation, while the emotional valence of the unpleasant imagery overwhims the hypnosis-related relaxation.

Aliment Pharmacol Ther 2003 Mar;17(5):635-42

BACKGROUND: We have previously shown that hypnotherapy alters rectal sensitivity in some patients with irritable bowel syndrome. However, this previous study used incremental volume distension of a latex balloon, which might be susceptible to subject response bias and might compromise the assessment of compliance. In addition, the study group was symptomatically rather than physiologically defined. AIM: To assess the effect of hypnotherapy on rectal sensitivity in hypersensitive, hyposensitive and normally sensitive irritable bowel syndrome patients using a distension technique (barostat) that addresses these technical issues. METHODS: Twenty-three irritable bowel syndrome (Rome I) patients (aged 24-72 years) were assessed before and after 12 weeks of hypnotherapy in terms of rectal sensitivity, symptomatology, anxiety and depression. Normal values for sensitivity were established in 17 healthy volunteers (aged 20-55 years). RESULTS: Compared with controls, 10 patients were hypersensitive, seven hyposensitive and six normally sensitive before treatment. Following hypnotherapy, the mean pain sensory threshold increased in the hypersensitive group (P = 0.04) and decreased in the hyposensitive group, although the latter failed to reach statistical significance (P = 0.19). Normal sensory perception was unchanged. Sensory improvement in the hypersensitive patients tended to correlate with a reduction in abdominal pain (r = 0.714, P = 0.07). CONCLUSION: Hypnotherapy improves abnormal sensory perception in irritable bowel syndrome, leaving normal sensation unchanged.

[0674] Frequency of occurrence of the F wave in distal flexor muscles as a function of hypnotic susceptibility and hypnosis
Brain Res Cogn Brain Res 2003 Mar;16(1):99-103
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The aim of the experiment was to assess whether the membrane excitability of flexor cervical and/or lumbar motoneurons is related to hypnotic susceptibility (measured with the Stanford Hypnotic Susceptibility Scale, Form A) and hypnosis. During the experimental sessions, hypnotized subjects were given only suggestions of relaxation (neutral hypnosis) while awake subjects were given instructions to be quiet and relaxed (simple relaxation). F waves were recorded from the abductor digiti minimi and abductor hallucis of both sides after electrical stimulation of the ulnar or tibial nerve, and were used as an index of motoneuron membrane excitability in three groups of subjects: highly susceptible under neutral hypnosis, highly susceptible and non-susceptible during simple relaxation sessions. In lower limbs, there was no difference among the groups in the frequency of occurrence of F waves. In upper limbs, hypnosis selectively reduced F frequency of occurrence in flexor motoneurons on the right side. This reduction persisted after the end of hypnosis and also occurred during the last period of relaxation in highly susceptible non-hypnotized subjects. Results support the idea that hypnotic phenomena develop along a continuum in which some trait differences can be more easily revealed by the induction of hypnosis.
BACKGROUND: Although emerging evidence during the past several decades suggests that psychosocial factors can directly influence both physiologic function and health outcomes, medicine had failed to move beyond the biomedical model, in part because of lack of exposure to the evidence base supporting the biopsychosocial model. The literature was reviewed to examine the efficacy of representative psychosocial-mind-body interventions, including relaxation, (cognitive) behavioral therapies, meditation, imagery, biofeedback, and hypnosis for several common clinical conditions. METHODS: An electronic search was undertaken of the MEDLINE, PsycLIT, and the Cochrane Library databases and a manual search of the reference sections of relevant articles for related clinical trials and reviews of the literature. Studies examining mind-body interventions for psychological disorders were excluded. Owing to space limitations, studies examining more body-based therapies, such as yoga and tai chi chuan, were also not included. Data were extracted from relevant systematic reviews, meta-analyses, and randomized controlled trials. RESULTS: Drawing principally from systematic reviews and meta-analyses, there is considerable evidence of efficacy for several mind-body therapies in the treatment of coronary artery disease (eg, cardiac rehabilitation), headaches, insomnia, incontinence, chronic low back pain disease and treatment-related symptoms of cancer, and improving postsurgical outcomes. We found moderate evidence of efficacy for mind-body therapies in the areas of hypertension and arthritis. Additional research is required to clarify the relative efficacy of different mind-body therapies, factors (such as specific patient characteristics) that might predict more or less successful outcomes, and mechanisms of action. Research is also necessary to examine the cost offsets associated with mind-body therapies. CONCLUSIONS: There is now considerable evidence that an array of mind-body therapies can be used as effective adjuncts to conventional medical treatment for a number of common clinical conditions.


INTRODUCTION: The objective of this study was to examine the benefits of autogenic training in patients with type 2 diabetes and 40 diabetics treated with oral antidiabetic agents were assigned to receive autogenic training. Treatment effects on GHb levels, glycemia, lipids and lipid peroxidases were evaluated after 12 weeks. RESULTS: Subjects demonstrated significant improvements of GHb level (8.94 +/- 2.21% vs. 7.9 +/- 2.39%) (p < 0.005). Fasting glucose was significantly lower after treatment (11.6 +/- 6.1 mmol/l vs. 8.32 +/- 4.53 mmol/l) (p < 0.005). The serum level of HDL cholesterol was significantly higher after autogenic training (1.21 +/- 0.11 vs. 1.36 +/- 1.42) (p < 0.005). Cholesterol level was significantly lower after training (6.63 +/- 1.66 mmol/l vs. 6.10 +/- 1.12 mmol/l) (p < 0.05). Lipid peroxidase was significantly lower after treatment (4.05 +/- 0.58 vs. 3.69 +/- 1.26) (p < 0.005). CONCLUSION: Autogenic training in selected patients, especially those who are most responsive to stress would provide benefits for glucose control and lipid metabolism that are not always achieved by conventional treatment.


Although interest in mental health promotion has recently been increasing, the most appropriate approaches remain to be determined. Therefore we conducted Stress Management Classes (SMCs) at Higashi Osaka City Naka Health Center in an attempt to help residents to improve their mental health. The purpose of this study was to evaluate the efficacy of SMCs, held four times over 2 months, with an educational program including the concept of stress and instruction in autogenic training as a relaxation technique. Subjects who attended a Health Promotion Class (HPC) at Osaka Prefectural Kaizuka Health Center were used as controls for the study. The aim of the HPC was to prevent chronic physical diseases such as hypertension, diabetes, and hyperlipidemia, with the program consisting mainly of exercise once a week for 3 months. The results were as follows: 1) People who attended SMCs were more likely to have mental health problems than those who attended the HPC. As a result, mentally ill patients could be diagnosed and receive psychiatric treatment at an early stage in the SMC group. 2) Both SMC and HPC attenders reported improvement of their mental health status with the use of POMS (Profile of Mood States). 3) Both SMC and HPC attenders exhibited significant decrease of blood pressure. Although attenders of both classes improved their mental health status, it is important to be able to attract individuals who are in a poor mental condition in case of mental health promotion. In this trial, we found that the term "stress management" was very useful because people who suffered stress were likely to be interested in it. After the Community Health Law was established in 1994, the flow of community health activities has been shifting from the prefectural government to the municipality. However, promoting mental health and welfare is still mainly the role of the prefectural government. In this sense, health centers are appropriate institutions to hold classes as in this trial.

[0678]
A holistic approach to meeting students' needs: using hypnotherapy techniques to assist students in managing their health
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Nursing education has long been holistic in its approach to aiding the client or family. Further, most nurses, especially school nurses, are holistic by nature. That is, school nurses see a person as a whole being, physical, emotional, mental, and spiritual. The more conscious nurses become of their holistic nature and the more they expand their knowledge and skills in holistic methods, the more they can assist students and families in having greater control over their health. Examples of selected holistic techniques and their positive effects when used by students with diabetes and asthma are illustrated in case studies.

[0679]
[Autogenic training in children and adolescents with type 1 diabetes mellitus]
Prax Kinderpsychol Kinderpsychiatr 1997 Apr;46(4):288-303
Gohr M, Ropcke B, Pistor K, Eggers C

This paper discusses psychosocial influences of diabetes mellitus type 1 on children and young patients. A group of 21 patients, age 9 to 14 years with Diabetes mellitus type 1 attended a course in "Autogenic Training" for a period of 11 weeks. From the multidimensional questionnaire for children (PFK 9-14, SETZ U. RAUSCHE 1976) 15 dimensions of personality and 5 second rank factors were extracted at the beginning and at the end of training and 5 months later. Additionally HbA1-scores were assessed at the beginning and at the end at a 2 month and a 5 month-follow-up. At the beginning of the course only on one of the 15 scales a significant difference could be observed between experimental group and age related normal population. After training 5 scales and one second rank factor showed significant changes. Significant reduction was observed in: "need for aggressive forms of dominance behaviour" "feeling of submission with respects to other", "emotional lability" and "tendency for dependence on adults". A significantly increased score was observed in the scale measuring "self confidence regarding one's own meaning, decisions and planning ability". The second rank faktor "neuroticism" was significantly reduced. Against expectations there was no reduction in HbA1 scores. At the end of training HbA1 scores even had increased significantly. But this might have been related to the high frequency of infections during this course. In subjective ratings of training evaluation most of the course members and their parents described fewer problems with attention, less test-anxiety and less aggression and nervousness. The results of this prospective pilot-study are discussed in terms of the psychodynamic influence on diabetes.

[0680]
A hypnotherapeutic approach to the improvement of compliance in adolescent diabetics
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Adolescents with insulin-dependent diabetes mellitus (IDDM) have a rate of noncompliance in our clinic of approximately 20% despite all of the usual measures aimed at securing compliance. Seven IDDM patients ranging in age from 11 to 19 years were managed in our clinic with all of our usual modalities, but all remained in long-term poor control during the 6 months immediately prior to the study. To ensure that each patient would serve as his/her own control, no changes were made in his/her management other than the addition of hypnosis. Six of the seven patients were followed for more than 6 months. No changes were made in insulin, diet, or exercise as prescribed. Posttreatment, the average HgbA1C dropped from 13.2% to 9.7%, and the average fasting blood sugar from 426 mg/dl to 149 mg/dl, values which are consistent with good compliance.

[0681]
Hypnosis in high risk ophthalmic surgery
Lewenstein LN, Iwamoto K, Schwartz H

Hypnosis is an effective tool in many areas of medicine and surgery. The exacting demands of ophthalmic surgery require good patient cooperation and strict adherence to treatment regimens. Multisystemic diseases compounded by the physiological stress of surgery make it essential that already strained homeostatic mechanisms are interfered with minimally. The cases presented in this report illustrate the beneficial use of hypnosis in the treatment of several high risk patients in unusual situations.

[0682]
The Prevalence and Pattern of Complementary and Alternative Medicine Use in Individuals With Diabetes
Diabetes Care 25:324-329, 2002
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OBJECTIVE-This study compared the prevalence and pattern of use of complementary and alternative medicine (CAM) in individuals with and without diabetes and identified factors associated with CAM use. RESEARCH DESIGN AND
METHODS—The 1996 Medical Expenditure Panel Survey, a nationally representative sample of the U.S. noninstitutionalized civilian population, was analyzed. Estimates of CAM use in individuals with common chronic conditions were determined, and estimates of CAM use in patients with diabetes were compared with that in individuals with chronic medical conditions. Patterns of use and costs of CAM use in patients with diabetes were compared with those in nondiabetic individuals. Multiple logistic regression was used to determine independent predictors of CAM use in individuals with diabetes, controlling for age, sex, race/ethnicity, household income, educational level, and comorbidity. RESULTS—Individuals with diabetes were 1.6 times more likely to use CAM than individuals without diabetes (8 vs. 5%, P &lt; 0.0001). In the general population, estimates of CAM use were not significantly different across selected chronic medical conditions, but diabetes was an independent predictor of CAM use. Among individuals with diabetes, older age (65 years) and higher educational attainment (high school education or higher) were independently associated with CAM use. CONCLUSIONS—Diabetes is an independent predictor of CAM use in the general population and in individuals with diabetes. CAM use is more common in individuals aged 65 years and those with more than high school education.

[0683]
The Cephalic Insulin Response to Meal Ingestion in Humans Is Dependent on Both Cholinergic and Noncholinergic Mechanisms and Is Important for Postprandial Glycemia
Diabetes 50:1030-1038, 2001
Bo Ahrén and Jens J. Holst

We studied the mechanisms and physiological relevance of the cephalic insulin response to meal ingestion in 12 healthy women (age 63 ± 0.4 years; BMI 27.7 ± 1.7 kg/m2). The ganglionic antagonist, trimethaphan, which impairs neurotransmission across parasympathetic and sympathetic autonomic ganglia, or atropine or saline was given intravenously during the first 15 min after ingestion of a standard meal (350 kcal). During saline infusion, insulin levels increased during the first 10 min after meal ingestion, whereas the first increase in glucose was evident at 15 min. The preabsorptive 10-min insulin response was reduced by 73 ± 11% by trimethaphan (P = 0.009), accompanied by impaired reduction of glucose levels from 25 to 60 min after meal ingestion (glucose = -1.27 ± 0.5 [with saline] vs. 0.1 ± 0.4 mmol/l [with trimethaphan]; P = 0.008). This reduction at 25-60 min in glucose levels correlated significantly to the 10-min insulin response (r = 0.65, P = 0.024). The 10-min insulin response to meal ingestion was also reduced by atropine, but only by 20 ± 9% (P = 0.045), which was lower than the reduction with trimethaphan (P = 0.004). The preabsorptive insulin response was not accompanied by any increase in circulating levels of gastric inhibitory polypeptide (GIP) or glucagon-like peptide 1 (GLP-1). In conclusion, 1) the early preabsorptive insulin response to meal ingestion in humans can be largely attributed to autonomic activation mediated by noncholinergic and cholinergic mechanisms, 2) this cephalic insulin response is required for a normal postprandial glucose tolerance, and 3) GIP and GLP-1 do not contribute to the preabsorptive cephalic phase insulin response to meal ingestion.

[0684]
Irritable bowel syndrome: a little understood organic bowel disease?
Lancet 2002; 360: 555-64
Nicholas J Talley, Robin Spiller

Irritable bowel syndrome affects 10% of adults with an unexplained female predominance. Although only a few people see their family doctor, the disease causes reduced quality of life and represents a multi-billion pound health-care problem. The disorder clusters in families, which is possibly because of intra-familial learning and a genetic predisposition. Visceral hypersensitivity is a key feature in most patients. Results of imaging studies of regional cerebral blood flow during rectal distension suggest underlying disturbances of central processing of afferent signals, though this is not unique to the disorder, since it is seen in other chronic pain syndromes. Environmental factors that are strongly implicated in at least some patients include gastrointestinal infection and inflammation and chronic stress. Diagnosis is based on positive symptoms and absence of any alarm indicators. Treatment remains unsatisfactory and hinges on an excellent doctor-patient relationship, with drugs for symptom exacerbations. Cognitive behavioural treatment, psychotherapy, and hypnosis could provide long-lasting benefit in some patients. Tricyclic antidepressants in low doses seem to be the most effective class of drugs for the disorder on the basis of limited data. Irritable bowel syndrome is a frequent yet little understood disorder. Patients present to family doctors, gynaecologists, surgeons, and gastroenterologists with abdominal pain or discomfort and an erratic bowel habit; they frequently undergo extensive testing before a diagnosis is reached. The disorder substantially impairs quality of life, and overall health-care costs are high. Irritable bowel syndrome has therefore gained increased attention from clinicians, researchers, payers, and industry. Relegated in the past to the realm of the psychosomatic and unimportant, research is now beginning to define the mechanisms of this heterogeneous disorder. Genetics, infection, mucosal inflammation, and disturbed central processing of abnormal sensory afferent signals all play a part, their importance varying from one patient to another. These insights could lead to new diagnostic approaches and therapeutic targets. We aim here to review published work, focusing on approaches to diagnosis and management on the basis of relevant pathophysiological insights.

[0685]
Awareness during anaesthesia: a prospective case study
Lancet 2000; 355: 707-11
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Background. Patients who are given general anaesthesia are not guaranteed to remain unconscious during surgery.
Knowledge about the effectiveness of current protective measures is scarce, as is our understanding of patients’ responses to this complication. We did a prospective case study to assess conscious awareness during anaesthesia. Methods. 11785 patients who had undergone general anaesthesia were interviewed for awareness on three occasions: before they left the post-anaesthesia care unit, and 1-3 days and 7-14 days after the operation. Findings. We identified 18 cases of awareness and one case of inadvertent muscle blockade that had occurred before unconsciousness. Incidence of awareness was 0.18% in cases in which neuromuscular blocking drugs were used, and 0.10% in the absence of such drugs. 17 cases of awareness were identified at the final interview, but no more than 11 would have been detected if an interview had been done only when the patients left the post-anaesthesia care unit. Four non-paralysed patients recalled intraoperative events, but none had anxiety during wakefulness or had delayed neurotic symptoms. This finding contrasts with anaesthesia with muscle relaxants, during which 11 of 14 patients had pain, anxiety, or delayed neurotic symptoms. Analysis of individual cases suggests that a reduced incidence of recall of intraoperative events would not be achieved by monitoring of end-tidal anaesthetic gas concentration or by more frequent use of benzodiazepines. Interpretation. The inability to prevent awareness by conventional measures may advocate monitoring of cerebral activity by neurophysiological techniques. However, the sensitivity of such techniques is not known, and in the light of our findings, at least 861 patients would need to be monitored to avoid one patient from suffering due to awareness during relaxant anaesthesia.

[0686] Adjunctive non-pharmacological analgesia for invasive medical procedures: a randomised trial
Lancet, Volume 355, Number 9214, 29 April 2000
Elvira V Lang, Eric G Benotsch, Lauri J Fick, Susan Lutgendorf, Michael L Berbaum, Kevin S Berbaum, Henrietta Logan, David Spiegel

Background. Non-pharmacological behavioural adjuncts have been suggested as efficient safe means in reducing discomfort and adverse effects during medical procedures. We tested this assumption for patients undergoing percutaneous vascular and renal procedures in a prospective, randomised, single-centre study. Methods. 241 patients were randomised to receive intraoperatively standard care (n=79), structured attention (n=80), or self-hypnotic relaxation (n=82). All had access to patient-controlled intravenous analgesia with fentanyl and midazolam. Patients rated their pain and anxiety on 0-10 scales before, every 15 min during and after the procedures. Findings. Pain increased linearly with procedure time in the standard group (slope 0.09 in pain score/15 min, p<0.0001), and the attention group (slope 0.04/15 min; p=0.0425), but remained flat in the hypnotic group. Anxiety decreased over time in all three groups with slopes of -0.04 (standard), -0.07 (attention), and -0.11 (hypnosis). Drug use in the standard group (1.9 units) was significantly higher than in the attention and hypnotic groups (0.8 and 0.9 units, respectively). One hypnotic patient became haemodynamically unstable compared with ten attention patients (p=0.0041), and 12 standard patients (p=0.0009). Procedure times were significantly shorter in the hypnotic group (61 min) than in the standard group (78 min, p=0.0016) with procedure duration of the attention group in between (67 min). Interpretation. Structured attention and self-hypnotic relaxation proved beneficial during invasive medical procedures. Hypnosis had more pronounced effects on pain and anxiety reduction, and is superior, in that it also improves haemodynamic stability.

[0687] Working with Dissociative Fugue in a general psychotherapy practice: a cautionary tale
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Dissociative Fugue is a somewhat rare condition that therapists may see only once or twice over the course of a professional career. A brief review of the uses of hypnosis in the treatment of Dissociative Fugue is followed by a presentation of the case of a 51-year-old man who presented with the clinical picture of Dissociative Fugue State and who experienced complete amnesia for the time prior to the fugue state. This article focuses on the pitfalls that the psychotherapist in a general practice may face when working with such a patient and offers specific recommendations and scripts that may be useful in proceeding with treatment.

[0688] Can medical hypnosis accelerate post-surgical wound healing? Results of a clinical trial
Am J Clin Hypn 2003 Apr;45(4):333-51
Ginandes C, Brooks P, Sando W, Jones C, Aker J
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Although medical hypnosis has a long history of myriad functional applications (pain reduction, procedural preparation etc.), it has been little tested for site-specific effects on physical healing per se. In this randomized controlled trial, we compared the relative efficacy of an adjunctive hypnotic intervention, supportive attention, and usual care only on early post-surgical wound healing. Eighteen healthy women presenting consecutively for medically recommended reduction mammoplasty at an ambulatory surgery practice underwent the same surgical protocol and postoperative care following preoperative randomization (n = 6 each) to one of the three treatment conditions: usual care, 8 adjunctive supportive attention sessions, or 8 adjunctive hypnosis sessions targeting accelerated wound healing. The primary outcome data of interest were objective, observational measures of incision healing made at 1.7 weeks postoperatively by medical staff blind to the participants’ group assignments. Data included clinical exams and digitized photographs that were scored
using a wound assessment inventory (WAI). Secondary outcome measures included the participants’ subjectively rated pain, perceived incision healing (VAS Scales), and baseline and post-surgical functional health status (SF-36). Analysis of variance showed the hypnosis group's objectively observed wound healing to be significantly greater than the other two groups', p < .001, through 7 postoperative weeks; standard care controls showed the smallest degree of healing. In addition, at both the 1 and 7 week post-surgical observation intervals, one-way analyses showed the hypnosis group to be significantly more healed than the usual care controls, p < .02. The mean scores of the subjective assessments of postoperative pain, incision healing and functional recovery trended similarly. Results of this preliminary trial indicate that use of a targeted hypnotic intervention can accelerate postoperative wound healing and suggest that further tests of using hypnosis to augment physical healing are warranted.

[0689]
Autonomic and EEG correlates of emotional imagery in subjects with different hypnotic susceptibility
Brain Res Bull 2003 Apr 15;60(1-2):151-60
Sebastiani L, Simoni A, Gemignani A, Ghelarducci B, Santarcangelo EL
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The autonomic and EEG correlates of the response to a cognitive unpleasant stimulation (US) verbally administered to awake hypnotizable and non hypnotizable subjects were studied. They were compared with the values obtained during a resting condition immediately preceding the stimulus and with those produced by a cognitive neutral stimulation (NS), also administered after a basal resting period. Results showed hypnotic trait effects on skin resistance, heart and respiratory rate as well as on EEG theta, alpha, beta and gamma relative power changes. The autonomic and EEG patterns observed indicated different strategies in the task execution for hypnotizable and non hypnotizable subjects and a discrepancy between the autonomic and EEG changes associated to the US in susceptible subjects. Results support dissociation theories of hypnosis and suggest for hypnolizable persons an active mechanism of protection against cardiac hazard.

[0690]
Neural circuitry underlying pain modulation: expectation, hypnosis, placebo
Trends Cogn Sci 2003 May;7(5):197-200
Ploghaus A, Becerra L, Borras C, Borsook D
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The ability to predict the likelihood of an aversive event is an important adaptive capacity. Certainty and uncertainty regarding pain cause different adaptive behavior, emotional states, attentional focus, and perceptual changes. Recent functional neuroimaging studies indicate that certain and uncertain expectation are mediated by different neural pathways-the former having been associated with activity in the rostral anterior cingulate cortex and posterior cerebellum, the latter with activation changes in the ventromedial prefrontal cortex, mid-cingulate cortex and hippocampus. Expectation plays an important role not only in its modulation of acute and chronic pain, but also in other disorders which are characterized by certain expectation (specific phobias) or uncertain expectation (generalized anxiety disorder) of aversive events.

[0691]
[The efficacy of smoking cessation methods available in the Netherlands: a systematic review based on Cochrane data]
Willemsen MC, Wagena EJ, van Schayck CP
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OBJECTIVE: To obtain an overview of data from the Cochrane Library on smoking-cessation methods and aids available in the Netherlands. DESIGN: Systematic literature review. METHOD: Common smoking-cessation methods in the Netherlands in 1999 and 2000 were selected from previous research. Data from relevant Cochrane reviews about these cessation methods were collected, after which the efficacy was calculated as a pooled odds ratio and the effectiveness as a percentage of 12 months' continuous abstinence. RESULTS: The following methods were found to be more efficacious than placebo: tailored written advice, individual counselling, telephonic counselling, group courses, all forms of nicotine-replacement therapy, bupropion and nortriptyline. Acupuncture was not superior to placebo. It was not possible to draw any unequivocal conclusions about hypnotherapy. No randomised studies were found with respect to the "Allen Carr method". Rates of 12 months' continuous abstinence were as follows for those methods with proven efficacy: tailored advice: 7%, individual counselling: 16%, telephonic counselling: 7.5%, nicotine gum: 17%, nicotine patch: 13%, nicotine inhaler: 17%, nicotine tablets: 20%, bupropion: 17%, and nortriptyline: 24%. The success rates for nicotine tablets and nortriptyline were based on only 2 and 1 study respectively. CONCLUSION: Several effective smoking-cessation methods are available in the Netherlands. In trials the long-term effectiveness of these methods was between 7-24%.

[0692]
[Hypnosis in gastroenterology]
Z Gastroenterol. 2003 May;41(5):405-12
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Hypnosis is one of the oldest remedies against physical diseases and mental disorders of mankind. The term hypnosis is used for the description of a technique as well as for the description of an altered state of consciousness which is induced by this technique. Hypnosis is a scientific tool in psychophysiological studies of gastrointestinal functions (secretion, motility, visceral sensitivity) and their processing in the central nervous system. Hypnosis is an empirically validated treatment of the irritable bowel syndrome even refractory to medical treatment which is recommended by international expert groups (Rome II) and the British Society of Gastroenterology. In diagnostic upper gastrointestinal endoscopy the relevance of hypnosis as an alternative of intravenous analgosedation needs to be clarified. Hypnosis cannot be recommended as an alternative for intravenous analgosedation in painful endoscopic therapeutic procedures of the gastrointestinal tract.

[0693] Paranormal phenomena in the medical literature sufficient smoke to warrant a search for fire
Med Hypotheses. 2003 Jun;60(6):864-8
Bobrow RS
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Paranormal phenomena - events that cannot be explained by existing science - are regularly reported in medicine. Surveys have shown that a majority of the population of the United States and Great Britain hold at least one paranormal belief. Information was retrieved by MEDLINE searches using keywords 'paranormal' and 'psychic', and from the author's own collection. Reports are predominantly by physicians, and from peer-reviewed, MEDLINE-indexed literature. This is a representative sample, as there is no database for paranormal medical phenomena. Presented and discussed are: a case of systemic lupus erythematosus ameliorated by witchcraft; an analysis of studies on distant healing; acupuncture, as a bridge between what is now accepted but recently would have been deemed paranormal; a carefully-done study of a psychic; auditory hallucinations informing a patient, correctly, that she had a brain tumor; two nearly-identical lay press reports of self-predicted death; lycanthropy (the delusion of being an animal); the development of Carl Jung's collective unconscious; hypnosis - still questioned despite documented therapeutic benefit, and a well-researched report of a person speaking a foreign language, apparently unlearned (xenoglossy) while hypnotized; and multiple examples of children who spout the details of the life of an unknown, deceased person. The inability of existing paradigms to explain these observations does not negate them; rather, it elucidates a need for more research.

[0694] Seeing is believing: The reality of hypnotic hallucinations
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Two experiments investigated the reality attributed to hypnotic suggestion through subtle projection of a visual image during simultaneous suggestion for a visual hallucination that resembled the projected image. In Experiment 1, high and low hypnotizable participants were administered either a hypnotic induction or wake instructions, given a suggestion to hallucinate a shape, and then the projected image was subsequently introduced. Although highs in both conditions rated the projected image more vividly than lows, highs in the hypnosis (but not wake) condition made comparable reality ratings when the projected image was absent and present. In Experiment 2, high hypnotizable participants were administered a suggestion to see a shape on a wall. For half the participants the suggested image was projected on the wall and then removed, and for half the projection was initially absent and then introduced. Participants who had the projection absent and then present reported comparable reality and vividness ratings when the projection was absent and present. These findings indicate that elevated hypnotizability and hypnosis are associated with attributions of external reality to suggested experiences.

[0695] Functional neuroanatomy of altered states of consciousness: The transient hypofrontality hypothesis
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It is the central hypothesis of this paper that the mental states commonly referred to as altered states of consciousness are principally due to transient prefrontal cortex deregulation. Supportive evidence from psychological and neuroscientific studies of dreaming, endurance running, meditation, daydreaming, hypnosis, and various drug-induced states is presented and integrated. It is proposed that transient hypofrontality is the unifying feature of all altered states and that the phenomenological uniqueness of each state is the result of the differential viability of various frontal circuits. Using an evolutionary approach, consciousness is conceptualized as hierarchically ordered cognitive function. Higher-order structures perform increasingly integrative functions and thus contribute more sophisticated content. Although this implies a holistic approach to consciousness, such a functional hierarchy localizes the most sophisticated layers of consciousness in the zenithal higher-order structure: the prefrontal cortex. The hallmark of altered states of consciousness is the subtle modification of behavioral and cognitive functions that are typically ascribed to the prefrontal cortex. The theoretical framework presented yields a number of testable hypotheses.

[0696] Therapy and cognitive-behaviour therapy in cancer care: the patients' view
Psychological intervention is not widely available for emotionally distressed patients with cancer. The purpose of this study is to investigate and report on the experiences of eight patients who participated in a programme consisting of hypnotherapy and cognitive-behaviour therapy. Following the 12-session intervention, qualitative analysis of interview data demonstrated that patients had acquired the skills to enable them to cope, both with invasive medical procedures and the psychological traumas they faced. The findings also indicated some initial misconceptions about hypnotherapy and the need to provide a therapy setting sensitive to the needs of cancer patients undergoing active medical treatment.

Subliminal processes, dissociation and the 'I'

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The study of unconscious processes leads to the hypothesis of the limit of consciousness, which involves two main kinds of psychic activity. The first represents psychic contents which are subliminal for their low energy, the second subliminal contents which are inaccessible to consciousness because they are dissociated in the subliminal region. Dissociation is a concept introduced by Pierre Janet for splitting consciousness due to traumatic events or during hypnosis. It takes a more general form in Hilgard's neo-dissociation theory of hypnotic phenomena and also in Jung's theory of the collective unconscious. Further generalization links it to the modern findings of explicit and implicit perception, leading to a shift in dissociation from hypothesis to clinical, experimental and theoretical reality. Studies in hypnosis also point to the existence of an integrative psychic entity, that comprises the conscious 'I'. Hilgard called this the hidden observer, and his findings represent empirical confirmation of Jung's term for the Self as mirror 'I', which leads to many important consequences for self-discovery and the meaning of life.

Brain function and conditioning in posttraumatic stress disorder

Redgrave K

Post-traumatic stress disorder (PTSD) is commonly treated by psychotherapy, which may draw upon behavioural psychology or cognitive-behavioural psychology, thereby making use of desensitisation techniques—amongst others; hypnotherapy may also be used. Hypnotherapy and psychotherapy are also available for helping patients who suffer from symptoms associated with general stress or who show phobic symptoms, such as a fear of heights or of walking across bridges. Studies of patients with such disorders have not always linked emotional (affective) and behavioural symptoms with psychophysical factors, which correlate with the symptoms. The present article not only does this, but also shows that it is possible for brain function and psychoemotional outcome to mislead a person and 'trick' him or her into believing that certain fears or panics appear 'out of the blue' or might be due to experiences other than the true cause. These may be important when, for instance, childhood memories form an issue in any court case.

Psychosocial aspects of functional gastrointestinal disorders

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Psychosocial factors, such as stress, abuse history, psychiatric disturbance, coping style, and learned illness behaviors, play an important role in functional GI disorders in terms of symptom experience and clinical outcome. These psychosocial factors are influenced by and influence GI symptoms in a bidirectional manner as mediated through the brain-gut axis (CNS and ENS pathways). Entering the patient encounter using a biopsychosocial approach and a care (versus cure) style can help avoid excessive diagnostic testing, and elicit crucial information about potential abuse history or psychiatric symptoms that can help guide therapy. Finally, for patients with severe, refractory symptoms, multicomponent treatment involving psychologic therapy, such as CBT, relaxation, or hypnotherapy, can be beneficial.

Role of spirituality in patients with sickle cell disease

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BACKGROUND: Patients with sickle cell disease cope with their disease in various ways, such as psychological counseling, hypnosis, medication, and prayer. Spirituality is a coping mechanism in a variety of diseases. This study evaluates the role of spirituality in patients coping with the pain of sickle cell disease. METHODS: Seventy-one patients from the Georgia Sickle Cell Clinic completed a questionnaire addressing their ability to cope with the pain of sickle cell disease and their degree of spirituality. A descriptive cross-sectional design was used. Correlation and multiple regression
analyses were calculated for the relation between coping with the pain of sickle cell disease and spirituality. RESULTS: The questionnaire provided several scales with high internal consistency for measuring spiritual well-being and its two components, existential well-being and religious well-being, that show a correlation between high levels of spirituality and life control. The study population exhibited high levels of spirituality and religiosity, but the influence of these feelings on coping with sickle cell disease was variable. Spiritual well-being was correlated with life-control but not with perceived pain severity. CONCLUSIONS: Existential well-being was associated with general coping ability. Spiritual well-being is important for some patients who must cope with the pain of sickle cell disease.

[0701]
Use and expenditure on complementary medicine in England: a population based survey
Complement Ther Med. 2001 Mar;9(1):2-11
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OBJECTIVES: Many claims are made that complementary medicine use is a substantial and growing part of health-care behaviour. Estimates of practitioner visits in the USA and Australia indicate high levels of use and expenditure. No reliable population-based estimates of practitioner use are available for the UK. METHODS: In 1998, a previously piloted postal questionnaire was sent to a geographically stratified, random sample of 5010 adults in England. The questionnaire focuses on practitioner contacts, but also asked about the purchase of over-the-counter remedies. Additional information was requested on socio-demographic characteristics, perceived health, and recent NHS resource use. Information on use included reason for encounter, expenditure, insurance, and location of visit. MAIN OUTCOMES MEASURES: Population estimates (by age group and sex) of lifetime use and use in the past 12 months for acupuncture, chiropractic, homoeopathy, hypnotherapy, medical herbalism, osteopathy. Estimates for two additional therapies (reflexology and aromatherapy), and homoeopathic or herbal remedies purchased over-the-counter. Estimates of annual out-of-pocket expenditure on practitioner visits in 1998. RESULTS: A crude response rate of 60% was achieved (adjusted response rate 59%). Responders were older and more likely to be female than non-responders. Usable responses (n = 2669) were weighted using the age/sex profile of the sample frame. From these adjusted data we estimate that 10.6% (95% CI 9.4 to 11.7) of the adult population of England had visited at least one therapist providing any one of the six more established therapies in the past 12 months (13.6% for use of any of the eight named therapies, 95% CI 12.3 to 14.9). If all eight therapies, and self-care using remedies purchased over the counter are included, the estimated proportion rises to 28.3% (95% CI 26.6 to 30.0) for use in the past 12 months, and 46.6% (95% CI 44.6 to 48.5) for lifetime use. All types of use declined in older age groups, and were more commonly reported by women than men (P &lt; 0.01 for all comparisons). An estimated 22 million visits were made to practitioners of one of the six established therapies in 1998. The NHS provided an estimated 10% of these contacts. The majority of non-NHS visits were financed through direct out-of-pocket expenditure. Annual out-of-pocket expenditure on any of the six more established therapies was estimated at pound 450 million (95% CI 357 to 543). CONCLUSION: This survey has demonstrated substantial use of practitioner-provided complementary therapies in England in 1998. The findings suggest that CAM is making a measurable contribution to first-contact primary care. However, we have shown that 90% of this provision is purchased privately. Further research into the cost-effectiveness of different CAM therapies for particular patient groups is now urgently needed to facilitate equal and appropriate access via the NHS.

[0702]
Unconventional therapies for cancer and cancer-related symptoms
Lancet Oncol. 2001 Apr;2(4):226-32
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A significant proportion of cancer patients try unconventional therapies and many use 'complementary' therapies, as adjuncts to mainstream care, for management of symptoms and to improve quality of life. A smaller proportion use 'alternative' therapies, which are typically invasive, biologically active, and commonly promoted as replacements for, rather than adjuncts to, mainstream therapy. Many alternative therapies, including high-dose vitamin C, the Di Bella regimen, and laetrile have been shown not to be effective. For others, such as metabolic therapy, evidence is extremely limited. Conversely, most complementary therapies are well studied and of proven benefit. There is evidence from randomised trials supporting the value of hypnosis for cancer pain and nausea; relaxation therapy, music therapy, and massage for anxiety; and acupuncture for nausea. Such complementary therapies are increasingly provided at mainstream cancer centres.

[0703]
Nurses' perceptions of complementary and alternative medical therapies
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The purpose of this study was to identify the perceptions of nurses toward the effectiveness and safety, as well as their recommendations for and personal use of complementary and alternative medical therapies. A, random sample of 1000 nurses throughout the United States were surveyed using a three-wave mailing. About half of the respondents perceived there was conclusive evidence or preponderance of evidence that five therapies were effective: biofeedback, chiropractic, meditation/relaxation, multi-vitamins, and massage therapy. The same amount of nurses also perceived five therapies as
definitely safe: hypnotherapy, chiropractic, acupressure, acupuncture, and healing touch. However, the nurses were most likely to recommend (regularly or periodically) four therapies: multivitamins, massage, meditation/relaxation, and pastoral/spiritual counseling. The vast majority (79%) of nurses perceived their professional preparation in this area to be fair or poor.

[0704]
Cortical representation of the sensory dimension of pain
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It is well accepted that pain is a multidimensional experience, but little is known of how the brain represents these dimensions. We used positron emission tomography (PET) to indirectly measure pain-evoked cerebral activity before and after hypnotic suggestions were given to modulate the perceived intensity of a painful stimulus. These techniques were similar to those of a previous study in which we gave suggestions to modulate the perceived unpleasantness of a noxious stimulus. Ten volunteers were scanned while tonic warm and noxious heat stimuli were presented to the hand during four experimental conditions: alert control, hypnosis control, hypnotic suggestions for increased-pain intensity and hypnotic suggestions for decreased-pain intensity. As shown in previous brain imaging studies, noxious thermal stimuli presented during the alert and hypnotic-control conditions reliably activated contralateral structures, including primary somatosensory cortex (S1), secondary somatosensory cortex (S2), anterior cingulate cortex, and insular cortex. Hypnotic modulation of the intensity of the pain sensation led to significant changes in pain-evoked activity within S1 in contrast to our previous study in which specific modulation of pain unpleasantness (affect), independent of pain intensity, produced specific changes within the ACC. This double dissociation of cortical modulation indicates a relative specialization of the sensory and the classical limbic cortical areas in the processing of the sensory and affective dimensions of pain.

[0705]
Posthypnotic responding: the relevance of suggestion and test congruence
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Thirty real, hypnotized subjects and 34 simulating, unhypnotized subjects were given either a suggestion to respond when they heard a cue (general) or a suggestion to respond when they heard a cue after hypnosis (posthypnotic). Half the subjects were given the cue during hypnosis (hypnotic test) and half were given it after hypnosis (posthypnotic test). Those who were given the cue during hypnosis were also given it after hypnosis. Between- and within-group comparisons were made of subjects' behavioral responses, latencies to respond, and ratings of experiential compulsion. The findings indicated that subjects' behavior and experience were influenced by congruence between information conveyed by the suggestion and the test about when and how they should respond.

[0706]
Treating adolescent conversion disorders: are hypnotic techniques reusable?
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When treating disabling conversion disorders in hospitalized adolescents, clinicians must act to restore function as rapidly as possible. After attempting to rule out physical causes for the symptoms and trying to find persuasive psychological reasons that the patient will accept and use to resolve the condition, the inpatient staff of a multidisciplinary therapeutic milieu must seek additional approaches to the care of these seriously ill individuals. This clinical forum reports the author's experience treating 2 young patients, a 12-year-old girl and a 15-year-old boy, with hypnosis. Therapists of every experience level find hypnotic techniques that work for them in a variety of patients, but are hypnotic techniques really reusable? The author reports what he learned once again.

[0707]
Irritable bowel syndrome: an update on therapeutic modalities
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Irritable bowel syndrome (IBS) is the most common condition that a physician faces in the GI clinic. Of the general population, 10 - 25% suffer from symptoms judged to be IBS. The negative impact of this disease includes not only pain, suffering and direct medical expenses but also significant social and job-related consequences. IBS can be the result of dysfunction in any part of the brain-gut axis: alterations in the CNS caused by psychological or other factors, abnormal gastrointestinal motility, or heightened visceral sensations. Diagnosis is based on either the Manning or Rome-II criteria. Education, reassurance and emotional support are the cornerstones of successful treatment. The mainstays of the current therapeutic approach continue to be: stress management strategies, dietary modification entailing addition of dietary fibre and pharmacotherapy. Pharmacotherapy is still limited to treating symptoms. Newer drugs that modulate...
motility or drugs that modulate visceral sensation may be useful in selected cases. Psychopharmacological agents are useful in the treatment of IBS, especially in those with psychological co-morbidity. Alternative therapies such as homeopathy, acupuncture, special diets, herbal medication and several forms of psychological treatments and hypnotherapy are sought by many patients and are now being offered by physicians as treatment options, either alone or in conjunction with conventional forms of therapy in patients with refractory symptoms.

[0708]
Rapid self-hypnosis: a new self-hypnosis method and its comparison with the Hypnotic Induction Profile (HIP)
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Despite its clinical importance, there are few systematic studies on the application of self-hypnosis. Rapid Self-Hypnosis (RSH) was created to provide a new procedure that is easy, comfortable, fosters alertness, and can be done covertly in everyday life. We present it as an alternative to the self-hypnosis version of the Hypnosis Induction Profile (HIP). Using a crossover design, we found in an experimental session that the RSH and the HIP produced comparable objective and subjective scores in the Barber Suggestibility Scale (BSS). However, as compared with the HIP, participants rated RSH as significantly more coherent, pleasant, faster and easier to learn, more likely to be used in everyday life and go unnoticed by others, less bothersome to use, and more likely to be used in private. Additional research should clarify whether these differences are reliable and have clinical significance. Our results suggest that RSH will be a valuable addition to the clinician’s arsenal.

[0709]
Improved recovery after music and therapeutic suggestions during general anaesthesia: a double-blind randomised controlled trial
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PURPOSE: This study was designed to determine whether music or music in combination with therapeutic suggestions in the intra-operative period under general anaesthesia could improve the recovery of hysterectomy patients. METHODS: In a double-blind randomised clinical investigation, 90 patients who underwent hysterectomy under general anaesthesia were intra-operatively exposed to music, music in combination with therapeutic suggestion or operation room sounds. The anaesthesia was standardised. Postoperative analgesia was provided by a patient-controlled analgesia (PCA). The pain scores were recorded by means of a visual analogue scale. Nausea, emesis, bowel function, fatigue, well-being and duration of hospital stay were studied as outcome variables. RESULTS: On the day of surgery, patients exposed to music in combination with therapeutic suggestions required less rescue analgesic compared with the controls. Patients in the music group experienced more effective analgesia the first day after surgery and could be mobilised earlier after the operation. At discharge from the hospital patients in the music and music combined with therapeutic suggestion group were less fatigued compared to the controls. No differences were noted in nausea, emesis, bowel function, well-being or length of hospital stay between the groups. CONCLUSION: This double-blind study has demonstrated that intra-operative music and music in combination with therapeutic suggestions may have some beneficial effects on postoperative recovery after hysterectomy. Further controlled studies are necessary to confirm our results.

[0710]
Which complementary and alternative therapies benefit which conditions? A survey of the opinions of 223 professional organizations
Complement Ther Med. 2001 Sep;9(3):178-85
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With the increasing demand and usage of complementary/alternative medicine (CAM) by the general public, it is vital that healthcare professionals can make informed decisions when advising or referring their patients who wish to use CAM. Therefore they might benefit from advice by CAM-providers as to which treatment can be recommended for which condition. AIM: The primary aim of this survey was to determine which complementary therapies are believed by their respective representing professional organizations to be suited for which medical conditions. METHOD: 223 questionnaires were sent out to CAM organizations representing a single CAM therapy. The respondents were asked to list the 15 conditions they felt benefited most from their CAM therapy, the 15 most important contra-indications, the typical costs of initial and any subsequent treatments and the average length of training required to become a fully qualified practitioner. The conditions and contra-indications quoted by responding CAM organizations were recorded and the top five of each were determined. Treatment costs and hours of training were expressed as ranges. RESULTS: Of the 223 questionnaires sent out, 66 were completed and returned. Taking undelivered questionnaires into account, the response rate was 34%. Two or more responses were received from CAM organizations representing twelve therapies: aromatherapy, Bach flower remedies, Bowen technique, chiropractic, homeopathy, hypnotherapy, magnet therapy, massage, nutrition, reflexology, Reiki and yoga. The top seven common conditions deemed to benefit by all twelve therapies, in order of frequency, were: stress/anxiety, headaches/migraine, back pain, respiratory problems (including asthma), insomnia, cardiovascular problems and musculoskeletal problems. Aromatherapy, Bach flower remedies, hypnotherapy, massage, nutrition, reflexology, Reiki and yoga were all recommended as suitable treatments for...
stress/anxiety. Aromatherapy, Bowen technique, chiropractic, hypnotherapy, massage, nutrition, reflexology, Reiki and yoga were all recommended for headache/migraine. Bowen technique, chiropractic, magnet therapy, massage, reflexology and yoga were recommended for back pain. None of the therapies cost more than £60 for an initial consultation and treatment. No obvious correlation between length of training and treatment cost was apparent.

CONCLUSION: The recommendations by CAM organizations responding to this survey may provide guidance to health care professionals wishing to advise or refer patients interested in using CAM.

[0711]
Assessment of the effects of a taped cognitive behavior message on postoperative complications (therapeutic suggestions under anesthesia)
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BACKGROUND: The authors studied whether playing a taped cognitive-behavior message during and immediately following bariatric surgery will improve performance of a postoperative regimen designed to enhance recovery.

METHODS: The double-blinded placebo-controlled study consisted of 27 morbidly obese bariatric surgical patients randomly assigned to listen to either a blank (Controls) or a positive therapeutic message audiotape (Tape). A Postoperative Regimen Checklist (PRC) quantified different parts of the postoperative recovery regimen. RESULTS: The data showed that patients in the Tape group, compared to the Controls: 1) achieved better scores at most PRC assessment points (p &lt; 0.05), 2) required less encouragement to perform tasks (p &lt; 0.05), and 3) were discharged from the hospital a mean of 1.6 days earlier. CONCLUSIONS: A taped cognitive-behavioral message, played to patients repetitively during and immediately following bariatric surgery, is effective in enhancing postoperative compliance and reducing in-patient length of stay.

[0712]
How events are reviewed matters: effects of varied focus on eyewitness suggestibility
Mem Cognit. 2001 Oct;29(7):940-7
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Witnesses to a crime or an accident perceive that event only once, but they are likely to think or talk about it multiple times. The way in which they review the event may affect their later memory. In particular, some types of review may increase suggestibility if the witness has been exposed to postevent misleading information. In Experiment 1, participants viewed a videotaped crime and then received false suggestions about the event. We found that participants who were then asked to focus on specific details when reviewing the event were more suggestible on a later source memory test than participants asked to review the main points. The findings of Experiment 2 suggest that this effect was not due to a criterion shift at test. These findings indicate that the type of rehearsal engaged in after witnessing an event can have important consequences for memory and, in particular, suggestibility.

[0713]
Interviewing witnesses: forced confabulation and confirmatory feedback increase false memories
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In two experiments, adults who witnessed a videotaped event subsequently engaged in face-to-face interviews during which they were forced to confabulate information about the events they had seen. The interviewer selectively reinforced some of the participants' confabulated responses by providing confirmatory feedback (e.g., "Yes, ______ is the correct answer") and provided neutral (uninformative) feedback for the remaining confabulated responses (e.g., "O.K______"). One week later participants developed false memories for the events they had earlier confabulated knowingly. However, confirmatory feedback increased false memory for forcibly confabulated events, increased confidence in those false memories, and increased the likelihood that participants would freely report the confabulated events 1 to 2 months later. The results illustrate the powerful role of social-motivational factors in promoting the development of false memories.

[0714]
First-line treatment for osteoarthritis. Part 2: Nonpharmacologic interventions and evaluation
Orthop Nurs. 2001 Nov-Dec;20(6):13-8; quiz 18-20
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Because of the chronic nature of osteoarthritis, nonpharmacologic interventions provide the client with self-care strategies that may lessen pain, improve physical functioning, and increase independence and sense of control. Nonpharmacologic interventions include exercise, rest and joint protection, heat and cold, hydrotherapy, therapeutic touch, acupuncture/acupressure, biofeedback, hypnotherapy, cognitive-behavioral techniques, activity and home maintenance modification, nutrition, and transportation interventions. Most of these therapies are very useful for nurses as independent interventions. Suggestions for evaluation of interventions are made.
This study examines the effects of certain types of information processing on the subjective experience of cognitive deficits in persons with chronic fatigue syndrome (CFS). Two groups of participants, persons with CFS and a group of healthy controls, were administered a symptom inventory and measures of intellectual functioning, memory, automatic processing, and suggestibility. The groups differed significantly on number and severity of reported symptoms and on measures of global suggestibility and automatic processing, but not on measures of intellectual functioning and memory. Suggestibility was related to number and severity of reported symptoms, as well as the inability to inhibit the automatic processing of information. Implications of these findings are discussed, as well as directions for future research and treatment of symptoms associated with CFS.

Biopsychosocial approaches to the treatment of chronic pain
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BACKGROUND: Biopsychosocial treatments address the range of physical, psychological, and social components of chronic pain. OBJECTIVE: This review sought to determine how effective unimodal and multimodal biopsychosocial approaches are in the treatment of chronic pain. METHODOLOGY: The literature search identified three systematic reviews of the literature and 21 randomized controlled trials to provide the evidence for this review. RESULTS: The systematic reviews and 12 randomized controlled trials reported on chronic low back pain. Other randomized controlled trials studied fibromyalgia (three trials) and back or other musculoskeletal disorders (five trials). Biopsychosocial components reviewed were electromyogram feedback and hypnosis as unimodal approaches, and behavioral and cognitive-behavioral treatments and back school, or group education, as multimodal approaches for chronic low back pain. For other chronic pain disorders, cognitive-behavioral treatments were reviewed. Comparisons were hindered by studies with heterogeneous subjects, varied comparison groups, different cointerventions and follow-up times, variable outcomes, and a range of analytic methods. CONCLUSIONS: Multimodal biopsychosocial treatments that include cognitive-behavioral and/or behavioral components are effective for chronic low back pain and other musculoskeletal pain for up to 12 months (level 2). There is limited evidence (level 3) that electromyogram feedback is effective for chronic low back pain for up to 3 months. The remaining evidence of longer-term effectiveness and of effectiveness of other interventions was inadequate (level 4a) or contradictory (level 4b). Future studies of cognitive-behavioral treatments should be condition specific, rather than include patients with different pain conditions.

Dental distress. A possible relief
Boudy M

The exacting task of endodontics can be considerably complicated by the behaviour of patients who have heightened fears and reactions to the manipulations involved. Hypnotherapy may offer a way to reduce these fears and enhance the comfort of both patient and dentist.

A primer of complementary and alternative medicine and its relevance in the treatment of mental health problems
Psychiatr Q. 2002 Winter;73(4):367-81
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The use of complementary and alternative medicine (CAM) is widespread. Those with psychiatric disorders are more likely to use CAM than those with other diseases. There are both benefits and limitations to CAM. Many controlled studies have yielded promising results in the areas of chronic pain, insomnia, anxiety, and depression. There is sufficient evidence, for example, to support the use of a) acupuncture for addiction problems and chronic musculoskeletal pain, b) hypnosis for cancer pain and nausea, c) massage therapy for anxiety, and the use of d) mind-body techniques such as meditation, relaxation, and biofeedback for pain, insomnia, and anxiety. Large doses of vitamins, herbal supplements, and their interaction with conventional medications are areas of concern. Physicians must become informed practitioners so that they can provide appropriate and meaningful advice to patients concerning benefits and limitations of CAM.

Treatment of childhood eczema
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Eczema in childhood is almost always atopic eczema, a common disease with huge impact on the quality of life of the child and family. Although atopic eczema constitutes part of the atopic syndrome, avoidance of allergens is never enough for disease control. Treatment of eczema in childhood has the same components as in adults. Emollients constitute the preventive background therapy in all stages of eczema, and topical corticosteroids are still the mainstay of treatment. Infectious exacerbation may require the use of a short course of topical or systemic antimicrobials. UV phototherapy should be considered as an adjunctive treatment to assist topical corticosteroids after an acute exacerbation of the disease. Cyclosporine can also be used in the treatment of childhood eczema in severe cases. Maternal allergen avoidance for disease prevention, oral antihistamines, Chinese herbs, dietary restriction in established atopic eczema, homeopathy, house-dust mite reduction, massage therapy, hypnotherapy, evening primrose oil, emollients, and topical coal tar are other temporarily used treatment modalities, without, however, firm evidence of efficacy from proper controlled trials. Calcineurin inhibitors constitute a new generation of drugs for both adult and childhood eczema already marketed in some countries. It is postulated that they will replace topical corticosteroids as first-line treatment of eczema.

[0720]
Video-hypnosis—the provision of specialized therapy via videoconferencing
J Telemed Telecare. 2002;8 Suppl 2:78-9
Simpson S, Morrow E, Jones M, Ferguson J, Brebner E
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Hypnosis is not normally accessible to patients living in remote areas. We conducted a pilot study to evaluate the feasibility of providing hypnosis via videoconferencing, using ISDN at 384 kbit/s. Eleven of 15 patients invited to do so took part. Ten of the 11 stated that they were satisfied with the video-hypnosis session and all indicated that they would like to have further video-hypnosis sessions in the future. Sound quality and image quality were acceptable during nearly all sessions, in spite of some interference as a result of technical problems and weather conditions. The results suggest that hypnosis can be provided successfully via videoconferencing.

[0721]
Verrucae vulgares in children: successful simulated X-ray treatment (a suggestion-based therapy)
Dermatology. 2002;204(4):287-9
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BACKGROUND: Treatment of verrucae vulgares is sometimes difficult. Invasive methods should not be used for young children. OBJECTIVE: Evaluation of a special suggestion therapy for treatment of verrucae vulgares in children.
METHODS: Nine children with warts on the hands and/or feet and in the face were treated with a simulated X-ray treatment. RESULTS: Five children showed a complete remission of warts, 3 children a partial remission. For 1 child, there was no response. On average, 3 treatment sessions were needed for children showing a complete remission. CONCLUSION: This therapy offers an easy-to-perform, alternative treatment option. It is noninvasive and does not depend on special psychological techniques for which training is required. Copyright 2002 S. Karger AG, Basel

[0722]
Methods for assessing adequacy of anesthesia
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Assessing adequacy of anesthesia requires evaluation of its components: hypnosis, analgesia, and neuromuscular transmission. In order to do this, many methods have been developed that process signals representing different modalities. Assessment of hypnosis requires cortical measures of the central nervous system (CNS); methods that assess analgesia concentrate on subcortical and spinal levels of the CNS; and neuromuscular transmission is a peripheral phenomenon. This article presents an overview of the current state of methods available for measuring each of these components. We conclude that, whereas important gains have been made in the area of assessment of hypnosis, mainly owing to the advancement of methods using EEG and auditory evoked potentials, and whereas neuromuscular transmission can be objectively monitored using motor nerve stimulation, assessment of analgesia still contains many challenges.

[0723]
[Oxytocin: a natural means of treating psychological stress]
Bull Mem Acad R Med Belg. 2002;157(7-9):383-9; discussion 389-90
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Oxytocin as an endogenous antistress hormone. The neurohypophysial peptide oxytocin (OT), besides it well known uterotonic and milk ejection activity, share also an inhibitory action on corticotrope activity. This has been demonstrated not only in pharmacological (perfusion) but also in physiological (lactation) conditions. This action is opposite to that of its "sister" hormone vasopressin (AVP) thus bringing arguments favouring the ago-antagonist ying-yang hypothesis. A non pharmacological stimulation of oxytocine secretion, as we have recently demonstrated in a preliminary study, related to hypnosis, could induce a beneficial inhibition of corticotrop axis and needs further rigorous experimental approach.
Recent works on Lourdes have tended to emphasize the positive personal, social, and spiritual aspects of a pilgrimage, while downplaying the role of religious politics in (over)determining discussions around the events taking place there over the course of the Third Republic. This paper seeks to reassert the extent to which the medical community remained divided, along religious lines, over the existence and nature of the cures taking place at Lourdes well into the twentieth century, while analyzing how Catholic physicians were able to create an aura of therapeutic credibility around the cures.

In this study explored the generalizability of the Video Suggestibility Scale for Children (VSSC), which was developed by Scullin and colleagues (Scullin & Ceci, 2001; Scullin & Hembrooke, 1998) as a tool for discriminating among children (aged three to five years) who have different levels of suggestibility. The VSSC consists of two subscales; Yield (a measure of children's willingness to acquiesce to misleading questions) and Shift (a measure of children's tendency to change their responses after feedback from the interviewer). Children's (N = 77) performance on each of the subscales was compared with their performance using several other measures of suggestibility. These measures included children's willingness to assent to a false event as well as the number of false interviewer suggestions and false new details that the children provided when responding to cued-recall questions about an independent true-biased and an independent false (non-experienced) event. An independent samples t-test revealed that those children who assented to the false event generated higher scores on the Yield measure. Hierarchical regression analyses revealed that Yield was a significant predictor of the dependent variables. The potential contribution of the VSSC for forensic researchers and practitioners is discussed. Copyright 2002 John Wiley & Sons, Ltd.

The objective of this article is to provide a brief, but critical, overview of the evidence related to complementary/alternative medicine (CAM) use, and to offer valid and useful information for dermatologists in clinical practice. Systematic literature searches were conducted on these databases: Medline, EMBASE, The Cochrane Library, CISCOM and AMED (until October 2000). Where appropriate, the evaluation of the published literature was based on systematic reviews and randomized controlled trials. After scanning the literature it was decided to focus on a selection of two conditions (atopic dermatitis and chronic venous insufficiency) and two treatment modalities (aloe vera gel and tea tree oil). Data for the life-time prevalence of CAM use by patients with dermatological disease ranges between 35 to 69%. The most popular modalities include herbalism and (other) dietary supplements, while atopic dermatitis is one of the conditions most frequently treated with CAM. For patients with atopic dermatitis the evidence relates to autogenic training, hypnotherapy, diet, herbal medicine, and dietary supplements. Compelling evidence of effectiveness exists for none of these therapies. However, some promising data have been reported for those with a psychological component: autogenic training.
biofeedback and hypnotherapy. For chronic venous insufficiency there is relatively convincing evidence for the effectiveness of oral horse chestnut seed extract. The data for aloe vera gel and tea tree oil indicate that for neither is there compelling evidence of effectiveness. The use of CAM treatments is not free of risk; direct and indirect risks associated with CAM must be considered.

[0728]
The urge to smoke depends on the expectation of smoking
Addiction. 2002 Jan;97(1):87-93
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AIMS: An earlier study (Dols et al. 2000) suggested that cue-induced urge to smoke depends on the expectation of smoking. The present study tried to replicate the findings under stringently controlled conditions. DESIGN: A 2 (context) x 2 (cues) x 6 (trial) within-subject design. Each smoker entered two different contexts: one context predicted the future occurrence of smoking (i.e. one puff of a cigarette) and one context predicted the non-occurrence of smoking. In each context smokers were exposed to smoking cues (i.e. cigarettes and lighter) or not. SETTING: Laboratory at Maastricht University. PARTICIPANTS: Thirty-two daily smokers, smoking at least five cigarettes a day for at least 2 years. MEASUREMENTS: Participants reported their urge to smoke in each context in the presence and absence of smoking cues using a computerized visual analogue scale (VAS). FINDINGS: The results revealed that the urge to smoke was higher in a context in which smoking was expected relative to a context in which it was not expected. As in the previous study the urge-inducing effect of smoking cues was larger in the smoking context than in the non-smoking context. Moreover, smoking cues did not have a significant effect in the non-smoking context. CONCLUSIONS: It was shown that smoking cues elicit craving due mainly to a generated expectation of the occurrence of smoking and less due to salience or long history of associative learning. Theoretical and practical implications of the results are discussed.

[0729]
Hypnotic susceptibility and alterations in subjective experiences
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Pavlov has described hypnosis as a partial sleep. A contemporary approach to this altered state of consciousness will be discussed. Under laboratory conditions subjective and behavioral data will be analyzed after hypnotic induction, shamanic trance and relaxation with listening to music. Role of different cortical regions will be shown after different hypnotic inductions as a function of hypnotic susceptibility. The importance of context will be underlined as an important factor in the possible alteration of consciousness.

[0730]
Modulation and experience of external stimuli: toward a science of experience and interoception
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The concept of interoception can be found in various writing over the past 100 or more years dating back to Sherrington, James and Lange. Professor Gyorgy Adam that made American scientists increasingly aware of the importance of interoception with his 1967 book Interoception and Behavior. In this article we want to discuss two areas of research from our laboratory that have been influenced from this perspective. First, we will focus on electrocortical correlates of error detection during visual-motor task and examine the manner in which an individual becomes aware of making an error as well as the way in which this awareness directs behavior on an ongoing basis. Second, we will examine hypnotic modulation of the pain experience and describe the manner in which electrocortical processes reflect the modulation and experience of pain. In this discussion, we suggest the importance of the anterior cingulate in not only modulating these processes in particular but also in its more general role as an interface between the limbic system and the neocortex and the integration of cognitive with emotional stimuli.

[0731]
[Development of Autogenic Training Clinical Effectiveness Scale (ATCES)]
Shinrigaku Kenkyu. 2002 Feb;72(6):475-81
Ikezuki M, Miyachi Y, Yamaguchi H, Koshikawa F
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The purpose of the present study was to develop a scale measuring clinical effectiveness of autogenic training. In Study 1, 167 undergraduates completed a survey of items concerning physical and mental states, which were thought to vary in the course of autogenic training. With item and factor analyses, 20 items were selected, and the resulting scale (ATCES) had high discrimination and clear factor structure. In Study 2, reliability and concurrent and clinical validity of the scale were examined with three groups of respondents: 85 mentally healthy, 31 control, 13 clinical persons. The scale showed a high test-retest correlation (r = .83) and alpha coefficient (alpha = .86). ATCES had a Pearson correlation coefficient of r = .56 with General Health Questionnaire (GHQ-12), and r = .73 with trait anxiety (STAI-T). And ATCES successfully discriminated the mentally healthy and clinical groups in terms of clinical effectiveness. These results demonstrated high
Reducing child witnesses’ false reports of misinformation from parents
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This study explored whether a source-monitoring training (SMT) procedure, in which children distinguished between events they recently witnessed versus events they only heard described, would help 3- to 8-year-olds to report only experienced events during a target interview. Children (N = 132) who witnessed science demonstrations and subsequently heard their parents describe nonexperienced events received SMT before or after a forensic-style interview. SMT reduced the number of false reports that 7- and 8-year-old children reported in response to direct questions but had no impact on the performance of younger children. Combined with earlier results, these data suggest a transition between 3 and 8 years of age in the strategic use of source-monitoring information to support verbal reports, such that only 7- and 8-year-olds generalize training to a difficult memory task that does not include mention of specific alternative sources. Copyright 2002 Elsevier Science.

The role of suggestions and personality characteristics in producing illness reports and desires for suing the responsible party
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For this project, 92 students entered an abandoned theater room in an old basement of the university where sand was scattered throughout. The purpose of the study was to experimentally demonstrate that psychological suggestions could produce illness reports and to explore who is most likely to say that they would sue for personal damages. The students filled out the Trait-State Anger Scale and two subscales, Anger Temperament and Anger Reaction (C. D. Spielberger, G. A. Jacobs, S. Russell, & R. S. Crance, 1983) as well as the Costello-Comrey Anxiety Scale (G. C. Costello & A. L. Comrey, 1967), the Hardiness Inventory (S. C. Kobasa, 1982), the Pennebaker Inventory of Limbic Languidness (J. W. Pennebaker, 1982), and, embedded in the Hardiness Inventory, measures of current illness as a result of exposure to the basement room. Half the participants were met by a confederate student who claimed to be cleaning up the remains of a production of "Lawrence of Arabia," and the other half were met by a confederate construction worker who claimed that "The stuff will tear up your skin and your lungs." Those in the experimental groups who perceived danger and scored low in the hardness dimension of challenge were more likely to report symptoms of illness. Willingness to file a law suit was predicted by a model including perceived danger and the personality characteristic of anger reactivity.

The effects of a caffeine placebo and suggestion on blood pressure, heart rate, well-being and cognitive performance
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We studied the effect of suggestion and different instructions in a balanced placebo design. One hundred and fifty-nine subjects were randomized into a 2*4 factorial design. All subjects except a control group received a caffeine placebo. Subjects were randomized to a condition which was identical to an earlier study, or received an information about scientifically proven effects of caffeine (factor 1). The second factor varied instructions: subjects were either made to expect coffee, no coffee or were in a double blind condition and were told either coffee or placebo would be applied. Dependent measures were blood pressure, heart rate, well-being and a cognitive task. There was one main effect of the instruction factor (P=0.03) on diastolic blood pressure, with the group 'told caffeine' reporting significantly smaller decrease in diastolic blood pressure than controls and subjects in the double blind condition. There were no other main effects on both the instruction or suggestion factor, and no interactions. Contrary to the literature, instruction effects were very small. This was apparently due to the fact that placebo-caffeine in the dose used in this study--one cup of strong 'coffee'--did not produce expectancy effects strong enough to affect the parameters measured. It is concluded that the placebo-caffeine research paradigm is not suitable for researching instruction effects in Germany, and that reported effects should be reproduced with tighter controls.

First year medical students’ perceptions and use of complementary and alternative medicine
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OBJECTIVES: To explore First Year medical students’ rating of CAM therapies following a core teaching session. To determine the influence of student gender and previous experience of CAM and therapist/teacher gender and professional background on ratings. DESIGN: Survey; self-administered questionnaire following a teaching session.
SETTING: First Year medical students Behavioural Science module CAM teaching session, University of Birmingham Medical School, UK. RESULTS: One hundred and fifty (71.0%) students completed a questionnaire. 56 (37.3%) students had previous experience of CAM, particularly where a family member already used it (P = &lt; 0.001). Aromatherapy (29/56, 51.7%) and homeopathy (17/56, 30.3%) were the most common therapies listed. Females were more likely than males to have used aromatherapy (P = 0.038) or reflexology (P = 0.007). Students using aromatherapy were more likely to have self treated (P = 0.01). Of 82 episodes of CAM use, most (67/82, 81.7%) were stated to have been helpful. Hypnotherapy (P = 0.003) and aromatherapy (P = 0.015) were most helpful. Following the teaching session students rated therapies observed on a 10 point scale, 1 (extremely sceptical) to 10 (totally convinced). All were rated above the mid-point; highest rated was chiropractic (median score = 8), lowest, reflexology (median score = 5.06). Students who had previously used hypnotherapy gave it higher scores (P = 0.018). Students whose family used CAM were more likely to rate aromatherapy highly (P = .027) and to give homeopathy a low score (P = 0.003). CONCLUSIONS: A short CAM teaching session early in the curriculum can inform students about the relationship of CAM with current medical practice. It can be used as a ‘taster’ prior to selection of Special Study Module choices in later years.

[0736]
Autogenic training: a meta-analysis of clinical outcome studies
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Autogenic training (AT) is a self-relaxation procedure by which a psychophysiological determined relaxation response is elicited. A meta-analysis was performed to evaluate the clinical effectiveness of AT. Seventy-three controlled outcome studies were found (published 1952-99). Sixty studies (35 randomized controlled trials [RCT]) qualified for inclusion in the meta-analysis. Medium-to-large effect sizes (ES) occurred for pre-post comparisons of disease-specific AT-effects, with the RCTs showing larger ES. When AT was compared to real control conditions, medium ES were found. Comparisons of AT versus other psychological treatment mostly resulted in no effects or small negative ES. This pattern of results was stable at follow-up. Unspecific AT-effects (i.e., effects on mood, cognitive performance, quality of life, and physiological variables) tended to be even larger than main effects. Separate meta-analyses for different disorders revealed a significant reduction of the heterogeneity of ES. Positive effects (medium range) of AT and of AT versus control in the meta-analysis of at least 3 studies were found for tension headache/migraine, mild-to-moderate essential hypertension, coronary heart disease, asthma bronchiale, somatoform pain disorder (unspecified type), Raynaud's disease, anxiety disorders, mild-to-moderate depression/dysthymia, and functional sleep disorders.

[0737]
Effects of autogenic training in elderly patients
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Autogenic training (AT) is a widely available relaxation method with beneficial outcome on physiological and psychological functioning. In our study, we wanted to test the effects of an AT course in cognitively impaired, frail elderly. After a 3 month waiting period (control), AT courses (intervention) of 3 months duration were offered in 2 nursing homes. Thirty-two frail elderly took part in the study, 24 of them had a psychiatric diagnosis (mean age 82.1 +/- 7.2 years, CAMCOG 75.5 +/- 15.7, MMSE 23.3 +/- 4.3, HAMD 10.0 +/- 3.6, NOSGER 57.2 +/- 18.4, AT-SYM 32.9 +/- 17.6 points). Eight participants dropped out during the waiting period, 8 during the course. From the 16 participants, 15 (94%) were able to learn the AT according to subjective, 9 (54%) according to objective criteria. The ability to practice the AT successfully correlated with the CAMCOG (p = 0.001) and the NOSGER (p = 0.01) score. Participants with a dementia syndrome had major difficulties, whereas age, depressiveness, and number of complaints (AT-SYM) had no influence on the ability to learn the AT. There was no intervention effect, measured with the HAMD, NOSGER, AT-SYM and MMSE. In the pre-post comparison of training sessions, a significant improvement in general well being was found (p < 0.001). Mentally impaired, frail elderly participants are able to learn the AT. Cognitive impairment is disadvantageous for a successful participation.

[0738]
Distinguishing between the self-descriptive task and the autobiographical retrieval task: evidence from the conceptually-driven test on the implicit instruction
Shinrigaku Kenkyu. 2002 Apr;73(1):82-7
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Klein and Loftus (1993) claimed that both trait-descriptive and autobiographical information about the self is available in memory, and that each can be addressed independently (the former is in the semantic memory system, the later is in the episodic memory system). In order to examine the validity of their claim, the conceptually-driven test on the implicit instruction was used. In Experiment 1, the self-descriptive task ("Does this word describe you?") produced better performance than the semantic task. However, in Experiment 2, there was no difference in performance between the autobiographical task ("Can you access a personal experience?") and the semantic task. These results were discussed in terms of a principle of transfer-appropriate processing, and it was interpreted that the difference in the results of the two
The development and evaluation of psychotherapeutic approaches for survivors of childhood trauma has been complicated by numerous conceptual and methodological challenges. Randomized controlled clinical trials are rare, and most of these test cognitive behavioral therapy with sexually abused children. This article reviews psychosocial (nonpharmacological) treatment approaches with child and adult survivors of childhood trauma, highlighting methodologically sound studies of treatment efficacy. Implications of efficacy data for clinical practice and future research are discussed. Copyright 2002, Elsevier Science.

This study reports how placebo analgesia was produced by conditioning whereby the intensity of electric stimulation was surreptitiously reduced in order to examine the contribution of psychological factors of suggestibility and expectancy on placebo analgesia. This strategy was used in order to manipulate expectancy for pain reduction. The magnitudes of the placebo effects were estimated after a manipulation procedure and during experimental trials in which stimulus intensities were reset to original baseline levels. Individual differences in suggestibility, verbal expectancy for drug efficacy and manipulation procedure for pain reduction were tested as possible mediators of placebo analgesia. The following dependent variables were measured: (a) subjective expectancy for drug efficacy in pain relief, (b) expected pain intensity and unpleasantness, (c) concurrent pain intensity and unpleasantness and (d) remembered pain intensity and unpleasantness. Statistically significant placebo effects on sensory and affective measures of pain were obtained independently of the extent of the surreptitious lowering of stimulus strength during manipulation trials. The pairing of placebo administration with painful stimulation was sufficient to produce a generalized placebo analgesic effect. However, verbal expectancy for drug efficacy and individual differences in suggestibility were found to contribute significantly to the magnitude of placebo analgesia. The highest placebo effect was shown by the most pronounced reductions in pain ratings in highly suggestible subjects who received suggestions presumed to elicit high expectancy for drug efficacy. The results also demonstrated that placebo effects established on remembered pain were at least twice as great as those obtained on concurrent placebo effects. This was mainly because baseline pain was remembered as being much more intense than it really was. Moreover, remembered placebo effects, like the concurrent placebo effects, were highly correlated with expected pain scores obtained just after manipulation trials. These results indicate that multiple factors contribute to the placebo effect, including suggestibility, expectancy and conditioning, and that the judgement of placebo analgesia is critically determined by whether pain relief is assessed concurrently or after treatment.
OBJECTIVE: To assess the yield of recorded habitual non-epileptic seizures during outpatient video EEG, using simple suggestion techniques based on hyperventilation and photic stimulation. DESIGN: Randomised controlled trial of "suggestion" v "no suggestion" during outpatient video EEG recording. SETTING: Regional epilepsy service (tertiary care; single centre). PARTICIPANTS: 30 patients (22 female, 8 male), aged over 16 years, with a probable clinical diagnosis of non-epileptic seizures; 15 were randomised to each group. MAIN OUTCOME MEASURES: Yield of habitual non-epileptic seizures recorded, and requirement for additional inpatient video EEG. RESULTS: 10/15 patients had habitual non-epileptic seizures with suggestion; 5/15 had non-epileptic seizures with no suggestion (p = 0.058; NS); 8/9 patients with a history of previous events in medical settings had non-epileptic seizures recorded during study. Logistic regression analysis with an interaction clause showed a significant effect of suggestion in patients with a history of previous events in medical settings (p = 0.003). An additional inpatient video-EEG was avoided in 14 of the 30 patients (47%). CONCLUSIONS: Habitual non-epileptic seizures can be recorded reliably during short outpatient video EEG in selected patients. Simple (non-invasive) suggestion techniques increase the yield at least in the subgroup with a history of previous events in medical settings. Inpatient video EEG can be avoided in some patients.

[0743]
Does the nature of the experience influence suggestibility? A study of children's event memory
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Two experiments examined the effects of event modality on children's memory and suggestibility. In Experiment 1, 3- and 5-year-old children directly participated in, observed, or listened to a narrative about an event. In an interview immediately after the event, free recall was followed by misleading or leading questions and, in turn, test recall questions. One week later children were reinterviewed. In Experiment 2, 4-year-old children either participated in or listened to a story about an event, either a single time or to a criterion level of learning. Misleading questions were presented either immediately or 1 week after learning, followed by test recall questions. Five-year-old children were more accurate than 3-year-olds and those participating were more accurate than those either observing or listening to a narrative. However, method of assessment, level of event learning, delay to testing, and variables relating to the misled items also influenced the magnitude of misinformation effects. Copyright 2002 Elsevier Science (USA).

[0744]
How practitioners (and others) can make scientifically viable contributions to clinical-outcome research using the single-case time-series design
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Although clinicians typically possess considerable interest in research, especially about which interventions do and do not work, all too often they dismiss the notion that they themselves can make viable scientific contributions to the outcome literature. This derives from an unfortunate assumption that the only true experiment is a between-groups experiment. There is another form of true experiment that is perfectly compatible with real-world clinical practice: the single-case time-series design. Intensive and systematic tracking of one or a few patients over time can yield viable inferences about efficacy, effectiveness, and, under some circumstances, mechanism of change. This paper describes how clinicians working with hypnosis can carry out such research. The rationale and essential features of time-series studies are outlined; each design is illustrated with actual studies from the hypnosis literature; and new methods of statistical analysis, well within the statistical competence of practitioners, are described.

[0745]
Source monitoring reduces the suggestibility of preschool children
Psychol Sci. 2002 May;13(3):286-91
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The relation between source monitoring and suggestibility was examined among preschool children. Thirty-two 3- to 5-year-olds were simultaneously presented with a brief story in two different modalities, as a silent video vignette and a spoken narrative. Each modality presented unique information about the story, but the information in the two versions was mutually compatible. The children were then asked a series of questions, including questions about the source (modality) of story details, and leading questions about story details (to assess suggestibility). Performance on the source-monitoring questions was highly correlated with the ability to resist suggestion. In addition, children who were asked source-monitoring questions prior to leading questioning were less susceptible to suggestion than were those who were asked the leading questions first. This study provides evidence that source monitoring can play a causal role in reducing the suggestibility of preschool children.

[0746]
[Recall and pseudo-memory. On the yearning to be a trauma victim]
Nervenarzt. 2002 May;73(5):445-51
Stoffels H, Ernst C
Memories are not called up from "storage" but instead are constructed anew in each case. Although many experiments have proven that memories are visual and inaccurate, many psychotherapists still assume that memories which surface during therapy are realistic representations of facts. They do not take into account that reminiscences (pseudomemories) of events can be planted in the memory by the imagination or through behavioral pressure. In light of this, the question arises as to why some patients during therapy tend to invent in particular memories of traumatic early childhood experiences. The authors assume that certain suggestive elements come to bear with victimization. The advantage gained is of great importance and has many facets. The case of Wilkomirski proves that mystification of the ego via identification with victims is not only provoked in psychotherapeutic treatment but also is a means of gaining public attention and support. As concerns the therapeutic handling of actual emotional traumatization (whose pathogenic significance and long-term effects used to be underestimated), suggestive and autosuggestive processes play a large role. In this respect, modern trauma research and psychotherapy are faced with special challenges.

[0747]
Predictors of response to a behavioral treatment in patients with chronic gastric motility disorders
Dig Dis Sci. 2002 May;47(5):1020-6
Rashed H, Cutts T, Abell T, Cowings P, Toscano W, El-Gammal A, Adl D
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Chronic gastric motility disorders have proven intractable to most traditional therapies. Twenty-six patients with chronic nausea and vomiting were treated with a behavioral technique, autonomic training (AT) with directed imagery (verbal instructions), to help facilitate physiological control. After treatment, gastrointestinal symptoms decreased by 30% in 58% of the treated patients. We compared those improved patients to the 43% who did not improve significantly. No significant differences existed in baseline symptoms and autonomic measures between both groups. However, baseline measures of gastric emptying and autonomic function predicted treatment outcome. Patients who improved manifested mild to moderate delay in baseline gastric emptying measures. The percent of liquid gastric emptying at 60 mins and the sympathetic adrenergic measure of percent of change in the foot cutaneous blood flow in response to cold stress test predicted improvement in AT outcome, with clinical diagnostic values of 77% and 71%, respectively. We conclude that AT treatment can be efficacious in some patients with impaired gastric emptying and adrenergic dysfunction. More work is warranted to compare biofeedback therapy with gastric motility patients and controls in population-based studies.

[0748]
Source-monitoring training facilitates preschoolers' eyewitness memory performance
Dev Psychol. 2002 May;38(3):428-37
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Preschool children are more susceptible to misleading postevent information than are older children and adults. One reason for young children's suggestibility is their failure to monitor the source of their memories, as in, for example, discriminating whether an event was seen live versus on television. The authors investigated whether source-monitoring training would decrease preschoolers' suggestibility. Thirty-six 3-4-year-olds observed target live and video events and were then given source-monitoring or recognition (control) training on nontarget events. Following training, all children answered 24 misleading and nonmisleading target-event questions. Children given source-monitoring training were more accurate than control group children in response to misleading and nonmisleading yes-no questions and in response to nonmisleading, open-ended questions. Implications for strategy development, dual representation, and child witness interviewing are discussed.

[0749]
Psychological factors in the etiology and treatment of severe nausea and vomiting in pregnancy
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The assumption is frequently made that women with severe nausea and vomiting during pregnancy are transforming psychological distress into physical symptoms. Psychoanalytic theory supporting this assumption is reviewed, along with the few methodologically flawed empirical studies that have been conducted. Little support can be found for the hypothesis that nausea and vomiting during pregnancy is such a conversion disorder, but there are suggestions that psychological responses to the physiologic condition(s) underlying this problem may become entrenched, or conditioned. This possibility is supported by findings that psychological treatments, such as hypnosis, can be effective. This implies that psychological responses can interact with the physiology of nausea and vomiting during pregnancy to exacerbate the condition. As such, psychological treatments for the symptoms of this disorder need to be further explored.

[0750]
Medical, social, and legal implications of treating nausea and vomiting of pregnancy
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This article will deal with medical, social, and legal implications of treating nausea and vomiting of pregnancy (NVP). Clinical problems occur when the symptoms become exaggerated and result in debilitation, dehydration, and hospitalization. The treatment of NVP in its early stages has the implication that it will prevent the more serious complications, including hospitalization. Therapeutic modalities discussed in this conference that have been used or are being tested are primarily symptomatic treatments (antihistamines, Bendectin (Merrell Dow; Cincinnati, Ohio), phenothiazines, hypnosis, accupressure, relaxation behavioral modification, audiogenic feedback training, newer medications, diet, and nutritional support). Bendectin is probably the most studied medication with regard to its reproductive effects, and the studies clearly demonstrate that therapeutic doses of Bendectin have no measurable reproductive risks to the mother or the fetus. In spite of Bendectin's record of safety, numerous nonmeritorious congenital malformation lawsuits were filed and went to trial, and that junk science was presented at these trials. The Bendectin era focused our attention on the area of nonmeritorious litigation and junk science, which could have an effect on any new or less well-studied therapies, because such a high percentage of women are treated for NVP. Because 3% of the offspring will be affected with birth defects, the potential for litigation is immense. The solutions are (1) for legal problems, the medical community should focus their attention on junk scientists and their junk science, over which physicians should have some authority, and (2) for the treatment problem, it would seem most logical that a major research effort should be directed toward brain receptors that are involved in these physiologic effects. Furthermore, it would be imperative to study the array of molecules, both natural and manufactured, that can interact with these receptors for the amelioration of nausea. Until we understand the mechanism and specific therapy for NVP, it would appear that the reintroduction of Bendectin is the logical intermediate course to follow. We should also accompany the introduction of Bendectin with an educational campaign with regard to the lack of reproductive risks for this medication. The Food and Drug Administration has set the stage for the reintroduction of Bendectin by republishing their conclusion that Bendectin does not represent an increase in reproductive risks to the fetuses of pregnant women.

[0751]
[Essential hypertension and stress. When do yoga, psychotherapy and autogenic training help?]
MMW Fortschr Med. 2002 May 9;144(19):38-41
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Psychosocial factors play an important role in the development and course of essential hypertension, although "stress" can account for only 10% of blood pressure variance. A variety of psychotherapeutic interventions, such as relaxation techniques (autogenic training or progressive muscular relaxation), behavioral therapy or biofeedback techniques, can lower elevated blood pressure by an average of 10 mmHg (systolic) and 5 mmHg (diastolic). As a "secondary effect", such measures may also prompt the hypertensive to adopt a more health-conscious lifestyle.

[0752]
Public knowledge and attitudes regarding smoking and smoking cessation treatments
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AIMS: To investigate current public knowledge and attitudes to tobacco smoking and smoking cessation treatments. METHOD: A telephone survey of 250 individuals randomly selected from the Christchurch Electoral Roll and assigned into one of three groups: current, ex and life-time never smokers. RESULTS: Significantly more current than ex-smokers cited habit as a major reason for continuing to smoke and a greater number reported using nicotine transdermal patches during a cessation attempt. Fewer ever smokers than never smokers stated health as a likely major motivation for cessation by smokers and believed doctors' advice and illness of a significant other highly influenced quit attempts. 55.7% of respondents believed nicotine patches to be the most effective smoking cessation method followed by 'cold turkey' (49.4%) and hypnotherapy (33.9%). While the majority of participants supported banning tobacco advertising (69.6%), banning tobacco sponsorship (59.6%), lower insurance rates for non-smokers (89.1%) and fully subsidised smoking cessation programmes (71.9%), significant differences were detected between groups regarding attitudes to tobacco control initiatives. CONCLUSIONS: This sample were relatively well informed regarding smoking practices in New Zealand and unaware of useful information to aid cessation. While evidence emerged to support current smokers being slightly better informed regarding proven strategies for cessation than ex-smokers, few current smokers were aware of efficacious interventions for smoking cessation.

[0753]
A review of the impact of hypnosis, relaxation, guided imagery and individual differences on aspects of immunity and health
Stress. 2002 Jun;5(2):147-63
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This review considers psychological interventions involving relaxation and guided imagery targeting immune functions. The review provides evidence of immune control accompanied by reports of enhanced mood and well-being. Three recent investigations of the author and his colleagues with self-hypnosis training incorporating imagery of the immune
Numerous vitamins, herbs, supplements, and other agents are readily available for the treatment of diabetes and obesity. Many of these products have little evidence-based medical support to prove the efficacy of these supplements. The physician must be aware that their patients are using these products and must be knowledgeable about their side effects and drug-herb interactions. Our patients have tremendous access to medical information in the lay literature and on the internet. They are using this information to gain access to various diet therapies. Numerous fad diets consisting of various combinations of protein, carbohydrate, and fat are widely publicized but not grounded in evidence. Liquid diets and supplements are readily available and widely used by the public with little long-term beneficial effects on obese patients. Other alternative methods, such as hypnotherapy, acupuncture, biofeedback, and electrogalvanic therapy, have become widely available and seem to have little adverse reaction, but whose benefits remain to be proved. The physician must recognize the widespread use of these products and work with patients and alternative practitioners to deliver comprehensive quality care. Physicians who become comfortable with these products should consider their judicious use while monitoring for side effects and drug interaction. It is hoped that with further evidence-based study many of these products and techniques will enter mainstream medicine.

[0756]
Respiratory and allergic diseases: from upper respiratory tract infections to asthma
Prim Care. 2002 Jun;29(2):231-61
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Patients with asthma and allergic rhinitis may benefit from hydration and a diet low in sodium, omega-6 fatty acids, and transfatty acids, but high in omega-3 fatty acids (i.e., fish, almonds, walnuts, pumpkin, and flax seeds), onions, and fruits and vegetables (at least five servings a day). Physicians may need to be more cautious when prescribing antibiotics to children in their first year of life when they are born to families with a history of atopy. More research is needed to establish whether supplementation with probiotics (lactobacillus and bifidobacterium) during the first year of life or after antibiotic use decreases the risk of developing asthma and allergic rhinitis. Despite a theoretic basis for the use of vitamin C supplements in asthmatic patients, the evidence is still equivocal, and long-term studies are needed. The evidence is...
stronger for exercise-induced asthma, in which the use of vitamin C supplementation at a dosage of 1 to 2 g per day may be helpful. It is also possible that fish oil supplements, administered in a dosage of 1 to 1.2 g of EPA and DHA per day, also may be helpful to some patients with asthma. Long-term studies of fish oil and vitamin C are needed for more definite answers. For the patient interested in incorporating nutritional approaches, vitamin C and fish oils have a safe profile. However, aspirin-sensitive individuals should avoid fish oils, and red blood cell magnesium levels may help in making the decision whether to use additional magnesium supplements. Combination herbal formulas should be used in the treatment of asthma with medical supervision and in collaboration with an experienced herbalist or practitioner of TCM.

Safe herbs, such as Boswellia and gingko, may be used singly as adjuncts to a comprehensive plan of care if the patient and practitioner have an interest in trying them while staying alert for drug-herb interactions. No data on the long-term use of these single herbs in asthma exist. For the motivated patient, mind-body interventions such as yoga, hypnosis, and biofeedback-assisted relaxation and breathing exercises are beneficial for stress reduction in general and may be helpful in further controlling asthma. Encouraging parents to learn how to massage their asthmatic children may appeal to some parents and provide benefits for parents and children alike. Acupuncture and chiropractic treatment cannot be recommended at this time, although some patients may derive benefit because of the placebo effect. For patients with allergic rhinitis, there are no good clinical research data on the use of quercetin and vitamin C. Similarly, freeze-dried stinging nettle leaves may be tried, but the applicable research evidence also is poor. Further studies are needed to assess the efficacy of these supplements and herbs. Homeopathic remedies based on extreme dilutions of the allergen may be beneficial in allergic rhinitis but require collaboration with an experienced homeopath. There are no research data on constitutional homeopathic approaches to asthma and allergic rhinitis. Patients with COPD are helped by exercise, pulmonary rehabilitation, and increased caloric protein and fat intake. Vitamin C and n-3 supplements are safe and reasonable; however, studies are needed to establish their efficacy in COPD. On the other hand, there are convincing data in favor of N-acetyl-cysteine supplementation for the patient with COPD at doses ranging between 400 and 1200 mg daily. Red blood cell magnesium levels may guide the use of magnesium replacement. The use of L-carnitine and coenzyme Q10 in patients with COPD needs further study. The addition of essential oils to the dietary regimen of patients with chronic bronchitis is worth exploring. Patients with upper respiratory tract infections can expect a shorter duration of symptoms by taking high doses of vitamin C (2 g) with zinc supplements, preferably the nasal zinc gel, at the onset of their symptoms. Adding an herb such as echinacea or Andrographis shortens the duration of the common cold. The one study on Elderberry's use for the flu was encouraging, and the data on the homeopathic remedy Oscillococcinum interesting, but more studies should be performed. Saline washes may be helpful to patients with allergic rhinitis and chronic sinusitis. Patients also may try the German combination (available in the United States) of elderberry, vervain, gentian, primrose, and sorrel that has been tested in randomized clinical trials. Bromelain is safe to try; the trials of bromelain supplementation were promising but were never repeated. The preceding suggestions need to be grounded in a program based on optimal medical management. Patients need to be well educated in the proper medical management of their disease and skilled at monitoring disease stability and progress. Asthmatic patients need to monitor their bronchodilator usage and peak flow meter measurements to step up their medical treatment in a timely manner, if needed. Patients welcome physician guidance when exploring the breadth of treatments available today. A true patient-physician partnership is always empowering to patients who are serious about regaining their function and health.

[0757]
Psychosocial aspects of assessment and treatment of irritable bowel syndrome in adults and recurrent abdominal pain in children
J Consult Clin Psychol. 2002 Jun;70(3):725-38
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This article presents a selective review of psychosocial research on irritable bowel syndrome (IBS) in adults and on a possible developmental precursor, recurrent abdominal pain (RAP), in children. For IBS the authors provide a summary of epidemiology, of the psychological and psychiatric disturbances frequently found among IBS patients, and of the possible role of early abuse in IBS. A review of the psychosocial treatments for IBS finds strong evidence to support the efficacy of hypnotherapy, cognitive therapy, and brief psychodynamic psychotherapy. The research relating RAP to IBS is briefly reviewed, as is the research on its psychological treatment. Cognitive-behavioral therapy that combines operant elements and stress management has the strongest support as a treatment for RAP.

[0758]
Hysteria. Pretending to be sick and its consequences
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Hysteria, as it involves the medical profession, is a form of sickness that is defined as being without disease or illness. This lack of a biomedical explanation has limited progress in its understanding. In this essay we propose that hysteria might be better thought of as a form of pretending, elaborated in transaction with the medical system. In medicine, to pretend usually means to deceive. From the perspective of play, however, pretend is a state more akin to acting, magic, belief, and hypnosis. We provide a number of reasons why sickness is an attractive focus for pretending. We show how enactments of sickness can be scripted by a group of involved persons, each contributing from their own perspective, as occurs in the parlour game of ‘Consequences’, except in hysteria the consequences are often dire.

[0759]
OBJECTIVE: To provide a theoretical background, to review existing literature and to present new case material relevant to the treatment of phantom limb pain using hypnotic imagery. METHOD: This paper presents two new case reports involving the use of hypnotic imagery procedures in the alleviation of phantom limb pain and reviews 10 previous clinical studies which have involved a similar approach. The earlier studies were identified by electronic and manual searches of the relevant literature. RESULTS: Two main treatment strategies can be identified: (1) ipsative/imagery-based approaches and (2) movement/imagery-based approaches. A common finding is the need to treat the phantom limb as a 'real' body part, to accept its existence as a valid mental representation and to avoid treating the amputation stump as the sole source of the phantom limb sensations. CONCLUSION: Hypnotic procedures appear to be a useful adjunct to established strategies for the treatment of phantom limb pain and would repay further, more systematic, investigation. Suggestions are provided as to the factors which should be considered for a more systematic research programme.

[0760]
"Animal hypnosis" and defensive dominant, behavioral aspect
Zh Vyssh Nerv Deiat Im I P Pavlova. 2002 Jul-Aug;52(4):508-10
Pavlygina RA, Galashina AG, Bogdanov AV
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A stationary excitation focus produced in the sensorimotor cortex of a rabbit by rhythmic electrical paw stimulation was manifested in the reaction to a testing sound stimulus earlier indifferent for the animal. Regardless of the stimulated paw (left or right), reactions to the testing stimuli appeared approximately in the equal percent of cases (70.7% and 71.5%, respectively). After a single-trial induction of the "animal hypnosis" state, it was difficult to produce the dominant focus by simulation of the left paw, whereas the results of the right-paw stimulation did not differ from those obtained during control stimulation. Consequently, the influence of hypnosis on defensive stationary excitation foci in different hemispheres was not the same.

[0761]
Nearly 4 years after an event: children's eyewitness memory and adults' perceptions of children's accuracy
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OBJECTIVE: The current study examined children's eyewitness memory nearly 4 years after an event and the ability of adults to evaluate such memory. METHOD: In Phase 1, 7- and 10-year olds were interviewed about a past event after a nearly 4-year delay. The interview included leading questions relevant to child abuse as well as statements designed to implicate the original confederate. In Phase 2, laypersons and professionals watched a videotaped interview (from Phase 1) that they were misled to believe was from an ongoing abuse investigation. Respondents then rated the child's accuracy and credibility, and the probability that the child had been abused. RESULTS: In Phase 1, few significant age differences in memory accuracy were found, perhaps owing in part to small sample size. Although children made a variety of commission errors, none claimed outright to have been abused. Nevertheless, some of the children's answers (e.g., saying that their picture had been taken, or that they had been in a bathtub) might cause concern in a forensic setting. In Phase 2, professional and nonprofessional respondents were unable to reliably estimate the overall accuracy of children's statements. However, respondents were able to reasonably estimate the accuracy of children's answers to abuse questions. Respondents were also more likely to think that 7-year olds compared to 10-year olds had been abused. Professionals were significantly less likely than nonprofessionals to believe that credible evidence of abuse existed. Professionals who indicated personal experience with child abuse or a close relationship with an abuse victim were more likely to rate children as abused. A gender bias to rate boys as more accurate than girls was apparent among laypersons but not professionals. CONCLUSIONS: Children were generally resistant to suggestions that abuse occurred during a long-ago generally forgotten event, but some potentially concerning errors were made. Both professionals and nonprofessionals had difficulty estimating the accuracy of children's reports, but adults were more likely to rate children as accurate if the children answered abuse-related questions correctly. Training and personal experience were associated with adults' ratings of children's reports. Implications for evaluations of child abuse reports are discussed.

[0762]
"I saw it with my own ears": the effects of peer conversations on preschoolers' reports of nonexperienced events
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The study was designed to explore the effects of naturally occurring peer interactions and repeated suggestive interviews on preschoolers' (N=96, Meanage=54 months) memories for a personally experienced event, namely a staged archaeological dig. During the dig, one third of the children witnessed two "target" activities. A second third of the children were the classmates of those in the first group, but did not witness the target activities. The remaining children were not the classmates of those who witnessed the target activities, nor did they witness the target activities themselves, and thus
served to provide a baseline against which to assess the effects of peer contact. Following the dig, the children were interviewed in either a neutral or suggestive manner on three occasions. Results from a fourth interview by a new examiner revealed that the combination of suggestive interviews and peer exposure led to claims of witnessing the target activities by the classmate group that were comparable to the children who actually did witness these activities. Further, assent rates to misleading questions employing peer pressure and false claims of actually seeing versus merely hearing about the target activities were elevated following opportunities to discuss these activities with peers.

[0763] Changes in public awareness of, attitudes to, and use of complementary therapy in North East Scotland: surveys in 1993 and 1999
Emслиe MJ, Campbell MK, Walker KA
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OBJECTIVE: To assess changes in awareness of, use of, attitudes to, and opinions about complementary and alternative medicine (CAM) amongst residents of North East Scotland and to obtain details about CAM use from respondents. STUDY DESIGN: Population survey carried out in 1999, 6 years after the initial study. Postal survey to 800 people to examine eight CAMs; acupuncture, aromatherapy, chiropractic, herbalism, homeopathy, hypnotherapy, osteopathy, and reflexology. RESULTS: A total of 432/800 (54%) responded, of whom 175 (41%) had used at least one type of CAM compared to 29% in 1993. Increases in use were statistically significant for aromatherapy (18% versus 9%), acupuncture (10% versus 6%) and reflexology (9% versus 3%). A greater proportion of 1999 respondents thought CAM should be available on the NHS but a smaller proportion of respondents had concerns about using CAM (25% in 1993 and 20% in 1999). Overall concerns about effectiveness of therapies had increased from 36 to 45%, but fewer individuals were concerned about the cost of therapy in the 1999 survey (52% in 1993 to 22% in 1999). A total of 175 individuals provided details about one CAM they had used. The self-reported primary reasons for using CAM were relief of pain due to headaches or musculoskeletal problems, and for relaxation and relief of stress. The majority of CAM was therapist administered (103/166) as opposed to a bought product. Effectiveness ratings were self-reported but overall 80/166 found CAM very effective and 62/166 partially effective. A total of 65% had consulted their GP about their health problem before using CAM, 59/157 indicated their GP knew they were using CAM and of these, 14 indicated their GP was administering the therapy. CONCLUSIONS: The study has provided further baseline data on which to assess trends in CAM use and highlighted issues for patients and the NHS about the use of CAM to relieve health problems. Results indicate a greater proportion of the population of North East Scotland are both aware of and using CAM to relieve health problems. More research into the implications for the NHS of concurrent use of CAM with conventional medicine is required.

[0764] Assessing complementary therapy services in a hospice program
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Increasing numbers of people have been supplementing their health care needs with complementary therapies. Complementary therapies have been used to promote health and treat patients with a variety of ailments. Types of complementary therapy used with terminally ill patients have included massage, therapeutic touch, Reiki, art and music therapy, aromatherapy, and hypnotherapy. The purpose of this study was to survey primary caregivers (PCGs) regarding their perceptions and satisfaction with a hospice complementary therapy program. Perhaps this study's most interesting finding is that patients who received complementary therapies were generally more satisfied with overall hospice care. More research into the implications for the NHS of concurrent use of CAM with conventional medicine is required.

[0765] A phase I study on the feasibility and acceptability of an acupuncture/hypnosis intervention for chronic pediatric pain
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The purpose of the present study was to conduct a Phase I investigation examining the feasibility and acceptability of a complementary and alternative medicine (CAM) package combining acupuncture and hypnosis for chronic pediatric pain. Thirty-three sequentially referred children (21 girls) aged 6-18 years were offered 6 weekly sessions consisting of individually tailored acupuncture treatment together with a 20-minute hypnosis session (conducted while the needles were in place). Parent and child ratings of pain and pain-related interferences in functioning, as well as child ratings of anxiety and depression, were obtained at pre- and post-treatment. The treatment was highly acceptable (only 2 patients refused; &gt; 90% completed treatment) and there were no adverse effects. Both parents and children reported significant improvements in children's pain and interference following treatment. Children's anticipatory anxiety declined significantly across treatment sessions. Our results support the feasibility and acceptability of a combined acupuncture/hypnosis intervention for chronic pediatric pain.

[0766] The believability of children and their interviewers' hearsay testimony: when less is more
Hearsay testimony from children's interviewers is increasingly common in sexual abuse trials, but little is known about its effects on juries. In 2 studies, the authors examined college students' perceptions of 3 types of hearsay testimony (an actual interview with a child or an adult interviewer providing either the gist of what that child had said or a verbatim account of the interview). Interviewers were rated as more accurate and truthful than the children. The interview was rated as higher quality, and children's statements, including their false statements, were sometimes rated as more believable in the interviewer gist hearsay condition. Mock jurors reacted differently to various types of hearsay testimony, and interviewer gist testimony may favor a child's case.

Benjamin Franklin and Mesmerism, revisited
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The authors revisit and update their previous historiographical note (McConkey & Perry, 1985) on Benjamin Franklin's involvement with and investigation of animal magnetism or mesmerism. They incorporate more recent literature and offer additional comment about Franklin's role in and views about mesmerism. Franklin had a higher degree of personal involvement with and a more detailed opinion of mesmerism than has been previously appreciated.

Memory and suggestibility in maltreated children: age, stress arousal, dissociation, and psychopathology
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The present study was designed to assess children's memory and suggestibility in the context of ongoing child maltreatment investigations. One hundred eighty-nine 3-17-year-olds involved in evaluations of alleged maltreatment were interviewed with specific and misleading questions about an anogenital examination and clinical assessment. For the anogenital examination, children's stress arousal was indexed both behaviorally and physiologically. For all children, individual-difference data were gathered on intellectual and short-term memory abilities, general psychopathology, and dissociative tendencies. Interviewers' ratings were available for a subset of children concerning the amount of detail provided in abuse disclosures. Results indicated that general psychopathology, short-term memory, and intellectual ability predicted facets of children's memory performance. Older compared to younger children evinced fewer memory errors and greater suggestibility resistance. Age was also significantly related to the amount of detail in children's abuse disclosures. Neither dissociation nor stress arousal significantly predicted children's memory. Implications for understanding maltreated children's eyewitness memory are discussed.

Summary of systematic revisions of the efficacy of smoking cessation therapy
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Smoking cessation can be considered the most effective strategy to reduce smoking related mortality at medium term. The aim of this study is to conduct an overview of systematic reviews of effectiveness of smoking cessation interventions in the general population. Medline, Embase and the Cochrane Library for the years 1990-march 2001 have been searched for those systematic reviews of primary studies evaluating the effectiveness of smoking cessation interventions in the general population, adult smokers. The outcome measure was abstinence from smoking at 6 months after the start of the intervention. Thirty papers were found, 15 Cochrane reviews and 15 other systematic reviews. The present overview focuses on Cochrane reviews, because they were more recent and followed a standardised methodology. The interventions which proved to be successful were: the simple medical advice, a structured intervention from nurses, individual counselling, group therapy, nicotine replacement therapy, and bupropion. There is not enough evidence yet that one strategy is better than another. Even though there is evidence that it is possible to quit smoking without any intervention, we can recommend that every physician register the smoking habits of his patients, encourage smokers to quit and offer all the available effective strategies.

Confidence judgments in children's and adults' event recall and suggestibility
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The present work investigated the role of children's and adults' metacognitive monitoring and control processes for unbiased event recall tasks and for suggestibility. Three studies were conducted in which children and adults indicated
their degree of confidence that their answers were correct after (Study 1) and before (Study 2) answering either unbiased or misleading questions or (Study 3) forced-choice recognition questions. There was a strong tendency for overestimation of confidence regardless of age and question format. However, children did not lack the principal metacognitive competencies when these questions were asked in a neutral interview. Under misleading questioning, in contrast, children's monitoring skills were seriously impaired. Within each age group, better metacognitive differentiation was positively associated with recall accuracy in the suggestive interview.

[0771]
The effect of hypnotic-guided imagery on psychological well-being and immune function in patients with prior breast cancer
J Psychosom Res. 2002 Dec;53(6):1131-7
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OBJECTIVE: To determine the effect of hypnotic-guided imagery on immune function and psychological parameters in patients being treated for Stage I or II breast cancer. METHODS: To determine the effects of hypnotic-guided imagery on immune function and psychological parameters, the following study was undertaken. Psychological profiles, natural killer (NK) cell number and activity were measured at baseline, after the 8-week imagery training program and at the 3-month follow-up. RESULTS: There were significant increases in improvement in depression (P&lt;0.04) and increase in absolute number of NK cells, but these were not maintained at the 3-month follow-up. Hypnotic-guided imagery did cause some transient changes in psychological well-being and immune parameters. However, these changes were not retained after the treatment ended. CONCLUSIONS: Many studies during the last 15 years have demonstrated interactions between the central nervous and the immune systems. While a negative effect of stress on immune responses has been demonstrated, there have also been published reports that psychological treatments can positively alter the immune system. However, given the complexities of immune system kinetics, the transient nature of any psychological effect and the insensitivity of immune assays, our study indicates that there is a role for hypnotic-guided imagery as an adjuvant therapy.

[0772]
Measurement of individual differences in children's suggestibility across situations
Scullin MH, Kanaya T, Ceci SJ
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The authors attempted to use scores on the Video Suggestibility Scale for Children (VSSC, M. H. Scullin &amp; S. J. Ceci, 2001) to predict 50 preschool children's performance during a field study in which they were interviewed suggestively 4 times about both a true event and a suggested event. Among the 25 children over age 4 years 6 months, tendencies on the VSSC to respond affirmatively to suggestive questions ("yield"), change answers in response to negative feedback ("shift"), and the sum of these ("total suggestibility") were all related to lack of accuracy about the true event in the field study and to both accuracy and lack of accuracy about the suggested event. Results support a 2-factor model of suggestibility.

[0773]
The role of attachment and cognitive inhibition in children's memory and suggestibility for a stressful event
J Exp Child Psychol. 2002 Dec;83(4):262-90
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There has been increasing interest in children's abilities to report memories of and resist misleading suggestions about distressing events. Individual differences among children and their parents may provide important insight into principles that govern children's eyewitness memory and suggestibility for such experiences. In the present study, 51 children between the ages of 3 and 7 years were interviewed about an inoculation after a delay of approximately 2 weeks. Results indicated that parents' attachment Avoidance was associated with children's distress during the inoculation. Parental attachment Anxiety and the interaction between parental Avoidance and children's stress predicted children's memory for the inoculation. Cognitive inhibition was also a significant predictor of children's memory errors and suggestibility. Theoretical implications concerning effects of stress and individual differences on children's eyewitness memory and suggestibility are discussed.

[0774]
Children's memories of experienced and nonexperienced events following repeated interviews
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The present study compared 3- and 5-year-olds' reports of a true or false play interaction following repeated interviews. Final interviews were conducted either by the same researcher or by a new researcher. Age-related improvements in performance were evident. Also, 3-year-olds questioned repeatedly about an entirely false event made more errors in
response to specific questions than 3-year-olds questioned repeatedly about false details of a true event. Five-year-olds who were questioned about the false event, however, were particularly accurate when answering questions about never-experienced body touch. Interviewer familiarity was associated with decreases in the amount of narrative detail 5-year-olds provided in free-recall and with increases in 3-year-olds' accuracy in response to direct questions. Both errors and response latency on a cognitive matching task were related to children's suggestibility.

[0775]

Subjective and objective assessment methods of mental imagery control: construct validation of self-report measures
J Clin Exp Neuropsychol. 2002 Dec;24(8):1103-16
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A study was conducted to examine the relationship between subjective and objective measures of mental imagery control. Eighty college undergraduates completed a battery of imagery tests and self-report measures to examine whether questionnaires that purport to measure imagery control or dynamic imagery ability (imagery of movement) would show a stronger relationship with objective measures of mental manipulation than would subjective measures that tap vividness of static imagery. Neither subjective measures of movement imagery nor subjective measures of stationary imagery showed meaningful relationships with objective measures of visuospatial manipulation. Additionally, subjective and objective imagery measures generally tended to dissociate. Basic component skills thought to be involved in mental manipulation, however, showed a much stronger relationship with the objective imagery tasks than did the self-report questionnaires. Findings suggest that subjective measures of imagery control do not tap the same cognitive processes involved in objective tests that require accurate imagery manipulation.

[0776]

Nonulcer dyspepsia
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Nonulcer dyspepsia is a common condition in clinical practice. It is a heterogeneous disorder, and no single therapeutic agent is effective in all patients. The treatment of nonulcer dyspepsia is still dissatisfactory. Eradication of Helicobacter pylori organisms has a limited role and little effect. Antisecretory therapy has a modest effect in alleviating symptoms. Prokinetic agents may be effective, but selection bias in the trials performed to date may exaggerate their benefit. Partial 5-HT(4) agonists stimulate gastric emptying and may also affect gastric accommodation. They are promising but need further study. Data are limited on 5-HT(3) antagonists and hypnotherapy. New treatment approaches are necessary for this common and often chronic condition.

[0777]

[Medical hypnosis]
Ebell H

As doctors we are required to pursue symptom complaints and treat them, no matter whether they bear objectively verifiable evidence of specific disorders or not. In treatment we also take Hypnosis background feelings, conflicts or fatigue into account as contributing components. This fact pertaining to the practice of medical psychotherapy is central to the treatment of all patients suffering from psychosomatic disorders--i.e. approximately one half of all patients being treated by general practitioners. Here hypnosis and self-hypnosis can serve well in the formulation of therapeutic goals as well as in diagnostic clarification. Hypnosis is above all else useful in encouraging patients to contribute their very own individual resources to a multi-modal and interdisciplinary comprehensive therapy concept. This proves itself in the long run to be a factor that promotes a significant emancipation of the patient from those dependencies that are an outgrowth of illness (see hypnosis and self-hypnosis for symptom control) as well as the treatment system (optimal coping, self-management) through the application of personal skills. A bio-psycho-social understanding of disorder is--both for ourselves as medical doctors (as "specialists of the objective dimension of the body") and for our patients (as "specialists of the subjective dimension of person")--a "conditio sine qua non".

[0778]

[Hypnosis in medicine]
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Hypnosis can be a valuable technique in the management of patients who fear medical treatment. Hypnosis leads to a stronger concentration and a more focussed attention, and thus to a better acceptance and greater effectiveness of suggestions. Literature indicates that hypnotherapy can reduce pain and fear in case of dental or medical phobia. After a short review of the existing literature on the topic, the practical aspects of the hypnotic approach are explained.
At first sight a combination of hypnosis and dentistry may very well appear not to be evident at all. Nevertheless, it works quite well in the everyday dental practice. In this article the author provides an overview of indications in which hypnosis can be used. Anxiety and pain are among the most common indications. Hypnotic techniques in dental practice can be explained at two levels: as a general way of communication between the dentist and his or her patient. Or as an advanced technique in the treatment of severe anxiety. The author discusses the several stages related to the latter technique: the intake interview, the induction, the deepening, the therapeutic stage and the deduction. The author also briefly mentions the disadvantages of hypnosis, but on the other hand encourages every dentist to become a hypnodentist. Not only for the benefit of his patient but also, and not the least, for his or her own well-being. All the more because hypnosis has become a scientific issue involving serious research at many renowned universities, including in Belgium.

Options for the prevention and management of acute chemotherapy-induced nausea and vomiting in children

The current standard of care with respect to preventing acute chemotherapy-induced nausea and vomiting (CINV) in children includes the administration of a 5-HT(3) antagonist with or without a corticosteroid, depending on the emetogenicity of the chemotherapy to be given. Problems in assessing the emetogenicity of chemotherapy regimens and nausea severity in children may influence the degree of success of CINV prophylaxis. Nevertheless, the majority of children who receive chemotherapy today experience moderate to complete control of acute CINV when given appropriate antiemetic prophylaxis. If children vomit or experience nausea despite appropriate prophylaxis, then measures must be taken to treat these symptoms since these children are likely to go on to experience delayed or anticipatory CINV. However, appropriate selection of interventions to treat acute CINV in children is limited by the lack of rigorous evidence to support one approach over another. Lorazepam is suggested as an immediate agent for the treatment of acute CINV. Doses and frequencies of the 5-HT(3) antagonist and corticosteroid administered for initial prophylaxis should also be maximized. Further treatment must be tailored to the circumstances and preferences of each child and family. Options include crossover to another 5-HT(3) antagonist, or administration of an adjunctive antiemetic such as metopimazine, low dose metoclopramide, domperidone, alizapride, nabilone, scopolamine, prochlorperazine, or chlorpromazine. Complementary interventions such as acupuncture, hypnosis, counseling, or ginger may also be of benefit. Further study is required to establish optimal antiemetic strategies in children.

Delusions of alien control in the normal brain

Delusions of alien control, or passivity experiences, are symptoms associated with schizophrenia in which patients misattribute self-generated actions to an external source. In this study hypnosis was used to induce a similar misattribution of self-generated movement in normal, healthy individuals. Positron Emission Tomography (PET) was employed to investigate the neural correlates of active movements correctly attributed to the self, compared with identical active movements misattributed to an external source. Active movements attributed to an external source resulted in significantly higher activations in the parietal cortex and cerebellum than identical active movements correctly attributed to the self. We suggest that, as a result of hypnotic suggestion, the functioning of this cerebellar-parietal network is altered so that self-produced actions are experienced as being external. These results have implications for the brain mechanisms underlying delusions of control, which may be associated with overactivation of the cerebellar-parietal network.

Rapid hypnotic inductions and therapeutic suggestions in the dental setting

For dentists to use hypnosis on a regular basis, the time spent on the nonreimbursed segment of treatment should be minimal. The basis for rapid utilization of hypnosis is outlined. Rapid inductions are defined with examples. Some therapeutic suggestions are given with a rationale for their use.
A Romanian-language version of the Harvard Group Scale of Hypnotic Susceptibility, Form A (HGSHS:A) was administered to 340 subjects (218 females and 122 males) recruited from 1998 to 1999 in Romania. Data were collected from three samples of participants to provide greater heterogeneity within the sample. The results from the Romanian version of the HGSHS:A were compared to those from Australian, Canadian, Danish, Finnish, German, Italian, Spanish, and original U.S. samples. The Romanian normative data are consistent with earlier normative studies in score distribution, item difficulty levels, and reliability. The mean score of the Romanian sample did not differ from those in the German and Italian samples but did significantly differ from the remaining samples. The total score reliability (.71) and item reliability of the Romanian sample was also comparable with published reference samples. No differences between women and men were found.

[0784]
Hypnosis and performance standards
Lynn SJ, Green JP, Jaquith L, Gasior D
Psychology Department, State University of New York at Binghamton, New York 13902, USA

Participants received 1 of 3 instructional sets designed to manipulate their performance standards (i.e., criteria used to evaluate hypnotic performance): (a) stringent set (n = 33), these subjects were told that responsive subjects respond immediately to hypnosis and imagine realistically, (b) lenient set (n = 30), these subjects were told that responsive subjects do not necessarily respond immediately or imagine realistically, and (c) control set (n = 34), standard prehypnotic information. As expected, compared to controls, stringent set participants were less responsive to hypnosis, as indexed by measures of actual and estimated suggestibility, subjective involvement, involuntariness, quickness of responding, satisfaction, and imaginative ability. Stringent set participants estimated they passed fewer suggestions, were less satisfied with their performance, and reported less subjective involvement than individuals in the lenient condition.

[0785]
A randomized controlled clinical trial of a hypnosis-based treatment for patients with conversion disorder, motor type
Moene FC, Spinholven P, Hoogduin KA, van Dyck R
Psychiatric Centre Overkampweg, Dordrecht, the Netherlands

This study tested whether a hypnosis-based intervention showed promise as a treatment for patients with conversion disorder, motor type. Forty-four outpatients with conversion disorder, motor type, or somatization disorder with motor conversion symptoms, were randomly assigned to a hypnosis or a waiting-list condition. The hypnosis-condition patients were more improved relative to baseline and the waiting-list controls. Improvement was evident on an observational index of behavioral symptoms associated with the motor conversion and on an interview measure of extent of motor disability. No effect was obtained on a nonspecific measure of broad psychopathology immediately posttreatment. At 6-month follow-up, improvement was maintained across the behavioral and interview measures. The effect size of hypnotizability as a predictor of treatment outcome was comparable to that found for other individual patient differences associated with psychotherapy outcome although non-significant. Hypnotizability scored above patient expectations as a predictor of treatment outcome.

[0786]
Clinical hypnosis in the alleviation of procedure-related pain in pediatric oncology patients
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This prospective controlled trial investigated the efficacy of a manual-based clinical hypnosis intervention in alleviating pain in 80 pediatric cancer patients (6-16 years of age) undergoing regular lumbar punctures. Patients were randomly assigned to 1 of 4 groups: direct hypnosis with standard medical treatment, indirect hypnosis with standard medical treatment, attention control with standard medical treatment, and standard medical treatment alone. Patients in the hypnosis groups reported less pain and anxiety and were rated as demonstrating less behavioral distress than those in the control groups. Direct and indirect suggestions were equally effective, and the level of hypnotizability was significantly associated with treatment benefit in the hypnosis groups. Therapeutic benefit degraded when patients were switched to self-hypnosis. The study indicates that hypnosis is effective in preparing pediatric oncology patients for lumbar puncture, but the presence of the therapist may be critical.

[0787]
Three core hypnotic phenomena studied with both scientific precision and clinical savvy
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Three especially interesting and important studies on hypnosis have appeared in the scientific and medical literatures.
Complementary and alternative therapies for pain management in labour
Cochrane Database Syst Rev. 2003;(2):CD003521
Smith CA, Collins CT, Cyna AM, Crowther CA
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BACKGROUND: Many women would like to avoid pharmacological or invasive methods of pain management in labour and this may contribute towards the popularity of complementary methods of pain management. This review examined currently available evidence supporting the use of alternative and complementary therapies for pain management in labour. OBJECTIVES: To examine the effectiveness of complementary and alternative therapies for pain management in labour on maternal and perinatal morbidity. SEARCH STRATEGY: We searched the Cochrane Pregnancy and Childbirth Group trials register (July 2002), the Cochrane Controlled Trials Register (The Cochrane Library Issue 2, 2002), MEDLINE (1966 to July 2002), EMBASE (1980 to July 2002) and CINAHL (1980 to July 2002). SELECTION CRITERIA: The inclusion criteria included published and unpublished randomised controlled trials comparing complementary and alternative therapies with placebo, no treatment or pharmacological forms of pain management in labour. All women whether primiparous or multiparous, and in spontaneous or induced labour, in the first and second stage of labour were included. DATA COLLECTION AND ANALYSIS: Meta-analysis was performed using relative risks for dichotomous outcomes and weighted mean differences for continuous outcomes. The outcome measures were maternal satisfaction, use of pharmacological pain relief and maternal and neonatal adverse outcomes. MAIN RESULTS: Seven trials involving 366 women and using different modalities of pain management were included in this review. The trials included one involving acupuncture (n = 100), one involving audio-analgesia (n = 25), one involving aromatherapy (n = 22), three trials of hypnosis (n = 189) and one trial of music (n = 30). The trial of acupuncture decreased the need for pain relief (relative risk (RR) 0.56, 95% confidence interval (CI) 0.39 to 0.81). Women receiving hypnosis were more satisfied with their pain management in labour compared with controls (RR 2.33, 95% CI 1.55 to 4.71). No differences were seen for women receiving aromatherapy, music or audio analgesia. REVIEWER'S CONCLUSIONS: Acupuncture and hypnosis may be beneficial for the management of pain during labour. However, few complementary therapies have been subjected to proper scientific study and the number of women studied is small.

Over 60% of surgery is now performed in an ambulatory setting. Despite improved analgesics and sophisticated drug delivery systems, surveys indicate that over 80% of patients experience moderate to severe pain postoperatively. Inadequate postoperative pain relief can prolong recovery, precipitate or increase the duration of hospital stay, increase healthcare costs, and reduce patient satisfaction. Effective postoperative pain management involves a multimodal approach and the use of various drugs with different mechanisms of action. Local anaesthetics are widely administered in the ambulatory setting using techniques such as local injection, field block, regional nerve block or neuraxial block. Continuous wound infusion pumps may have great potential in an ambulatory setting. Regional anaesthesia (involving anaesthetising regional areas of the body, including single extremities, multiple extremities, the torso, and the face or jaw) allows surgery to be performed in a specific location, usually an extremity, without the use of general anaesthesia, and potentially with little or no sedation. Opioids remain an important component of any analgesic regimen in treating moderate to severe acute postoperative pain. However, the incorporation of non-opioids, local anaesthetics and regional techniques will enhance current postoperative analgesic regimens. The development of new modalities of treatment, such as patient controlled analgesia, and newer drugs, such as cyclo-oxygenase-2 inhibitors, provide additional choices for the practitioner. While there are different routes of administration for analgesics (e.g. oral, parenteral, intramuscular, transmucosal, transdermal and sublingual), oral delivery of medications has remained the mainstay for postoperative pain control. The oral route is effective, the simplest to use and typically the least expensive. The intravenous route has the advantages of a rapid onset of action and easier titratability, and so is recommended for the treatment of acute pain. Non-pharmacological methods for the management of postoperative pain include acupuncture, electromagnetic millimetre waves, hypnosis and the use of music during surgery. However, further research of these techniques is warranted to elucidate their effectiveness in this indication. Pain is a multifactorial experience, not just a sensation. Emotion, perception and past experience all affect an individual's response to noxious stimuli. Improved postoperative pain control through innovation and creativity may improve compliance, ease of delivery, reduce length of hospital stay and improve patient satisfaction. Patient education, early diagnosis of symptoms and aggressive treatment of pain using an integrative approach, combining pharmacotherapy as well as complementary technique, should serve us well in dealing with this complex problem.

Complementary and alternative therapies for pain management in labour
Cochrane Database Syst Rev. 2003;(2):CD003521
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In the experiments reported here, children chose either to maintain their initial belief about an object's identity or to accept the experimenter's contradicting suggestion. Both 3- to 4-year-olds and 4- to 5-year-olds were good at accepting the suggestion only when the experimenter was better informed than they were (implicit source monitoring). They were less accurate at recalling both their own and the experimenter's information access (explicit recall of experience), though they performed well above chance. Children were least accurate at reporting whether their final belief was based on what they were told or on what they experienced directly (explicit source monitoring). Contrasting results emerged when children decided between contradictory suggestions from two differentially informed adults: Three- to 4-year-olds were more accurate at reporting the knowledge source of the adult they believed than at deciding which suggestion was reliable. Decision making in this observation task may require reflective understanding akin to that required for explicit source judgments when the child participates in the task.

The purpose of this study was to assess differences in the management techniques used by Israeli female and male pediatric dentists. All 112 participants of the meeting of the Israeli Society of Dentistry for Children that was held in February 1999 received a questionnaire which sought information regarding age, sex, behavioral and pharmacological methods used to treat children, having a course in nitrous oxide, general anesthesia, and feelings towards pediatric patients. No differences between female and male dentists were found regarding most management techniques. The majority of dentists used tell-show-do, and gave presents at the end of the appointments. Hypnosis was the least used technique. Papoose board was more prevalent among male dentists than among female dentists. Most dentists reported having the parents present during treatment, and more male dentists used their assistance when restraint was needed. General anesthesia was significantly more prevalent among males than among females (p = 0.01). One-third of the dentists reported feeling aggression toward the pediatric patient. Although not statistically significant, more female dentists reported about feeling aggression than male dentists. Most dentists felt authority towards the pediatric patient. Our findings imply that female and male dentists use similar management techniques when treating children.

The ability of 4 cosmonauts to voluntarily control their physiological parameters during the standing test was evaluated following a series of the adaptive feedback (AF) training sessions. Vegetative status of the cosmonauts during voluntary "relaxation" and "straining" was different when compared with its indices determined before these sessions. In addition, there was a considerable individual variability in the intensity and direction of the AF effects, and the range of parameters responding to AF. It was GCR which was the easiest one for the AF control.

This article presents a substance abuse treatment method that acknowledges and accommodates the personal needs that are being addressed by substance. This method, Utilization Sobriety, bypasses perceived resistances and employs idiosyncratic psychobiological learning to achieve a body-mind gestalt that is complementary to the client's sobriety. It develops a safe framework for addressing any subsequent mental health themes directly or indirectly related to substance misuse. A treatment protocol for the use of Utilization Sobriety as well as relevant clinical material illustrating its application and a discussion of its implications are offered.

The individual diagnosed with Narcissistic Personality Disorder presents with grandiosity, extreme self-involvement, and lack of interest in and empathy for others. This paper reviews current theories concerning the development and treatment of Narcissistic Personality Disorder, and introduces the use of Ego State Therapy for its treatment. The ego state model of treatment will be described and demonstrated with case material. Initially ego states that reveal the grandiosity will be
accessed. As therapy progresses, ego states that hold the underlying feelings of emptiness, rage, and depression are able to emerge. With further treatment, transformation and maturation of the ego states occur, reflecting the changes in internal structure and dynamics as well as improvement in external interpersonal relationships. Issues concerning Ego State Therapy as utilized with personality disorders will be discussed and contrasted with more traditional methods of treatment.

[0795]
[The effects of hypnosis on emotional responses of depressed students in frustrating situations]
Shinrigaku Kenkyu. 2003 Feb;73(6):457-63
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The present study examined the effects of hypnosis on aggression and depression in depressed undergraduate students. Six frustrating situations were presented to 13 mildly depressed subjects as well as to 13 non-depressed subjects. All subjects were studied both in light trance and in the waking state. Their emotions were measured by numeric rating scales and open-ended questions. On scores using with numeric rating scales, depressed subjects were less depressive under trance as compared to the waking state. Responses to open-ended questions, which were scored by four raters, indicated that depressed subjects were less aggressive during trance than during the waking state, while non-depressed subjects were more aggressive under trance. Furthermore, the depression score was lower during trance than during the waking state. These findings suggested that depressed subjects were not repressive, while non-depressed subjects were repressive and exhibited controlled anger in the waking state.

[0796]
Mind control of menopause
Womens Health Issues. 2003 Mar-Apr;13(2):74-8
Younus J, Simpson I, Collins A, Wang X
London Regional Cancer Centre, Ontario, Canada

The primary objective of this study was to observe the effect of hypnosis on hot flashes (HF) and overall quality of life in symptomatic patients. A secondary objective was to observe the effect of hypnosis on fatigue. Ten healthy volunteers and four breast cancer patients (total 14 patients) with symptoms of HF were treated with four, 1 h/wk sessions of hypnosis. The same physician, with the help of a nurse, conducted every session. All subjects recorded frequency, duration, and severity of HF in a HF diary. The QLQ-C30 and Brief Fatigue Inventory forms were used to assess the impact on quality of life and fatigue, respectively. The statistical evaluations were performed, including analysis of variance and nonparametric procedures. The frequency (p &lt; 0.0001), duration (p &lt; 0.0001), and severity (p &lt; 0.0001) of HF were significantly reduced. The overall quality of life was also improved (p = 0.05). The subjects enjoyed better sleep and had less insomnia (p = 0.012). There was a significant improvement on current fatigue level (p = 0.017), but we did not find a statistically significant reduction in the total fatigue level. We conclude that hypnosis appears to be a feasible and promising intervention for HF, with a potential to improve quality of life and insomnia. Although improvement in current level of fatigue was observed in this pilot study, total fatigue improvement did not reach statistical significance.

[0797]
Imagination can create false autobiographical memories
Psychol Sci. 2003 Mar;14(2):186-8
Mazzoni G, Memon A
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Previous studies have shown that imagining an event can alter autobiographical beliefs. The current study examined whether it can also create false memories. One group of participants imagined a relatively frequent event and received information about an event that never occurs. A second group imagined the nonoccurring event and received information about the frequent event. One week before and again 1 week immediately after the manipulation, participants rated the likelihood that they had experienced each of the two critical events and a series of noncritical events, using the Life Events Inventory. During the last phase, participants were also asked to describe any memories they had for the events. For both events, imagination increased the number of memories reported, as well as beliefs about experiencing the event. These results indicate that imagination can induce false autobiographical memories.

[0798]
Children who speak of past-life experiences: is there a psychological explanation?
Psychol Psychother. 2003 Mar;76(Pt 1):55-67
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Children who claim to remember fragments of a past life are found in some countries. Various explanations have been put forward as to why the alleged memories develop, ranging from reincarnation to 'therapeutic resource'. This study puts to the test the role of some psychological characteristics and the circumstances in which the children live, such as fantasy, suggestibility, social isolation, dissociation, and attention-seeking. Thirty children in Lebanon who had persistently spoken of past-life memories, and 30 comparison children, were administered relevant tests and questionnaires. The target group obtained higher scores for daydreaming, attention-seeking, and dissociation, but not for social isolation and suggestibility.
The level of dissociation was much lower than in cases of multiple personality and not clinically relevant. There was some evidence of post-traumatic stress disorder-like symptoms. Eighty per cent of the children spoke of past-life memories of circumstances leading to a violent death (mostly accidents, also war-related deaths and murder). It is discussed if this imagery-when experienced repeatedly-may serve as a stressor.

[0799] Comparisons of three different investigative interview techniques with young children
J Genet Psychol. 2003 Mar;164(1):5-28
Lindberg MA, Chapman MT, Samsøck D, Thomas SW, Lindberg AW
Department of Psychology, Marshall University, Huntington, WV 25755, USA

After viewing a film of a mother hitting her son, a film not seen by the college student interviewers, children were misinformed about a detail (via exposure to a misleading question) as well as explicitly coached to disclose 3 false details. The children were then interviewed by interviewers who had previously learned 1 of 3 different interviewing procedures: the Yuille Step-Wise Interview developed by J. C. Yuille, R. Hunter, R. Joffe, & J. Zapamiuk (1993); a doll play interview developed by Action for Child Protection Inc. (1994); or the Modified Structured Interview developed for this study. The Modified Structured Interview yielded more "where" information and was better at detecting if coaching had occurred. However, the interviewers were not very good at discriminating suggested versus coached versus correct witnessed information. The authors found that the deeper one digs for memories, the more one uncovers incorrect versus correct items. They concluded that although the Modified Structured Interview was superior to the techniques currently in use, cautions are necessary.

[0800] Effect of autogenic training on drug consumption in patients with primary headache: an 8-month follow-up study
Headache. 2003 Mar;43(3):251-7
Zsombok T, Juhasz G, Budavari A, Vitrai J, Bagdy G
Laboratory of Neurochemistry and Experimental Medicine, and the Department of Vascular Neurology, Semmelweis University National Institute of Psychiatry and Neurology, Budapest, Hungary

OBJECTIVE: To examine the effects of Schultz-type autogenic training on headache-related drug consumption and headache frequency in patients with migraine, tension-type, or mixed (migraine plus tension-type) headache over an 8-month period. BACKGROUND: Behavioral treatments often are used alone or adjunctively for different types of headache. There are, however, only a few studies that have compared the efficacy and durability of the same treatment in different types of primary headache, and the effects of treatment on headache-related drug consumption rarely have been assessed even in these studies. METHODS: Twenty-five women with primary headache (11 with mixed headache, 8 with migraine, and 6 with tension-type headache) were evaluated via an open-label, self-controlled, 8-month, follow-up study design. After an initial 4 months of observation, patients began learning Schultz-type autogenic training as modified for patients with headache. They practiced autogenic training on a regular basis for 4 months. Based on data from headache diaries and daily medication records, headache frequencies and the amounts of analgesics, "migraine-specific" drugs (ergots and triptans), and anxiolytics taken by the patients were compared in the three subgroups over the 8-month period. Results.-From the first month of implementation of autogenic training, headache frequencies were significantly reduced in patients with tension-type and mixed headache. Significant reduction in frequency was achieved in patients with migraine only from the third month of autogenic training. Decreases in headache frequencies were accompanied by decreases in consumption of migraine drugs and analgesics resulting in significant correlations among these parameters. Reduction in consumption of anxiolytic drugs was more rapid and robust in patients with tension-type headache compared to patients with migraine, and this outcome failed to show any correlation with change in headache frequency. CONCLUSION: Schultz-type autogenic training is an effective therapeutic approach that may lead to a reduction in both headache frequency and the use of headache medication.

[0801] Analgesia following music and therapeutic suggestions in the PACU in ambulatory surgery; a randomized controlled trial
Nilsson U, Rawal N, Enqvist B, Unosson M
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BACKGROUND: This study was designed to determine whether music (M), or music in combination with therapeutic suggestions (M/TS) could improve the postoperative recovery in the immediate postoperative in daycare surgery. METHODS: One-hundred and eighty-two unpremedicated patients who underwent varicose vein or open inguinal hernia repair surgery under general anaesthesia were randomly assigned to (a) listening to music; (b) music in combination with therapeutic suggestions; or (c) blank tape in the immediate postoperative period. The surgical technique, anaesthesia and postoperative analgesia were standardized. Analgesia, the total requirement of morphine, nausea, fatigue, well-being, anxiety, headache, urinary problems, heart rate and oxygen saturation were studied as outcome variables. RESULTS: Pain intensity (VAS) was significantly lower (P = 0.002) in the M (2.1), and the M/TS (1.9) group compared with the control group (2.9) and a higher oxygen saturation in M (99.2%) and M/TS (99.2%) group compared with the control (98.0%), P &lt; 0.001, were found. No differences were noted in the other outcome variables. CONCLUSION: This controlled study has demonstrated that music with or without therapeutic suggestions in the early postoperative period has a beneficial effect on patients' experience of analgesia. Although statistically significant, the improvement in analgesia is modest in this group of patients with low overall pain levels.
Perceptually oriented hypnosis
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This theoretical article explores postulates representative of a perceptual frame of reference for a better understanding of hypnotic experiencing. This author contends that Perceptual Psychology, a theory first conceptualized by Snygg and Combs, as revised by Combs, Richards, and Richards in 1988, and Perceptually Oriented Hypnosis provide an effective way of understanding hypnosis, the therapist-client relationship, and has some implications as well for better comprehending psychopathology. Perceptually oriented hypnotic principles are shown to enhance the characteristics of the adequate personality, expand the phenomenal field, change personal meanings, and change aspects of the phenomenal self in the context of hypnosis. Implications for understanding differing views and conflicting perceptions of reality held by scientists and researchers are discussed. Implications for Dissociative Identity Disorder are also addressed. Research utilizing Giorgi's research methodology and Wasicsko's qualitative procedure for assessing educators' dispositions is suggested.

Taking responsibility for an act not committed: the influence of age and suggestibility
Law Hum Behav. 2003 Apr;27(2):141-56
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Inherent in false confessions is a person taking responsibility for an act he or she did not commit. The risk of taking such responsibility may be elevated in juveniles. To study possible factors that influence individuals' likelihood for taking responsibility for something they did not do, participants in a laboratory experiment were led to believe they crashed a computer when in fact they had not. Participants from 3 age groups were tested: 12- and 13-year-olds, 15- and 16-year-olds, and young adults. Half of the participants in each age group were presented with false evidence indicating liability. Additionally, suggestibility was investigated as a potential individual-difference factor affecting vulnerability to admissions of guilt. Results showed that younger and more suggestible participants were more likely than older and less suggestible participants to falsely take responsibility. Implications of these findings for juvenile justice are discussed.

Brain imaging techniques
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In the last decade, functional brain imaging techniques ranging from fMRI to PET to EEG have added to understanding the mechanisms involved in cognitive, affective, and motoric processes. More recently, as demonstrated by papers in a variety of neuroscience journals, the hypnotic experience and its modulation of critical human processes such as pain have added hypnotic procedures to the experimental techniques available for the neuroscience community. For this interplay to be manifested, it is critical that readers understand brain imaging procedures and the types of questions they can and cannot answer. In this spirit, the present article is an overview of the major brain imaging techniques available to a researcher interested in hypnosis.

Hypnosis phenomenology and the neurobiology of consciousness
Int J Clin Exp Hypn. 2003 Apr;51(2):105-29
Rainville P, Price DD
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Recent developments in the philosophical and neurobiological studies of consciousness provide promising frameworks to investigate the neurobiology of hypnosis. A model of consciousness phenomenology is described to demonstrate that the experiential dimensions characterizing hypnosis (relaxation and mental ease, absorption, orientation and monitoring, and self-agency) reflect basic phenomenal properties of consciousness. Changes in relaxation-mental ease and absorption, produced by standard hypnotic procedures, are further associated with changes in brain activity within structures critically involved in the basic representation of the body-self and the regulation of states of consciousness. The combination of experiential and modern brain imaging methods offers a unique perspective on hypnotic phenomena and provides new observations consistent with the proposition that hypnosis is an altered state of consciousness.

Negative and positive visual hypnotic hallucinations: attending inside and out
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Hypnotic perceptual alteration affects brain function. Those hypnotic instructions that reduce perception by creating an illusory obstruction to it reduce brain response to perception in the cognate sensory cortex, as measured by event-related potential (ERP) amplitude and regional blood flow (PET). Those hypnotic instructions that affect the subject's reaction to perception activate the anterior attentional system, especially the anterior cingulate cortex in PET studies. Hypnosis involves activation without arousal and may be particularly mediated via dopaminergic pathways. Hypnotic alteration of perception is accompanied by measurable changes in both perceptual and attentional function of those specific regions of the brain that process these activities, modulated by the nature of the specific hypnotic instruction. Positive obstructive hallucinations seem to allow for a hypnotic focus inward, activating the functioning of attentional neural systems and reducing perceptual ones.

The fox, the hedgehog, and hypnosis

Int J Clin Exp Hypn. 2003 Apr;51(2):166-89
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Isaiah Berlin's contrast between the fox, who "knows many things," and the hedgehog, who "knows one big thing," is the starting point for a consideration of monolithic and pluralistic approaches to hypnosis.

Temporal aspects of hypnotic processes

Int J Clin Exp Hypn. 2003 Apr;51(2):147-65
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The authors examine the cortical processes underlying the process of hypnosis, especially as related to the temporal appearance of specific waveforms in relation to pain. Nonhypnotic pain research suggests that in terms of temporal processing early EEG components are more sensory in nature, and later components are of a more emotional or evaluative nature. In the present work, the authors report that the influence of hypnosis is less on the EEG components associated with the initial sensory experience itself and more on the later components that carry with them rich cognitive/emotional information. The research reviewed in this paper clearly suggests an inhibitory process for the high susceptible individuals associated with the hypnotic analgesia.

Cleaning up the river: a metaphor for functional digestive disorders

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The irritable bowel syndrome is characterized by abdominal pain, altered bowel habits and various other digestive symptoms. Emotional factors are important in some patients. I describe here a metaphor which links the altered motility of the digestive system to the emotional contents it may embody. A metaphor of a river is used to evoke both a smooth, coordinated flow through the normal digestive tract and a normal flow in the management of the patient's emotions. The possibility that some blockage has occurred in the river, resulting in perturbation of the normal flow is then suggested to the patient. This is followed by a suggestion for the patient to clear the blockage. This approach may lead patients to work on the emotional components of their symptoms, resulting in their subsequent resolution. I have used this approach with several patients and it proved very effective. This paper demonstrates the use of this metaphor in one of the patients.

Binaural beat induced theta EEG activity and hypnotic susceptibility: contradictory results and technical considerations

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The present study offered a constructive replication of an earlier study which demonstrated significant increases in theta EEG activity following theta binaural beat (BB) entrainment training and significant increases in hypnotic susceptibility. This study improved upon the earlier small-sample, multiple-baseline investigation by employing a larger sample, by utilizing a double-blind, repeated-measures group experimental design, by investigating only low and moderate susceptible participants, and by providing 4 hours of binaural beat training. With these design improvements, results were not supportive of the specific efficacy of the theta binaural beat training employed in this study in either increasing frontal theta EEG activity or in increasing hypnotic susceptibility. Statistical power analyses indicated the theta binaural beat training to be a very low power phenomenon on theta EEG activity. Furthermore, we found no significant relationship between frontal theta power and hypnotizability, although the more hypnotizable participants showed significantly greater increases in hypnotizability than the less hypnotizables. Results are discussed within the context of participant selection and classification factors, technical considerations in the presentation of TBB training, and theta blocking.

Gourmand savants and environmental determinants of obesity
Obesity is an embodiment of a multifactorial problem with several intermediates in its casual pathway. Virtually all who have written on obesity have responded to four inter-related factors: genetic, perinatal, environmental, and consumption-expenditure energy imbalance. The message to take home is that while a molecular description of each participant of the obesity machinery seems achievable in principle, a complex model describing all of them is currently beyond our grasp. That is why the eradication of the obesity epidemic is seen in a more precise neuropsychological description of what is wrong with each subset of patients. This review proposes that the neuropsychiatric experience might be the most fundamental for it could help to refocus the view of obesity from 'traditional' environmental factors and lifestyle changes to those dominated by a more 'individual-centred' perspective in which different modes of causal attribution are appropriate. This review advocates the idea of environmental dependency as a determinant of obesity, which has been an important idea in neurosciences for more than 30 years with roots in three important areas: psychological, neuropsychiatric, and experimental. The neuropsychology of obesity is yet to become part of today's agenda of obesity research.

Chronic headache in young patients: clinical aspects and treatment suggestions
Neurol Sci. 2003 May;24 Suppl 2:S112-4
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The term "chronic daily headache" (CDH) is used to describe a patient who suffers from recurrent headache, at an average frequency of 15 days per month without an underlying serious medical condition. CDH, sometimes referred to as chronic non-progressive headache, was described in adults by Mathew et al. in 1987. Estimating the incidence and prevalence of this disorder has been difficult, because universally agreed criteria regarding the classification of CDH in children and adolescents have not been reached. This condition is a source of concern and disability both for the patient as well as their family. CDH may be associated with comorbid anxiety or depression, resulting in a tremendous amount of dysfunction for the youngster and the family.

Posthypnotic amnesia for a first romantic relationship: Forgetting the entire relationship versus forgetting selected events
Memory. 2003 May;11(3):307-18
Cox RE, Barnier AJ
University of New South Wales, Sydney, Australia

This experiment investigated the impact of suggestion focus on posthypnotic amnesia (PHA) for memories of a first romantic relationship. During hypnosis, high and low hypnotisable participants recalled specific memories from this period in response to 10 cue phrases (Elicitation). They then received a PHA suggestion that targeted either the entire period or specific memories from that period. Participants' explicit memory was indexed by cued recall after PHA was administered (memories recalled to "old" and "new" cues; Recall 1) and after it was cancelled (Recall 2). A social judgement task indexed dissociations between implicit and explicit memory. PHA had the greatest impact on highs', but not lows', memory performance (in terms of memories recalled to old cues, recall latency, and qualitative memory ratings) when the suggestion targeted the entire period rather than specific events. We discuss these findings in terms of the parameters of PHA's influence on memory, its value for exploring the nature and structure of autobiographical memory, and its utility as a laboratory analogue of functional amnesia.

Hypnotherapy as a treatment for vulvar vestibulitis syndrome: a case report
Kandyba K, Binik YM
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The effectiveness of hypnotherapy in alleviating pain has been demonstrated with several disorders and diseases involving acute and chronic pain. Although hypnosis has been suggested as treatment for dyspareunia resulting from vulvar vestibulitis syndrome (VVS), empirical data and case reports showing its effectiveness have been lacking. This article presents a case report on the use of hypnotherapy to treat a 26-year-old woman suffering from VVS. Psychotherapy consisted of twelve sessions, of which eight were devoted to hypnosis. The goal of hypnosis was to help the client decrease her anticipatory anxiety, create a positive association of pleasure with intercourse, and create a sense of control over her pain. Despite having persistent pain during intercourse for 3 years with several partners, she experienced no more pain following treatment, and remained pain free at a 12-month follow up.

Non-pharmacological approaches to behaviour management in children
Dent Update. 2003 May;30(4):194-9
Newton JT, Shah S, Patel H, Sturmey P
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This review examines a number of non-pharmacological approaches to the management of dental anxiety and its manifestations among children and young people. The article concludes with recommendations regarding the use of non-pharmacological approaches.

[0816]
[Management of psychologic factors in chronic urticaria. When and how?]
Ann Dermatol Venereol. 2003 May;130 Spec No 1:1S145-59
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INTRODUCTION: Chronic idiopathic urticaria is a frequent disease with treatment is often disappointing. Psychological factors seem to be frequently associated to it. In what cases consider psychological treatment? And according to what modalities? METHOD: Review of the literature in search of articles in both French and English concerning psychological factors associated to chronic urticaria, either as responsible factors, or as aggravating factors, or as a consequence of the urticaria, with the study of the impact on the quality of life. We also studied articles analyzing various types of psychology-targeted treatments. We use a serie of keywords on following data banks: Medline (1970-2002), Embase, Pascal and Cochrane Library (period 1995-2002). RESULTS: Very few controlled studies were published. Various studies are found reporting an association between stress, anxiety or depressive symptomatology and CIU, but none can assert a causality. Three controlled opened studies show significantly more anxiety and/or depression in the chronic urticaria patients. Three studies analyze the psychopathological personalities of the patients with urticaria. Two studies focus specifically on the impact of the CIU on the quality of life. Various psychotropic drugs (mainly tricyclic antidepressants) have been tested, mostly because of their anti-H1 activity. There is no study on psychological support, psychotherapies, behavioral therapies, technique of biofeedback and group therapies. A particular attention is focused to hypnosis and relaxation techniques because of the improvement of the urticarial wheals reported in studies of cutaneous ability to react in subcutaneous injections of histamine. CONCLUSION: A complementary psychological treatment of patients suffering from CIU seems necessary, because of the high frequency of psychological symptoms. Published studies concern essentially the prescription of psychotropic drugs and the use of therapies with suggestion or relaxation under hypnosis. Prospective studies on the impact of an adapted psychological treatment on the CIU evolution are not available.

[0817]
Biofeedback, cognitive-behavioral methods, and hypnosis in dermatology: Is it all in your mind?
Dermatol Ther. 2003 Jun;16(2):114-22
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Biofeedback can improve cutaneous problems that have an autonomic nervous system component. Examples include biofeedback of galvanic skin resistance (GSR) for hyperhidrosis and biofeedback of skin temperature for Raynaud's disease. Hypnosis may enhance the effects obtained by biofeedback. Cognitive-behavioral methods may resolve dysfunctional thought patterns (cognitive) or actions (behavioral) that damage the skin or interfere with dermatologic therapy. Responsive diseases include acne excoriee, atopic dermatitis, factitious cheilitis, hyperhidrosis, lichen simplex chronicus, needle phobia, neurodermatitis, onychotillomania, prurigo nodularis, trichotillomania, and urticaria. Hypnosis can facilitate aversive therapy and enhance desensitization and other cognitive-behavioral methods. Hypnosis may improve or resolve numerous dermatoses. Examples include acne excoriee, alopecia areata, atopic dermatitis, congenital ichthyosiform erythroderma, dyshidrotic dermatitis, erythromelalgia, furuncles, glossodynia, herpes simplex, hyperhidrosis, ichthyosis vulgaris, lichen planus, neurodermatitis, nummular dermatitis, postherpetic neuralgia, pruritus, psoriasis, rosacea, trichotillomania, urticaria, verruca vulgaris, and vitiligo. Hypnosis can also reduce the anxiety and pain associated with dermatologic procedures.

[0818]
Validity of a test of children's suggestibility for predicting responses to two interview situations differing in their degree of suggestiveness
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In the present study the relative contributions of internal and external sources of variation in children's suggestibility in interrogative situations were examined. One hundred and eleven children (48 4- to 5-year-olds and 63 7- to 8-year-olds) were administered a suggestibility test (BTSS) and the most suggestible (N=36) and the least suggestible (N=36) children were randomly assigned to either an interview condition containing several suggestive techniques or to one containing only suggestive questions. The effects of internal sources of variation in suggestibility were compared with the effects of the interview styles on the children's answers. The former did influence the children, but the external sources of variation in suggestibility had a stronger impact. Influences of cognitive, developmental factors could be found, but not when abuse-related questions were asked and high pressured interview methods were used. These findings indicate that individual assessment of suggestibility can be of some assistance when interviewing children, but diminishing suggestive influences in interrogations must be given priority.
Eye movement desensitization and reprocessing (EMDR) is an integrative therapy that "unlocks" disturbing memories or beliefs and reprocesses them, in some way, so they are no longer as disabling. EMDR can be used for any experientially based psychological problems and has proven especially effective for traumatic imagery associated with posttraumatic stress disorder. A primary benefit of EMDR is its time efficiency, requiring as few as 3 to 5 hours of treatment. Many potential mechanisms (i.e., cognitive, hypnotic, self-disclosure, biological) may account for the effectiveness of EMDR.

Hypnosis has been demonstrated to reduce analogue pain, and studies on the mechanisms of laboratory pain reduction have provided useful applications to clinical populations. Studies showing central nervous system activity during hypnotic procedures offer preliminary information concerning possible physiological mechanisms of hypnotic analgesia. Randomized controlled studies with clinical populations indicate that hypnosis has a reliable and significant impact on acute procedural pain and chronic pain conditions. Methodological issues of this body of research are discussed, as are methods to better integrate hypnosis into comprehensive pain treatment.

Multineuron activity was recorded from the sensorimotor cortex of the right and left hemispheres during immobilization catatonia in rabbits. The first session of immobilization of the animals was followed by changes in spike frequency in 47% of neurons in the sensorimotor cortex of the right hemisphere. Of these, 30% showed decreases in spike frequency and 17% showed increases. Spike frequency in the sensorimotor cortex of the left hemisphere changed in only 18% of cells, of which 13% showed decreases in spike frequency and 5% showed increases. The spike frequency of neighboring (recorded with the same electrode) neurons could change reciprocally. Differences in neuron activity in the two hemispheres were virtually absent after the second session of immobilization (several days after the first) -- spike activity changed in 21% of neurons in the right hemisphere and 24% in the left hemisphere. The ratios of the numbers of neurons with increases and decreases in spike activity in "hypnosis" also became identical in the cortex of the right and left hemispheres. A hypothesis is proposed for the involvement of cortical neurons in the organization of "hypnosis-like" states.

Based on reflections on the University of Tennessee Conference on Brain Imaging and Hypnosis, the authors point the field of hypnosis toward a new generation of research that can successfully coordinate multiple methods of inquiry and effectively connect psychological with biological understanding. They examine issues concerning hypnosis as a state, hypnotic susceptibility as a trait, and the psychological processes that underlie hypnotic responses. The article indicates ways in which some old questions can, and need to, be asked in new ways. The authors illustrate how to move toward a neuropsychological understanding of hypnosis by describing the classic suggestion effect and consider candidate psychological mechanisms to explain this effect. They argue that the neuroscience of hypnosis needs to build on a sound psychological foundation and add to, rather than replace, existing levels of analysis.

Hypnosis research has contributed much to the understanding of human behavior and experience, both normal and...
abnormal. This paper considers ways in which neuroscience approaches may be integrated into hypnosis research to continue and enhance that contribution, as well as further reveal the nature of hypnosis itself. The authors review the influences on and advances in hypnosis research over the last century; illustrate the investigative value of hypnosis to selected phenomena across the areas of doing, feeling, believing, and remembering; and specify elements for the successful integration of neuroscience approaches into hypnosis research. The authors believe that hypnosis research offers powerful techniques to isolate psychological processes in ways that allow their neural bases to be mapped. Successful integration will be achieved when researchers add levels of explanation, rather than shift the emphasis from one level or feature to another.

[0824]
Evolutionary approaches to understanding the hypnotic experience
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Using Tinbergen's 4 why questions of causation, development, evolution, and function, the authors examine hypnosis from a larger, evolutionary perspective. Reasoning by analogy, they seek to view hypnosis in terms of an action pattern that represents a self-contained behavioral program although not as rigid as seen in lower organisms. In humans, such a program develops within the context of a long developmental sequence emphasizing social connections, imitation of significant figures, and the use of linguistic symbols to regulate both internal and external processes and actions. In terms of a mechanism, the authors speculate on the involvement of the cingulate cortex in achieving in hypnosis the experience of autonomous actions or analgesic sensory processes. Finally, they point to the fact that hypnotizability is associated with an ability to reduce the experience of pain, modulate the immune system, and achieve greater benefits of psychosocial therapies as a functional significance of the hypnotic experience.

[0825]
How can brain activity and hypnosis inform each other?
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Applying P. Teitelbaum's conception of the method of physiological psychology as interlocking stages of analysis and synthesis, the authors examine how studies of brain function can advance the understanding of hypnosis as a psychological process. They consider the exploration of animal analogues of human hypnosis, the study of brain injury in humans as a window on mechanisms underlying hypnosis, the distinct questions that brain-imaging studies of hypnosis can address, and the potential for comparative and developmental approaches to hypnosis as close allies to psychophysiological approaches. They conclude both that hypnosis is a powerful technique for studying the brain mechanisms of conscious experience and that underlying brain mechanisms may shed new light on longstanding theoretical debates about hypnosis.

[0826]
The four causes of hypnosis
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Aristotle's model of comprehension involves the description of a phenomenon and identification of its efficient causes (triggers), material cause (substrate), formal cause (models of structure), and final cause (function). This causal analysis provides a framework for understanding hypnosis and the hypnotic state. States are constellations of parameters within specified ranges; they name, but do not explain, a phenomenon. Concerns about reification of states are matters of semantics and pragmatics, not ontology. Isolation of efficient causes (e.g., procedure, context, social variables) is but one component of understanding. Experimental, technical, and conceptual advances have carried us into a century where the substrates and functions of hypnosis may be represented in synoptic theories that comprise all 4 causes of hypnosis.

[0827]
Hypnotic enhancement of cognitive-behavioral interventions for pain: an analogue treatment study
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Recent meta-analyses have shown that adding hypnosis enhances the effectiveness of cognitive-behavioral psychotherapy. This hypnotic enhancement effect was evaluated in the analogue treatment of pain. Individuals scoring in the high (n = 135) and low (n = 150) ranges of hypnotic suggestibility were randomly assigned to 1 of 6 conditions: Stress Inoculation Training, the same treatment provided hypnotically, nonhypnotic analgesia suggestions, hypnotic analgesia suggestions, a hypnotic induction treatment, or a control condition. The 5 analogue treatments reduced experimental pain more than the control condition, but were not different from one another. Under circumstances optimized to detect an enhancement effect, neither Stress Inoculation Training nor analgesia suggestions produced more relief when delivered in a hypnotic context than identical treatments provided nonhypnotically.
Increased cerebral functional connectivity underlying the antinociceptive effects of hypnosis
Brain Res Cogn Brain Res. 2003 Jul;17(2):255-62
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The neural mechanisms underlying the antinociceptive effects of hypnosis are not well understood. Using positron emission tomography (PET), we recently showed that the activity in the anterior cingulate cortex (midcingulate area 24a') covaries with the hypnotis-induced reduction of affective and sensory responses to noxious thermal stimulation [Faymonville et al., Anesthesiology 92 (2000) 1257-1267]. In the present study, we assessed changes in cerebral functional connectivity related to the hypnotic state, compared to simple distraction and the resting state. Nineteen highly hypnotizable right-handed volunteers were studied using H(2)(15)O-PET. The experimental conditions were hot noxious or warm non-noxious stimulation of the right hand during resting state, mental imagery and hypnotic state. Using a psychophysiological interaction analysis, we identified brain areas that would respond to noxious stimulations under the modulatory action of the midcingulate cortex in, and only in, the hypnotic state. Hypnosis, compared to the resting state, reduced pain perception by 50%. Pain perception during rest and mental imagery was not significantly different. Analysis of PET data showed that the hypnotic state, compared to normal alertness (i.e., rest and mental imagery), significantly enhanced the functional modulation between midcingulate cortex and a large neural network encompassing bilateral insula, pregenual anterior cingulate cortex, pre-supplementary motor area, right prefrontal cortex and striatum, thalamus and brainstem. These findings point to a critical role for the midcingulate cortex in the modulation of a large cortical and subcortical network underlying its influence on sensory, affective, cognitive and behavioral aspects of nociception, in the specific context of hypnosis.

Implicit memory varies as a function of hypnotic electroencephalogram stage in surgical patients
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Previous studies have observed a correlation of implicit memory with certain electroencephalogram (EEG) measures during anesthesia. Here, we tested the relationship between hypnotic depth determined by computer system (Narcotrend(TM)) and implicit memory in anesthetized patients, assessed by a postoperative reading speed test. Thirty-two patients undergoing laparoscopic herniotomy and 30 age-matched volunteer controls were included the study. All patients received IV midazolam 2-3 mg followed by an induction dose of propofol and remifentanil. The anesthesia was maintained with propofol and remifentanil infusions and cisatracurium. Each patient was exposed to 2 of 4 stories, repeated 6 times. The first story was presented during light to moderate hypnotic EEG stages, and the second story was presented during deep hypnosis. Presentation of stories was balanced between patients and hypnotic stages. The controls listened to the two stories without receiving anesthesia. The reading speed for the previously presented stories and two new stories was measured approximately 7 h later with a computer program. No signs of inadequate anesthesia were observed, and no explicit memories of intraoperative events were revealed by a structured interview. No change of reading speed was observed for words presented during deep hypnotic stages. In contrast, an increased reading speed of 20 ms per word was found for content words (i.e., nouns, verbs, and adjectives), but not for function words (conjunctions, prepositions, and so on), presented during light to moderate hypnotic stages. Increased reading speed for semantically rich content words indicates that anesthetized patients are able to process acoustic information during light and moderate, but not deep, hypnosis. IMPLICATIONS: In this study, implicit memory was observed during general anesthesia at light to moderate, but not deep, hypnotic stages. Hypnotic stages were determined by a commercial electroencephalogram device, and implicit memory was measured by using a postoperative reading speed task. During lighter phases of anesthesia, patients should be protected against acoustic information that could negatively influence their postoperative outcome.

Efficacy vs. effectiveness research in psychotherapy: implications for clinical hypnosis
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Empirically supported therapy (EST) has become a major focus and trend for mental health practice. When hypnosis is involved, this may mean satisfying a standard that is entirely too narrow in its emphasis. In this article "efficacy"-based research in clinical practice is contrasted with "effectiveness"-focused research, and they are discussed from the perspective of hypnosis. When clinicians can consider trans-theoretical factors as well as those that are treatment-enhancing, possibilities for improved treatment outcome increase. The "effectiveness" perspective also serves as a counterpoint for hypnosis in contrast with the dubious efficacy-based gold standard currently proposed for therapy in general, and hypnosis in particular.

A project to change the attitudes, beliefs and practices of health professionals concerning hypnosis
This study describes an educational project designed to change the beliefs, attitudes and practices of health care professionals concerning hypnosis and hypnotherapy. The purpose of the study was to investigate whether an educational offering that dispelled myths and misconceptions of hypnosis, offered a historical perspective, discussed how hypnosis works therapeutically, and elucidated the many medical uses of hypnosis, could change the attitudes, practices and beliefs of health care providers. Workshops were given to health care professionals at a variety of venues. Three questionnaires were used to collect data from study subjects before, immediately after and three months following the educational intervention. The results indicated that it is possible with a 90 to 180 minute lecture on hypnosis to create changes in beliefs, attitudes and practices. When health professionals have accurate information on hypnosis that is substantiated by scientific research, they are more likely to believe that hypnosis has a place in traditional mainstream medicine and to suggest self-regulatory strategies and hypnosis to their patients. An educational presentation on hypnosis can encourage health care professionals to learn more about this modality and to seek training in hypnosis.

[0832]
The hypnotic belay in alpine mountaineering: the use of self-hypnosis for the resolution of sports injuries and for performance enhancement
Morton PA

The author, an experienced alpine mountaineer, sustained several traumatic climbing injuries over a two-year period. This article describes her multiple uses of self-hypnosis to deal with several challenges related to her returning to successful mountain climbing. She used self-hypnosis for physical healing and to enhance her motivation to resume climbing. While training for her next expedition, she successfully utilized self-hypnotic techniques to deal with acute stress and later post-traumatic symptoms that had emerged related to her climbing injuries. She describes her use of hypnotic ego-strengthening, mental rehearsal, age progression, and "Inner Strength" as well as active-alert trance states. Her successful summitting of Ecuador's Cotopaxi at 19,380 feet was facilitated by "The Hypnotic Belay" which permitted her to secure herself by self-hypnosis in addition to the rope used to secure climbers. In 1994, the author returned to the Cascade Mountains where she had been injured three years earlier and reached the summit of Mount Shuksan. This time she was secured by "The Hypnotic Belay".

[0833]
Self-hypnosis for anxiety associated with severe asthma: a case report
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BACKGROUND: Management of asthma can be complicated by both medical and psychiatric conditions, such as gastroesophageal reflux, chronic sinusitis, and anxiety. When symptoms of asthma are interpreted without regard to such conditions treatment may yield a suboptimal outcome. For example, anxiety-associated dyspnea, tachypnea, and chest tightness can be mistakenly interpreted as resulting from an exacerbation of asthma. Medical treatment directed only for asthma may thus lead to overuse of asthma medications and increased hospitalizations. CASE PRESENTATION: The described case illustrates how a systemic steroid-dependent patient with asthma benefited from receiving care from a pediatric pulmonologist who also was well versed in the diagnosis and treatment of anxiety. By using self-hypnosis, the patient was able to reduce her dependence on bronchodilators. Following modification of her medical therapy under supervision of the pulmonologist, and regular use of hypnosis, the patient ultimately was weaned off her systemic steroid therapy. CONCLUSIONS: This report emphasizes that anxiety must be considered as a comorbid condition in the treatment of asthma. Self-hypnosis can be a useful skill in the treatment of a patient with anxiety and asthma.

[0834]
An evaluation of Woodard's theory of perceptually oriented hypnosis
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This article evaluates Woodard's theory of Perceptually Oriented Hypnosis, a welcome addition to theories of hypnosis that emphasize the centrality of subjective experiences in understanding and studying hypnosis. With a focus on subjective experience. Woodard's account of perceptually oriented hypnosis is based on elements of humanistic, client-centered, and perceptual psychology. However, we contend that improvements in the operational clarity and coverage of the theory are necessary to optimize its utility and heuristic value. We also argue that it is important for Perceptually Oriented Hypnosis to address hypnotic phenomena, e.g., individual differences in suggestibility, involuntary responding to suggestions, stability of responding over time, widely recognized as essential to understanding hypnotic experience and responding. With these refinements, we believe that Woodard's theory would have a greater potential to enrich our understanding of both the unique experiences of individuals who undergo hypnosis and of hypnosis in general.
Dental treatments of high dental anxiety patients (n = 20) under hypnotic conditions were investigated. Time need of main hypnotic events like rapport; induction; deepening; calming; developing imagination; dehypnosis; discussion was measured. Total time was significantly higher (p < 0.05) than pure dental treatment time, but the time the patients perceived was significantly less than total (p < 0.05), even somewhat less than pure dental treatment time. Distortion correlated significantly (negative Pearson's correlation; p < 0.05) with the time need of rapport (-0.50), calming (-0.51) and dehypnosis (-0.46), and with the time need of developing delightful imagination (+0.57) (positive Pearson's correlation; p < 0.05). There was no significant correlation between time distortion and the time need of hypnotic induction, deepening, total time need of hypnosis, or pure dental treatment time.

[0836]
Treatment of Irritable Bowel Syndrome
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Irritable bowel syndrome (IBS) is an extremely common cause of consultation, and at present is diagnosed on the basis of symptoms and a few simple exclusion tests. Exclusion diets can be successful, but many patients have already attempted and failed such treatments before consulting. Anxiety and somatization may be an important driver of consultation. Patients' concerns should be understood and addressed. Those with prominent psychologic disease may benefit from psychotherapy. Hypnotherapy benefits symptoms in those without psychologic disturbance, but its availability is limited. Antidepressants are effective in improving both mood and IBS symptoms globally, and the evidence is particularly good for tricyclic antidepressants. Although antispasmodics are currently the most commonly prescribed drugs, most responses (75%) are due to the placebo effect and not specific to the drug. Bulk laxatives such as ispaghula can increase stool frequency and help pain, but bloating may be aggravated. Loperamide is effective treatment for urgency and loose stools, but less effective for bloating and pain. 5-HT(3) antagonists such as alosetron improve urgency, stool consistency, and pain in diarrhea-predominant-IBS. The 5-HT(4) agonist tegaserod shows modest benefit in constipation-predominant IBS, improving stool frequency, consistency, and bloating as well as global improvement. There are many new drugs, such as cholecystokinin, neurokinin, and corticotropin receptor antagonists, in development.

[0837]
Treatment of Functional Dyspepsia
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Because there is currently no universally effective treatment for functional dyspepsia, a stepwise approach is useful. The initial steps should include 1) making a firm clinical diagnosis and providing the patient with appropriate information and reassurance; 2) ascertaining the reason for referral/consultation, as this determines what the patient will regard as a satisfactory outcome; 3) informing the patient that there is no universally effective drug treatment; and 4) giving dietary and general lifestyle advice, such as ingestion of smaller, more frequent meals, a low-fat diet, avoidance of certain foods that may exacerbate symptoms, limiting coffee and alcohol intake, smoking cessation, and stress management techniques. If the initial approach does not provide a satisfactory outcome, the following approaches may be helpful. Psychologic treatment approaches, such as hypnotherapy and/or antidepressants, have shown very encouraging results in recent studies and deserve active consideration. In patients with uninvestigated dyspepsia, the "test and treat" strategy for Helicobacter pylori is a cost-effective approach. Prokinetics are of possible benefit in subjects with delayed gastric emptying; however, the relationship between improvement of gastric emptying and symptom alleviation is weak. Furthermore, it needs to be recognized that treatments directed at acid suppression are generally of little sustained benefit, and that there is ongoing controversy as to whether H. pylori eradication is of direct benefit.

[0838]
The contributions of suggestion, desire, and expectation to placebo effects in irritable bowel syndrome patients. An empirical investigation
Pain. 2003 Sep;105(1-2):17-25
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In order to investigate external factors that may influence the magnitude of placebo analgesia as well as psychological factors that mediate placebo analgesia, 13 irritable bowel syndrome (IBS) patients rated evoked rectal distension and cutaneous heat pain under the conditions of natural history (NH), rectal placebo (RP), rectal nocebo (RN), rectal lidocaine (RL) and oral lidocaine (OL). Patients were given verbal suggestions for pain relief and rated expected pain levels and desire for pain relief for both evoked visceral and cutaneous pain, respectively. Large reductions in pain intensity and pain unpleasantness ratings were found in the RP, RL and OL condition as compared to the natural history condition, whereas no significant difference in pain reduction between the three treatment conditions was found. Ratings during RN and NH...
were not statistically different. Compared to a previous study, which shows that rectal lidocaine reverses visceral and cutaneous hyperalgesia, these results suggest that adding a verbal suggestion for pain relief can increase the magnitude of placebo analgesia to that of an active agent. Since IBS patients rate these stimuli as much higher than do normal control subjects and since placebo effects were very large, they probably reflect anti-hyperalgesic mechanisms to a major extent. Expected pain levels and desire for pain relief accounted for large amounts of the variance in visceral pain intensity in the RP, RL, and OL condition (up to 81%), and for lower amounts of the variance in cutaneous pain intensity. Hence, the combination of expected pain levels and desire for pain relief may offer an alternative means of assessing the contribution of placebo factors during analgesia.

[0839]
Effects of using a nursing crisis intervention program on psychosocial responses and coping strategies of infertile women during in vitro fertilization
J Nurs Res. 2003 Sep;11(3):197-208
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Infertility and its treatment may cause life crises in infertile women. The purpose of this study is to evaluate the effects of a crisis intervention program on improving psychosocial responses and enhancing coping strategies for infertile women attending different stages of an In-Vitro Fertilization V Embryo Transfer (IVF-ET) treatment program. Using an experimental study design, infertile women attending an IVF-ET treatment program were randomly assigned to experimental and control groups. In the experimental group, infertile women completed and answered a questionnaire and received nursing crisis intervention at the initial stage of treatment (day 3). This included (1). viewing a video explaining the therapeutic process of IVF-ET, (2). self-hypnosis and muscle relaxation training, and (3). provision of cognitive-behavioral counseling. The same questionnaire was used again for subjects at the stage of embryo transfer and before taking a pregnancy test. The women in the control group were only interviewed using the same questionnaire and at the same times as the experimental group. Analysis by repeated measurement ANOVA demonstrated that there was a reduction in psychosocial response in terms of interpersonal relationships, and there was an interaction between intervention effects and stage of treatment. However, there was no statistically significant difference in the level of psychosocial responses between the experimental and control groups although some meaningful findings were made. However, in terms of state of anxiety, confrontational problems, and isolated mind/body relaxation, there were significant differences between the two groups of infertile women at some stages of IVF-ET treatment. The women in the experimental group perceived a positive effect of the nursing intervention in relieving their psychosocial responses. The results of this nursing crisis intervention could be helpful in nursing practice when dealing with infertile women attending IVF treatment programs.

[0840]
Effectiveness of autogenic relaxation training on children and adolescents with behavioral and emotional problems
J Am Acad Child Adolesc Psychiatry. 2003 Sep;42(9):1046-54
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OBJECTIVE: To investigate the effectiveness of autogenic relaxation training in a mildly disturbed outpatient population of children and adolescents with mostly internalizing symptoms, and/or some aggressive, impulsive, or attention deficit symptoms. METHOD: Fifty children and adolescents from southern Germany (mean age 10.2 years; range 6-15 years; mostly intact middle class family background) participated in a group intervention program. Fifteen patients were randomly assigned to a waiting-list control group. Behavior symptoms (Child Behavior CheckList), psychosomatic complaints (Giessen Complaint List), and level of stress were assessed before and after the intervention or after the waiting phase. Individual goal attainment was evaluated at the end of the intervention and in a 3-month follow-up. RESULTS: The parent report on CBCL reflected reduced symptoms compared with control. The child report indicated reduced stress and psychosomatic symptoms both in the intervention and control group, and no significant group x time interaction effects occurred on these scales. Effect sizes of 0.49 in the CBCL and 0.36 in the complaint list indicated clinically relevant effects of the intervention compared with the control group. At the end of the intervention, 56% of the children and 55% of the parents reported partial goal attainment, 38% of the children and 30% of the parents reported complete goal attainment; 71% of the parents confirmed partial goal attainment 3 months postintervention. CONCLUSIONS: Autogenic relaxation training is an effective broadband method for children and adolescents.

[0841]
Hypnotic control of attention in the Stroop task: a historical footnote
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Raz, Shapiro, Fan, and Posner (2002) have recently provided a compelling demonstration of enhanced attentional control under post-hypnotic suggestion. Using the classic color-word interference paradigm, in which the task is to ignore a word and to name the color in which it is printed (e.g., RED in green, say "green"), they gave a post-hypnotic instruction to participants that they would be unable to read. This eliminated Stroop interference in high suggestibility participants but did not alter interference in low suggestibility participants. replicated this pattern and further demonstrated that it is not
due to a visual strategy (such as blurring or looking at a different location). As a historical footnote, we describe a "case study" from 18 years ago in which we observed the same result using a hypnotic instruction to a single highly suggestible individual that he could not read. The elimination of Stroop interference has important implications for both the study of attention and the study of hypnosis.

A model of hypnotic intervention for palliative care
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The World Health Organization defines palliative care as "the active total care of patients whose disease is not responsive to curative treatment." One of the primary issues of palliative care for patients with advanced cancer is symptom control and quality-of-life issues. The purpose of the hypnotic model presented here is to improve the patient's total psychological, social, and spiritual well-being. There exists a need for a broad and inclusive model of mind-body interventions for palliative care. This is supported by the observation that symptoms related to psychological distress and existential concerns are even more prevalent than pain and other physical symptoms among those with life-limiting conditions. The following model integrates naturalistic, solution-oriented hypnosis within the framework of a situational 4-stage crisis matrix. The four stages of the matrix are: (1) The Initial Crisis, (2) Transition, (3) Acceptance, and (4) Preparation for Death. Hypnotic interventions are tailored to each stage in the crisis matrix.

Long term benefits of hypnotherapy for irritable bowel syndrome
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BACKGROUND AND AIMS: There is now good evidence from several sources that hypnotherapy can relieve the symptoms of irritable bowel syndrome in the short term. However, there is no long term data on its benefits and this information is essential before the technique can be widely recommended. This study aimed to answer this question.

PATIENTS AND METHODS: 204 patients prospectively completed questionnaires scoring symptoms, quality of life, anxiety, and depression before, immediately after, and up to six years following hypnotherapy. All subjects also subjectively assessed the effects of hypnotherapy retrospectively in order to define their "responder status". RESULTS: 71% of patients initially responded to therapy. Of these, 81% maintained their improvement over time while the majority of the remaining 19% claimed that deterioration of symptoms had only been slight. With respect to symptom scores, all items at follow up were significantly improved on pre-hypnotherapy levels (p<0.001) and showed little change from post-hypnotherapy values. There were no significant differences in the symptom scores between patients assessed at 1, 2, 3, 4, or 5+ years following treatment. Quality of life and anxiety or depression scores were similarly still significantly improved at follow up (p<0.001) but did show some deterioration. Patients also reported a reduction in consultation rates and medication use following the completion of hypnotherapy. CONCLUSION: This study demonstrates that the beneficial effects of hypnotherapy appear to last at least five years. Thus it is a viable therapeutic option for the treatment of irritable bowel syndrome.

Eyewitness memory, suggestibility, and repeated recall sessions in children with mild and moderate intellectual disabilities
Law Hum Behav. 2003 Oct;27(5):481-505
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This study of eyewitness memory questioned children with mild and moderate intellectual disabilities (ID) about a live staged event 1 day later and, again, 2 weeks later. Children with mild ID performed as well as typically-developing children of the same age in response to free recall instructions, and they were just as able as same age peers to resist misleading questions. However, they performed more poorly on general questions, probing for further information after free recall. The children with mild ID also changed their responses to specific questions more often in the repeated interview. The group of children with moderate ID showed markedly lower performance than peers of the same age on nearly every type of eyewitness memory question. Comparisons of the children with ID to mental age-matched peers indicated that performance was similar, although children with ID gave more information in response to free recall instructions and changed their answers in the repeated interview more often. Standardized measures of verbal memory (TOMAL) and suggestibility (Gudjonsson Suggestibility Scale) were modest to moderate predictors of eyewitness memory performance.

Swedish norms for the Harvard Group Scale of Hypnotic Susceptibility, Form A
Bergman M, Trenter E, Kallio S
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This article examines the norms for a Swedish adaptation of the Harvard Group Scale of Hypnotic Susceptibility, Form A (HGSHS:A) (Shor & Orne, 1962). In total, 291 subjects (199 females and 92 males) participated in the study. Comparisons are made between the Swedish sample and reference samples, which include English versions of the HGSHS:A from the United States and Australia, as well as 5 translated versions from Italy, Finland, Denmark, Spain, and Germany. In the Swedish sample, females scored significantly higher than males. Generally, however, the normative data from the Swedish sample are congruent with the reference samples and therefore can be used as a tool for initial screening of hypnotic susceptibility in Sweden.

Hypnosis, attention, and time cognition
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This study examined the influence of hypnotic susceptibility (high vs. low), hypnotic condition (hypnotic vs. nonhypnotic), and attentional demands (high vs. low) on the verbal estimates (N = 510 undergraduates) of 30- and 60-second time intervals under both prospective (aware of timing) and retrospective (unaware of timing) paradigms. It was expected that prospective judgments would be greater than retrospective judgments across all factors. Consistent with existing literature, strong support was found for this hypothesis. Hypotheses generated within the trait-state paradigm were not supported. No effects were found for hypnotic susceptibility in any form. Partial support was found for the sociocognitive model. The hypnotic context, independent of level of susceptibility, apparently utilizes the attentional resources of participants and as a by-product leads to underestimation of time. Longer time intervals (60 s) were also underestimated in comparison to shorter intervals (30 s).

Could empathy be a predictor of hypnotic ability?
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This study examined whether trait empathy is related to hypnotic ability and absorption. Sixty-four graduate students and mental health professionals completed the Harvard Group Scale of Hypnotic Susceptibility, Form A; the Davis Interpersonal Reactivity Index; and the Tellegen Absorption Scale as measures of hypnotic ability, empathy, and absorption. Correlation analysis determined that statistically significant relationships exist between empathy and hypnotic ability (r = .41); empathy and absorption (r = .43); and absorption and hypnotic ability (r = .31). The results also indicate that empathy and absorption are both predictors of hypnotic ability, although absorption does not appear to contribute a statistically significant amount of the explained variance in hypnotizability that is independent of empathy. It may be that the conceptual ground shared by both empathy and absorption is what predicts hypnotic ability.

Beliefs about hypnosis: popular beliefs, misconceptions, and the importance of experience
Green JP
The Ohio State University, Lima, Ohio 45804, USA

Contemporary views and opinions about hypnosis were sampled with a modified version of McConkey's Opinions About Hypnosis (OAH) scale. The OAH was administered at 2 different times, 1 month apart, to 276 undergraduate students. Approximately half of the participants completed the Harvard Group Scale of Hypnotic Susceptibility, Form A, between the survey sessions. Results indicated that the experience of being hypnotized modified a majority of the opinions sampled, with participants expressing less stereotypic views about hypnosis after being hypnotized. Expressed opinions and beliefs about hypnosis failed to meaningfully correlate with hypnotizability scores.

Hypnotizability and posttraumatic stress disorder: a prospective study
Bryant RA, Guthrie RM, Moulds ML, Nixon RD, Felmingham K
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Although there is converging evidence that posttraumatic stress disorder (PTSD) is associated with higher levels of hypnotizability, there are no studies concerning the stability of hypnotizability levels following trauma. Acutely traumatized participants with acute stress disorder (N = 45) were administered the Stanford Hypnotic Clinical Scale (SHCS) within 4 weeks of their trauma. Participants were subsequently administered a brief cognitive-behavior therapy program. Six months after treatment, participants were re-assessed with the SHCS. Although SHCS scores were generally stable (r = .47), two thirds of participants responded differently across the 2 assessments. Increased SHCS scores at the second assessment were correlated with elevated PTSD avoidance scores. This finding suggests that elevated hypnotizability in PTSD populations may not be entirely stable and may be associated with specific PTSD responses.
Adverse short-term effects of attention-control treatment on hypnotizability: a challenge in designing controlled hypnosis trials
Koch T, Lang EV, Hatsioupolou O, Anderson B, Berbaum K, Spiegel D
Harvard Medical School, Boston, Massachusetts 02215, USA

Characteristics of patients in test and attention-control groups should be comparable and be unaffected by the intervention to be tested in clinical trials. The authors assessed whether this is the case for measures of hypnotizability in the postoperative period. One hundred and forty-six patients undergoing percutaneous peripheral vascular or renal interventions were randomized into 2 groups. One group received structured empathic attention during their procedures; the other was guided to self-hypnotic relaxation. Hypnotizability was assessed postoperatively by the Hypnotic Induction Profile. The eye-roll scores, which measure the biological hypnotic potential, were not significantly different, but the average induction scores, which measure the expression of the hypnotic performance, were significantly lower in the attention group than the hypnotic group (4.9 vs. 5.9). The authors conclude that patients who were aided by an external focus intraoperatively are postoperatively less able or willing to follow suggestions measuring hypnotizability than patients who had guidance to self-hypnotic relaxation.

[0851]
Treatment of functional hypothalamic amenorrhea with hypnotherapy
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OBJECTIVE: To determine the effects of hypnotherapy on resumption of menstruation in patients with functional hypothalamic amenorrhea (FHA). DESIGN: Uncontrolled clinical study. SETTING: Academic clinical care center. PATIENT(S): Twelve consecutive women with FHA were selected. INTERVENTION(S): A single 45- to 70-minute session of hypnotherapy was administered, and patients were observed for 12 weeks. MAIN OUTCOME MEASURE(S): Patients were asked whether or not menstruation resumed and whether or not well-being and self-confidence changed. RESULT(S): Within 12 weeks, 9 out of 12 patients (75%) resumed menstruation. All of the patients, including those who did not menstruate, reported several beneficial side effects such as increased general well-being and increased self-confidence. CONCLUSION(S): Hypnotherapy could be an efficacious and time-saving treatment option that also avoids the pitfalls of pharmacological modalities for women with FHA.

[0852]
Effects of diaphragmatic breathing on ambulatory blood pressure and heart rate
Biomed Pharmacother. 2003 Oct;57 Suppl 1:87s-91s
Lee JS, Lee MS, Lee JY, Cornelissen G, Otsuka K, Halberg F
Halberg Chronobiology Center, University of Minnesota, MMC 8609, 420 Delaware Street SE, Minneapolis, MN 55455, USA

Psychological procedures, such as self-hypnosis in the form of autogenic training, have been proposed for correcting a deviant, e.g., high blood pressure (BP). In view of the overwhelming evidence for the circadian (CD) stage dependence of any treatment effects, the CD stage dependence of the effects of diaphragmatic breathing (DB) on BP and heart rate (HR) was explored in data from a clinically healthy normotensive subject who, following 3 weeks of ambulatory monitoring as a reference standard, measured BP and HR with a manual monitor at 1-min intervals for 5 min before and after DB (three deep diaphragmatic breaths) and who performed DB for about 2 weeks at about 2-h intervals while awake. The 3-week data series were analyzed by cosinor, involving the least-squares fit of cosine curves with periods of 24, 12 and 168 h. A CD rhythm was detected for BP and HR (P &lt; 0.001 in each case), peaking in the afternoon. Some about-weekly (circaseptan; CS) BP rhythms and 12-h (circasemidian) components were also statistically significant. DB was found to reduce systolic (S) BP. Overall, SBP decreased by 5.9 +/- 0.8 mmHg (P &lt; 0.001) and diastolic (D) BP by 1.4 +/- 0.8 mmHg (P &lt; 0.005), while HR remained at about the same average. The effect of DB on BP was CD-dependent, the largest response occurring in the afternoon, 2-3 h before the peaks in SBP and DBP found in the reference data of the same subject. There was also a 5-10% decrease in SBP around the weekend (Friday and Saturday). The results on a single subject suggest the need to collect similar data on others for optimizing by clock-hour, day of the week, and eventually by the marker rhythms BP and/or HR the best times for DB and other procedures. The personalized best time for people on different work/rest schedules for relaxation may be several hours before their BP has reached its highest point in the 24-h span. HR may serve as a marker for DB timing, but the effect on HR of DB was only of borderline statistical significance in the subject investigated.

[0853]
Eastern meditative techniques and hypnosis: a new synthesis
Otani A
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In this article major ancient Buddhist meditation techniques, samatha, vipassana, Zen, and ton-lon, will be described in reference to contemporary clinical hypnosis. In so doing, the Eastern healing framework out of which these techniques
emerged is examined in comparison with and in contrast to its Western counterpart. A growing body of empirical literature shows that meditation and hypnosis have many resemblances despite the distinct differences in underlying philosophy and technical methodologies. Although not all meditation techniques "fit" the Western culture, each has much to offer to clinicians who are familiar with hypnosis.

[0854]
The science of meditation and the state of hypnosis
Holroyd J
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Two aspects of Buddhist meditation—concentration and mindfulness—are discussed in relationship to hypnosis. Mindfulness training facilitates the investigation of subjective responses to hypnosis. Concentration practice leads to altered states similar to those in hypnosis, both phenomenologically and neurologically. The similarities and differences between hypnosis and meditation are used to shed light on perennial questions: (1) Does hypnosis involve an altered state of consciousness? (2) Does a hypnotic induction increase suggestibility? I conclude that a model for hypnosis should include altered states as well as capacity for imaginative involvement and expectations.

[0855]
Hypnotic susceptibility as a predictor of participation in student activities
Graham KR, Marra LC, Rudski JM
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In this study, Harvard Group Scale of Hypnotic Susceptibility: Form A scores for 458 college students were compared with college yearbook records of their participation in student activities. Students who scored low in susceptibility showed significantly less participation in activities than others who were either moderate or high in susceptibility. Overall, females showed higher levels of participation than males, but there was no significant interaction between gender and hypnotic susceptibility. Spectral analysis showed participation scores to be somewhat more strongly related to easier HGSHS:A items than to more difficult items in the manner predicted by two-factor theory. Closer examination of the results revealed that this effect was primarily due to the fact that low susceptible subjects participated significantly less in student activities than subjects who were either moderate or high in hypnotic susceptibility. The results suggest that future research should further examine the unique contribution of low susceptibility subjects to hypnosis theory and research.

[0856]
Hypnosis as a vehicle for choice and self-agency in the treatment of children with Trichotillomania
Iglesias A
[source location: unknown]

Three pediatric cases of Trichotillomania were treated with direct hypnotic suggestion with exclusive emphasis on sensitizing and alerting the patients to impending scalp hair pulling behaviors. These children had presented with total lack of awareness of their scalp hair pulling behaviors until they had actually twisted and pulled off clumps of hair. It was also suggested, under hypnosis, that upon learning to recognize impending scalp hair pulling behaviors, the patients would become free to choose to willfully pull their hair or to resist the impulse and not pull. At no point was the explicit suggestion given that they stop pulling their hair. A preliminary condition was agreed to by the parents that redefined the patients' hair as their own property and affirmed their sole responsibility for its care and maintenance. An element of suggestion given that they stop pulling their hair. A preliminary condition was agreed to by the parents that redefined the patients' hair as their own property and affirmed their sole responsibility for its care and maintenance. An element of suggestion that this effect was primarily due to the fact that low susceptible subjects participated significantly less in student activities than subjects who were either moderate or high in hypnotic susceptibility. The results suggest that future research should further examine the unique contribution of low susceptibility subjects to hypnosis theory and research.

[0857]
Effect of photo-acoustic stimulation combined with hypnotherapy on saliva secretion. A pilot study
Fogory Sz. 2003 Oct;96(5):217-21
Semmelweis Egyetem, Fogpollastani Klinika, Budapest

Effect of photo-acoustic stimulation on the flow rate and protein concentration of whole saliva was investigated. 10 medical students' and 11 edentulous patients' salivary volume and protein concentrations were measured before, during, and after stimulation. The flow rate of the students' group was significantly higher (p < 0.01) and after the treatment, whereas the protein concentration was significantly lower (p < 0.05) before, during and after treatment comparing to the patients' group. The flow rate of the students' group significantly increased during stimulation (p < 0.05). Salivary protein concentration of the students' group significantly increased (p < 0.05) after stimulation. There were no significant changes in the group of patients. Repeated stimulation combined with hypnotic relaxation was used in the case of 4 psychosomatic patients. Resting salivary flow and protein concentration significantly increased in 2
cases (p ≤ 0.05) as a result of the therapy.

[0858]
[Effectiveness of standardized direct suggestions in dental hypnosis]
Fogorv Sz. 2003 Oct;96(5):205-10
Gaspar J, Linninger M, Kaan B, Balint M, Fejerdy L, Fabian TK
Semmelweis Egyetem, Fogopoliai Klinika, Budapest

The frequency of occurrence of amnesia, analgesia and time distortion during hypnotic dental treatments (n = 60) was investigated on high dental anxiety patients. Hypnosis with and without standardised direct suggestions related to amnesia, analgesia and time distortion were compared. Treatment of alert patients without direct suggestions (n = 10) were also used for comparison. Amnesia and time distortion was higher (p ≤ 0.05) with the use of suggestions under hypnotic conditions, but analgesia was not significantly different. Alert appearance of the events were in all cases less (p ≤ 0.01) than under hypnotic conditions.

[0859]
Effects of autogenic training and antihypertensive agents on circadian and circaseptan variation of blood pressure
Watanabe Y, Cornelissen G, Watanabe M, Watanabe F, Otsuka K, Ohkawa S, Kikuchi T, Halberg F
Tokyo Women's Medical University, Tokyo, Japan

Even when the daily blood pressure mean is acceptable, too large a circadian amplitude of blood pressure largely increases cardiovascular disease risk. Autogenic training (N = 11), a non-pharmacologic intervention capable of lowering an excessive blood pressure variability, may be well-suited for MESOR-normotensive patients diagnosed with circadian-hyper-amplitude-tension (CHAT). Not all anti-hypertensive drugs affect blood pressure variability. Accordingly, long-acting carteolol (N = 11) and/or atenolol (N = 8) may be preferred to captopril retard (N = 13), nilvadipine (N = 8), or amloidipine (N = 7) for midline-estimating statistic of rhythm (MESOR)-hypertensive patients with CHAT. Prospective outcome studies are needed to assess whether the relative merits of these treatments are in keeping with their effects on blood pressure and blood pressure variability.

[0860]
[Algorithm for diagnosis and therapy of pain]
Gallacchi G
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Certain basic principles are applicable to all forms of pain treatment when the aims are pain relief and the avoidance of chronicity. Such algorithms, as guidelines are even more important when pain is becoming chronic. The use of the described algorithms is necessary in the diagnosis and therapy of acute pain and also to avoid the establishment of chronic pain due to the changes of neuroplasticity in the central nervous system. The most important basic principles in the form of algorithms are first of all that therapies should be simultaneously applied and not sequentially. Secondly, the challenge should be met to create a concept where by various therapies can be performed in a parallel fashion, without compete one another and being effective on different aspects and causes of the pain.

[0861]
Use of aromatherapy (with or without hypnosis) in the treatment of intractable epilepsy--a two-year follow-up study
Seizure. 2003 Dec;12(8):534-8
Betts T
Birmingham University Seizure Clinic, Queen Elizabeth Psychiatric Hospital, Birmingham B15 2QZ, UK

We have been trying the effect of aromatherapy (with or without hypnosis) in patients with intractable epilepsy who ask for it. This is a report of the first 100 patients to try the treatment, followed up for at least two years after the treatment ended. It is important to remember that this was a treatment for people who had asked for it and for whom time and a therapist was available. It was not a controlled trial but was carried out when we could and at a time when we were experimenting with the best way of using it. Results must therefore be treated with caution and with due regard to other therapeutic factors that may be implicated in the results, both good and bad. We assume that the result (with over a third of the patients using aromatherapy with or without hypnosis becoming seizure free for at least a year) as being the best that could be achieved and likely to be less in a properly controlled trial. Of the three treatments tried (aromatherapy on its own, aromatherapy plus hypnosis and hypnosis without aromatherapy), aromatherapy plus hypnosis seems to have had the best and most lasting effect (a third of patients still seizure free at two years), but was the most labour intensive and needed medical therapist input. Aromatherapy itself might be best reserved as a short-term treatment for people going through a bad time with their seizures. A fuller and more lasting effect may be obtained with aromatherapy plus hypnosis, but this needs a patient who is prepared to put much time and personal effort into the treatment.

[0862]
Smoking cessation
Respir Care. 2003 Dec;48(12):1238-54; discussion 1254-6
Marlow SP, Stoller JK
Cigarette smoking is the primary cause of chronic obstructive pulmonary disease, and smoking cessation is the most effective means of stopping the progression of chronic obstructive pulmonary disease. Worldwide, approximately a billion people smoke cigarettes and 80% reside in low-income and middle-income countries. Though in the United States there has been a substantial decline in cigarette smoking since 1964, when the Surgeon General's report first reviewed smoking, smoking remains widespread in the United States today (about 23% of the population in 2001). Nicotine is addictive, but there are now effective drugs and behavioral interventions to assist people to overcome the addiction. Available evidence shows that smoking cessation can be helped with counseling, nicotine replacement, and bupropion. Less-studied interventions, including hypnosis, acupuncture, aversive therapy, exercise, lobeline, anxiolytics, mecamylamine, opioid agonists, and silver acetate, have assisted some people in smoking cessation, but none of those interventions has strong research evidence of efficacy. To promote smoking cessation, physicians should discuss with their smoking patients "relevance, risk, rewards, roadblocks, and repetition," and with patients who are willing to attempt to quit, physicians should use the 5-step system of "ask, advise, assess, assist, and arrange." An ideal smoking cessation program is individualized, accounting for the reasons the person smokes, the environment in which smoking occurs, available resources to quit, and individual preferences about how to quit. The clinician should bear in mind that quitting smoking can be very difficult, so it is important to be patient and persistent in developing, implementing, and adjusting each patient's smoking-cessation program. One of the most effective behavioral interventions is advice from a health care professional; it seems not to matter whether the advice is from a doctor, respiratory therapist, nurse, or other clinician, so smoking cessation should be encouraged by multiple clinicians. However, since respiratory therapists interact with smokers frequently, we believe it is particularly important for respiratory therapists to show leadership in implementing smoking cessation.

[0863] Phenomenological contributions to understanding hypnosis: review of the literature
Psychol Rep. 2003 Dec;93(3 Pt 1):829-47
Woodard F
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This article provides a summary of the available qualitative literature on hypnosis of importance to empirical study of hypnosis. The author advocates a link between phenomenological research and the qualitative research of perceptual theory to deepen an understanding of hypnosis previously missing in the research literature and in debates on the theoretical approaches to hypnosis. The author suggests linking Giorgi's and Wasicsko's research methodologies to advance qualitative research. Researchers could conduct more qualitative research on the experience of hypnosis to expand and explicate subjective experiencing and enhance exploration of individual differences that cannot be captured in artificially controlled environments.

[0864] Is there touch in the game of Twister? The effects of innocuous touch and suggestive questions on children's eyewitness memory
Law Hum Behav. 2003 Dec;27(6):589-604
Krackow E, Lynn SJ
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Preschool children (ages 48-70 months, N = 48) experienced 2 to-be-remembered events (i.e., the games Twister and Shapes) that included either innocuous bodily touch or no touch. Participants were interviewed 7 days later and asked direct ("Did Amy kiss you?") or suggestive "tag" questions ("Amy kissed you, didn't she?") equated for content. Results indicated that children who were innocuously touched were no more likely to falsely assent to "abuse-related" touch questions (e.g., "Amy touched your bottom, didn't she?") than were children who were not touched. However, children who were asked tag questions responded at chance levels, thereby making high errors of commission in response to abuse-touch questions relative to their no-tag counterparts who responded to "abuse questions" accurately 93% of the time. Children who were asked tag questions assented at a higher rate to general forensic questions ("Amy took your picture, didn't she?") than did children asked direct questions, and children assented at higher rates to "abuse-touch" questions than to general forensic questions. Results are discussed in terms of prior research on interviewing techniques and adult influence on children's testimony.

[0865] The integration of hypnosis into a model of palliative care
Integr Cancer Ther. 2003 Dec;2(4):365-70
Marcus J, Elkins G, Mott F
Mind-Body Cancer Research Program and Center for Cancer Prevention and Care, Scott and White Memorial Hospital and Clinic

There exists a need for a broad and inclusive model of integration of mind-body interventions for palliative care. Symptoms relating to psychological distress and existential concerns are even more prevalent than pain and other physical symptoms among those with life-limiting conditions. The hypnotic model's purpose is to improve the patient's total psychological, social, and spiritual well-being. A 4-stage model of interventions is offered to assist the clinician in developing and implementing appropriate hypnotherapeutic treatment for noncurative patients. The focus of the
hypnotherapy is to ameliorate the effects of pain and dyspnea to restore a level of psychological and physical wellbeing. Within this model of therapy for patients with active, progressive, far-advanced disease and a short life expectancy, the goals of the hypnotic intervention are to provide relief from pain and shortness of breath. Other focuses include assisting the patient with the psychological adjustment to their noncurative and ultimately final state.

[0866] The impact of self-hypnosis and Johrei on lymphocyte subpopulations at exam time: a controlled study
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In a prospective randomised controlled trial, 48 students were randomly assigned to stress reduction training before exams with self-hypnosis, Johrei or a mock neurofeedback relaxation control. Peripheral blood lymphocyte subpopulations and self-reported stress (Perceived Stress Scale) were measured before training and 1-2 months later as exams approached. Absolute number and percentages of CD3(+)CD4(+) and CD3(+)CD8(+) T lymphocytes, CD3(-)CD56(+) Natural Killer cells (NK cells) and NK cell cytotoxic activity was measured from venous blood. Stressed participants showed small but significant declines in both CD3(-)CD56(+) NK cell percentages and NK cell cytotoxic activity levels while CD3(+)CD4(+) T cell percentages increased, changes supported by correlations with perceived stress. The effects of stress were moderated in those who learned Johrei at exam time; 11/12 showed increases in CD3(-)CD56(+) NK cell percentages with decreased percentages of CD3(+)CD4(+) T cells, effects not seen in the relaxation control group. Stress was also buffered in those who learned and practised self-hypnosis in whom CD3(-)CD56(+) NK cell and CD3(+)CD4(+) T cell levels were maintained, and whose CD3(+)CD8(+) T cell percentages, shown previously to decline with exams, increased. The results compliment beneficial effects on mood of self-hypnosis and Johrei. The results are in keeping with beneficial influences of self-hypnosis and provide the first evidence of the suggestive value of the Japanese Johrei procedure for stress reduction, which clearly warrants further investigation.

[0867] Virtual reality hypnosis: a case report
Patterson DR, Tininenko JR, Schmidt AE, Sharar SR
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This preliminary case report explored the use of hypnosis induced through a 3-dimensional, immersive, computer-generated virtual reality (VR) world as a means to control pain and anxiety in a patient with a severe burn injury. On hospitalization Day 40, after reports of uncontrollable pain and anxiety, the patient underwent hypnotic induction while immersed in a virtual world and received posthypnotic suggestions for decreased pain and anxiety during subsequent wound-care sessions. The patient's pain and anxiety each dropped 40% after VR hypnosis on a Graphic Rating Scale for his Day 41 wound care. Pain dropped similar levels on Day 42 with an audio-only version of the intervention and then returned to baseline without intervention on Day 43.

[0868] Hypnosis, memory, and frontal executive functioning
Farvolden P, Woody EZ
Section on Personality and Psychopathology, Center for Addiction and Mental Health, Toronto, Ont., Canada

According to the dissociated-control hypothesis forwarded by Woody and Bowers (1994), the effects of hypnosis are consistent with attenuated frontal lobe functioning. The present study was designed to compare the performance of participants with high and low hypnotic ability on a variety of memory tasks thought to be sensitive to frontal lobe functioning, as well as some control memory tasks not considered to be sensitive to such functioning. Results generally indicated that participants with high hypnotic ability have more difficulty with tasks sensitive to frontal lobe functioning, including free recall, proactive interference, and source amnesia tasks, both within and outside of the context of hypnosis. These differences, which were not found for nonfrontal tasks, are generally supportive of the dissociated control theory of hypnotic responding.

[0869] Clinical hypnosis for smoking cessation: preliminary results of a three-session intervention
Elkins GR, Rajab MH
Texas A&M University System Health Science Center College of Medicine, USA

This study presents preliminary data regarding hypnosis treatment for smoking cessation in a clinical setting. An individualized, 3-session hypnosis treatment is described. Thirty smokers enrolled in an HMO were referred by their primary physician for treatment. Twenty-one patients returned after an initial consultation and received hypnosis for smoking cessation. At the end of treatment, 81% of those patients reported that they had stopped smoking, and 48% reported abstinence at 12 months posttreatment. Most patients (95%) were satisfied with the treatment they received. Recommendations for future research to empirically evaluate this hypnosis treatment are discussed.
One hundred and seven healthy volunteers were administered Cloninger's Tridimensional Personality Questionnaire (TPQ), the Differential Attentional Processes Inventory (DAPI), the Tellegen Absorption Scale (TAS), and the Stanford Hypnotic Susceptibility Scale, Form C (SHSS:C). Polymorphisms of catechol O-methyltransferase (COMT), an enzyme involved in dopamine metabolism, were assessed. Highly hypnotizable subjects self-reported greater TPQ persistence, absorption, and focused attentional abilities. Hierarchical multiple regression analyses found that TPQ persistence, COMT, TAS, and the DAPI attentional scales explained 43.8% of the variance in women and 29% in men. Membership was correctly discriminated for the more extreme low (62.1%) and highly (81.5%) hypnotizable groups. These results suggest that highly hypnotizable persons have a more effective frontolimbic attentional system and further suggest the involvement of dopaminergic systems in hypnotizability.

Over a 28-year period, 724 men and 1148 women completed the Harvard Group Scale of Hypnotic Susceptibility, Form A. Overall, women scored higher than men. This effect was most prominent on 6 of the 12 items, most (though not all) challenge items (identified by a principal-components analysis). The overall effect size was quite small. Results are discussed in terms of differences in item difficulty.

Recently, 9 especially important critical reviews and research studies have appeared in the general scientific and medical literatures pertaining to 4 areas of applied and scientific hypnosis: management of pain, treatment of gastrointestinal disorders, adjunctive hypnosis in outpatient surgery, and error in memory. Together, these articles examine matters of soma and cognition that are at once core to scientific hypnosis but also of keen interest to clinicians. The studies and reviews are conceptually ambitious and methodologically sophisticated. The findings enlighten medical and scientific readers about what hypnosis is and what it is not.

Firm empirical evidence is to be found for the effectiveness of hypnosis in analgesia. In the other areas reviewed there is also some evidence for the possible clinical value for hypnosis. CONCLUSIONS: Additional research will be necessary to determine the proper place of hypnosis in clinical medical care.

Purpose of review: Complementary and alternative medicine is widely used in bronchial asthma. Data on efficacy of these treatment modalities are lacking. Recent findings: Studies published since June 2002 on complementary and alternative medicine in bronchial asthma were systematically reviewed. Summary: Studies do not support the use of homeopathy, air ionizers, manual therapy, or acupuncture for asthma. These methods bear some risks to patients related
to undertreatment and side effects. There might be a possible, but so far not clearly established, role for antioxidant dietary supplementation, and some natural antiinflammatory and immunomodulatory remedies. However, their effect size compared with the classical treatment and side-effect profile is not clearly established. Strategies influencing breathing technique or perception, such as breathing or retraining exercises, need to be studied over the next few years to establish their additive role in the treatment of asthma. Breathing exercises could improve lung function and quality of life in different studies. Psychotherapy-related methods such as relaxation, hypnosis, autogenic training, speleotherapy, and biofeedback might have a small effect in selected cases, but have not proven to be superior to placebo. Nevertheless, more randomized controlled trials of good methodological quality are required to allow firm conclusions.

[0875] Psychological interventions for non-ulcer dyspepsia
Cochrane Database Syst Rev. 2004;(1):CD002301
Soo S, Moayyedi P, Deeks J, Delaney B, Lewis M, Forman D
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BACKGROUND: Studies have also shown that NUD patients have higher scores of anxiety, depression, neurotism, chronic tension, hostility, hypochondriasis, and tendency to be more pessimistic when compared with the community controls. However, the role of psychological interventions in NUD remains uncertain. OBJECTIVES: This review aims to determine the effectiveness of psychological interventions including psychotherapy, psychodrama, cognitive behavioral therapy, relaxation therapy and hypnosis in the improvement of either individual or global dyspepsia symptom scores and quality of life scores patients with NUD. SEARCH STRATEGY: Trials were located through electronic searches of the Cochrane Controlled Trials Register (CCTR), MEDLINE, EMBASE, CINAHL and PsycLIT, using very broad subject headings and text words. Bibliographies of retrieved articles were also searched and experts in the field were contacted. SELECTION CRITERIA: All randomised controlled trials (RCTs) or quasi-randomised studies assessing the effectiveness of psychological interventions (including psychotherapy, psychodrama, cognitive behavioural therapy, relaxation therapy and hypnosis) for non-ulcer dyspepsia (NUD) were identified. DATA COLLECTION AND ANALYSIS: Data collected included individual, global dyspepsia symptom scores and quality of life (QoL) scores. MAIN RESULTS: We identified only four trials, each using different psychological interventions and three presenting results in a manner, that did not allow synthesis of the data to form a meta-analysis. All trials suggest that psychological interventions benefit dyspepsia symptoms and this effect persists for one year. However, all trials use statistical techniques that adjusted for baseline differences between groups. This should not be necessary for a randomised trial that is adequately powered suggesting that the sample size of these papers was too small. Unadjusted data was not statistically significant. The other problem of psychological intervention include low recruitment and high drop out rate which has been shown to be greater in patients receiving group therapy. REVIEWER'S CONCLUSIONS: There is currently insufficient evidence from this review to confirm the efficacy of psychological intervention in NUD. There is also no evidence on the combined effects of pharmacological and psychological therapy. Nevertheless, if there are any benefits of psychological therapies, they are likely to persist long-term and NUD is a chronic relapsing and remitting disorder. Psychological therapies may therefore be offered to patients with severe symptoms that have not responded to pharmacological therapies.

[0876] Mind-body therapies for the management of pain
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This paper reviews the evidence for mind-body therapies (eg, relaxation, meditation, imagery, cognitive-behavioral therapy) in the treatment of pain-related medical conditions and suggests directions for future research in these areas. Based on evidence from randomized controlled trials and in many cases, systematic reviews of the literature, the following recommendations can be made: 1) multi-component mind-body approaches that include some combination of stress management, coping skills training, cognitive restructuring and relaxation therapy may be an appropriate adjunctive treatment for chronic low back pain; 2) multimodal mind-body approaches such as cognitive-behavioral therapy, particularly when combined with an educational/informational component, can be an effective adjunct in the management of rheumatoid and osteoarthritis; 3) relaxation and thermal biofeedback may be considered as a treatment for recurrent migraine while relaxation and muscle biofeedback can be an effective adjunct or stand alone therapy for recurrent tension headache; 4) an array of mind-body therapies (eg, imagery, hypnosis, relaxation) when employed pre-surgically, can improve recovery time and reduce pain following surgical procedures; 5) mind-body approaches may be considered as adjunctive therapies to help ameliorate pain during invasive medical procedures.

[0877] Childhood habit cough treated with self-hypnosis
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OBJECTIVES: To better understand factors associated with the development and persistence of habit cough and to report use of self-hypnosis for this condition. STUDY DESIGN: A retrospective chart review was performed for 56 children and adolescents with habit cough. Interested patients were instructed in self-hypnosis for relaxation and to help ignore the
cough-triggering sensation. RESULTS: The patients' mean age was 10.7 years. The cough was triggered by upper respiratory infections in 59%, asthma in 13%, exercise in 5%, and eating in 4%. Onset of the cough occurred as early as 2 years, and its average duration was 13 months (range, 2 weeks to 7 years). There was a high incidence of abdominal pain and irritable bowel syndrome in the 50% of the patients who missed more than 1 week of school because of their cough. Among the 51 patients who used hypnosis, the cough resolved during or immediately after the initial hypnosis instruction session in 78% and within 1 month in an additional 12%. CONCLUSIONS: Habit cough is triggered by various physiologic conditions, related frequently to other diagnoses, and it is associated with significant school absence. Self-hypnosis offers a safe efficient treatment.

[0878]
The effect of hemispheric synchronization on intraoperative analgesia
Anesth Analg. 2004 Feb;98(2):533-6; table of contents
Lewis AK, Osborn IP, Roth R
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In this double-blinded randomized study, we sought to confirm that patients undergoing general anesthesia who were exposed to a hemispheric synchronization (Hemi-Sync) musical recording during surgery had a smaller analgesia requirement, as was suggested in a previous study. Bispectral index monitoring was used to adjust depth of hypnosis, and hemodynamic variables were used to determine analgesia administration. Consented patients underwent either laparoscopic bariatric or one-level lumbar disk surgery. After endotracheal intubation and application of headphones, baseline heart rate and arterial blood pressure were established. Isoflurane was titrated to maintain sedation on the basis of a target bispectral index range of 40-60, and 25-microg increments of fentanyl were administered in response to increases in heart rate and systolic arterial blood pressure. Bariatric patients who listened to Hemi-Sync required one-third less fentanyl than the control group (mean [SD]: 0.015 [0.01] vs 0.024 microg.kg(-1).min(-1) [0.01]) (P = 0.009). It is interesting to note that lumbar patients in the experimental and control groups required similar amounts of fentanyl (0.012 [0.01] vs 0.015 microg.kg(-1).min(-1) [0.01]). End-tidal isoflurane concentration was similar for Hemi-Sync and blank-tape patients (bariatric, 0.74% (0.14) vs 0.77% (0.21); lumbar, 0.36% [0.16] vs 0.39% [0.12]). The bariatric patients in this study demonstrated that Hemi-Sync may be an innovative intraoperative supplement to analgesia. IMPLICATIONS: The purpose of this study was to determine the decrease in analgesia requirement for patients listening to hemispheric synchronization (musical tones) while under general anesthesia. We demonstrated that bariatric patients who listened to hemispheric synchronization had a smaller analgesia requirement than those who listened to a blank tape.

[0879]
[Hypnotherapy in the treatment of refractory nocturnal enuresis]
Tidsskr Nor Lægeforen. 2004 Feb 19;124(4):488-91
Diseth TH, Vandvik IH
Barne- og ungdomspsykiatrisk seksjon, Barneavdelingen, Rikshospitalet, Oslo

BACKGROUND: Nocturnal enuresis represents a practical, social and emotional problem. The present study illustrates the advantage of using hypnosis as a therapy in chronic cases. MATERIAL: Twelve boys, median age 12 years (range 8-16), eight with primary nocturnal enuresis and four with primary nocturnal and diurnal enuresis, reported at referral a median of 0 (range 0-3) dry nights per week. All patients had a family history of enuresis and had used enuresis alarm and Desmopressin; 50% used Imipramin. Eight had been referred to psychological or psychiatric services for treatment. METHODS: All patients had undergone a somatic assessment by a paediatrician, a paediatric surgeon, or an urologist. After a preliminary assessment of motivation, they underwent hypnotherapy with a median of six sessions (range 2-8), followed by median one month with self-hypnosis exercises. RESULTS: At follow-up after three months and one year, nine out of 12 patients had respectively 6-7/7, and 7/7 dry nights per week. Three patients had nocturnal enuresis at follow-up; two of them were referred to a paediatric surgeon for their overactive urine bladder and one was referred to his local psychiatric clinic because of ongoing family conflicts. INTERPRETATION: Hypnotherapy had lasting effects for boys with chronic and complex forms of nocturnal enuresis. We suggest that hypnotherapy should be included in the therapeutic guidelines.

[0880]
[Perioperative use of medical hypnosisTherapy options for anaesthetists and surgeons]
Anaesth. 2004 Feb 27 [Epub ahead of print]
Hermes D, Trubger D, Hakim SG, Sieg P
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BACKGROUND. Surgical treatment of patients under local anaesthesia is quite commonly restricted by limited compliance from the patient. An alternative to treatment under pharmacological sedation or general anaesthesia could be the application of medical hypnosis. With this method, both suggestive and autosuggestive procedures are used for anxiolysis, relaxation, sedation and analgesia of the patient. PATIENTS AND METHODS. During a 1-year period of first clinical application, a total of 207 surgical procedures on a non-selected collective of 174 patients were carried out under combined local anaesthesia and medical hypnosis. RESULTS. Medical hypnosis proved to be a standardisable and reliable method by which remarkable improvements in treatment conditions for both patient and surgeons were achievable. CONCLUSION. Medical hypnosis is not considered to be a substitute for conscious sedation or general anaesthesia but a therapeutic option equally interesting for anaesthetists and surgeons.
Functional dyspepsia is a common chronic condition. It can have a major impact on quality of life and remains a large burden on healthcare resources. Its underlying mechanisms are not fully understood and therapies are mainly empirical. In this review, we summarize the best evidence on available therapeutic interventions in functional dyspepsia. Helicobacter pylori eradication, for those infected, is likely a safe and cost-effective strategy but benefits only a minority. Antisecretory agents such as proton-pump inhibitors and histamine-2 receptor antagonists have shown some benefit and are recommended as the first-line option in the absence of H. pylori infection. There is a lack of strong evidence of benefit from prokinetic agents, and cisapride, the most studied agent, is largely unavailable. Antidepressants need to be adequately tested in functional dyspepsia, but both psychotherapy and hypnotherapy interventions have shown promising results. Herbal therapies need further study in these patients. 5-Hydroxytryptamine3 (5-HT(3)) and 5-HT(4) receptor antagonists, and cholecystokinin type A and neurokinin receptor antagonists remain promising emerging therapies.

Belief in the paranormal and suggestion in the seance room
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In Experiment 1, participants took part in a fake seance. An actor suggested that a table was levitating when, in fact, it remained stationary. After the seance, approximately one third of participants incorrectly reported that the table had moved. Results also showed a significant relationship between the reported movement of the table and belief in the paranormal, with a greater percentage of believers than disbelievers, reporting that the table had moved. Experiment 2 varied whether the suggestion was consistent, or inconsistent, with participants’ belief in the paranormal. Results again showed that believers were more susceptible to suggestion than disbelievers, but only when the suggestion was consistent with their belief in the paranormal. Approximately one fifth of participants believed that the fake seances contained genuine paranormal phenomena.

Misinformation effects in eyewitness memory: the presence and absence of memory impairment as a function of warning and misinformation accessibility
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The authors report 5 experiments investigating how exposure to misleading postevent information affects people’s ability to remember details from a witnessed event. In each experiment the authors tested memory using the modified opposition test, which was designed to isolate retrieval-blocking effects. The findings indicate that retrieval blocking occurs regardless of whether the misleading information is presented before or after the witnessed event. In addition, when people are warned immediately about the presence of misleading information, they can counteract retrieval-blocking effects but only if the misinformation is relatively low in accessibility. The authors discuss the findings in terms of the retrieval-blocking hypothesis and a hypothetical suppression mechanism that can counteract retrieval-blocking effects in some circumstances. (c) 2003 APA, all rights reserved.

Posthypnotic suggestion and the modulation of Stroop interference under cycloplegia
Conscious Cogn. 2003 Sep;12(3):332-46
Raz A, Landzberg KS, Schweizer HR, Zephrani ZR, Shapiro T, Fan J, Posner MI
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Recent data indicate that under a specific posthypnotic suggestion to circumvent reading, highly suggestible subjects successfully eliminated the Stroop interference effect. The present study examined whether an optical explanation (e.g., visual blurring or looking away) could account for this finding. Using cyclopentolate hydrochloride eye drops to pharmacologically prevent visual accommodation in all subjects, behavioral Stroop data were collected from six highly hypnotizables and six less suggestibles using an optical setup that guaranteed either sharply focused or blurred vision. The highly suggestibles performed the Stroop task when naturally vigilant, under posthypnotic suggestion not to read, and while visually blurred; the less suggestibles ran naturally vigilant, while looking away, and while visually blurred. Although visual accommodation was precluded for all subjects, posthypnotic suggestion effectively eliminated Stroop interference and was comparable to looking away in controls. These data strengthen the view that Stroop interference is neither robust nor inevitable and support the hypothesis that posthypnotic suggestion may exert a top-down influence on neural processing.
Self-Psychology, as a segment of contemporary psychoanalysis, can claim merit as to having included the vastly accrued body of knowledge of pertinent fields of the human sciences into their clinical reasoning. This, in turn, has set forth a rebound effect which eventually has contributed to Psychoanalysis' still ongoing exodus from its long-lasting "splendid isolation". By presenting selected findings pertaining to attachment- and neuroscientific trauma-research, the author aims at hypothesizing with reference to the interface of early ontogenic attachment disorganization, onset of dissociative disorders and graded traumatic impact. Finally, in considering clinical relevance of the data, the author opts for composite strategies i.e. measures embedded in an overall psychodynamic treatment stance inclusive of occasional employ of EMDR and hypnotherapeutic interventions.

Imagery perspective and source monitoring in imagination inflation
Mem Cognit. 2003 Oct;31(7):1072-81
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The present experiments suggest that imagery perspective--first person (own) versus third person (observer's)--influences source-monitoring judgments. Imagination inflation (Garry, Manning, Loftus, & Sherman, 1996) occurs when imaginary experience with events is mistaken for real experience. In Experiment 1, the perspective used to visualize real past events depended on memory test wording ("remember doing?" vs. "happened to you?"). Experiment 2 manipulated the perspective used to visually imagine counterfactual events and showed that the effect on imagination inflation depended on memory test wording. Imagination inflation was most likely when memory test wording encouraged participants to visualize real events from the same perspective as they had used to imagine counterfactual ones. Imagination inflation may result not simply from having created imaginary representations of events, but also from having created representations that match the decision criteria used in source monitoring.

At the birth of the scientific thoughts, the degree of creativity of the searcher depends on his capacity to extract himself from the previously acquired notions in this domain. The discovery of anaphylaxis, by Charles Richet and Paul Portier, constitutes therefore an epistemological break off, knocking over the theory on organism defences and the universality of the biological response to different stimuli. In the light of the works of Charles Richet on hypnosis, renal physiology, thermoregulation and psychophysiology, we see that the most creative discoveries are also the most unexpected or the most difficult to impose. They require courage and initiative, severity of thought, a radical independence of mind and a certain distance concerning eventual practical consequences.

The problem of post-hypnotic suggestion was introduced in 1884. Give a hypnotic subject the post-hypnotic command to return in 13 days. Awake, the subject remembers nothing yet nonetheless fulfills the command to return. How then does the subject count 13 days without knowing it? In 1886, Pierre Janet proposed the concept of dissociation as a solution, arguing that a second consciousness kept track of time outside of the subject's main consciousness. Joseph Delboeuf, in 1885, and Hippolyte Bernheim, in 1886, proposed an alternative solution, arguing that subjects occasionally drifted into a hypnotic state in which they were reminded of the suggestion. This article traces the development of these competing solutions and describes some of Delboeuf's final reflections on the problem of simulation and the nature of hypnosis. Copyright 2004 Wiley Periodicals, Inc.

A critical review of techniques aiming at enhancing and sustaining worker's alertness during the night shift
Ind Health. 2004 Jan;42(1):1-14
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Two types of methods based on a particular principle allow enhancing and sustaining workers' alertness all along their night work. The first one rather consists in arousing workers by exposing them to stimulant environment conditions (light or noise...) or by giving them natural or pharmacological reactivating substances (caffeine or amphetamines...) for example. The second principle consists in increasing workers' possibilities for resting and allowing them to have short sleep periods or Short Rest Periods (SRP) in an adapted area at the workplace. In order to use these techniques in real work situations, after a critical review taking into account both efficiency, advantages and disadvantages but also applicability and acceptability, the SRP technique stands out as the most efficient method as it has a certain number of advantages with regard to our initial objective.

[0890]
Treatment with hypnotherapy reduces the sensory and motor component of the gastrocolonic response in irritable bowel syndrome
Simren M, Ringstrom G, Bjornsson ES, Abrahamsson H
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OBJECTIVE: Postprandial symptoms in irritable bowel syndrome are common and relate to an exaggerated motor and sensory component of the gastrocolonic response. We investigated whether this response can be affected by hypnotherapy. METHODS: We included 28 patients with irritable bowel syndrome refractory to other treatments. They were randomized to receive gut-directed hypnotherapy 1 hour per week for 12 weeks (N = 14) or were provided with supportive therapy (control group; N = 14). Before randomization and after 3 months, all patients underwent a colonic distension trial before and after a 1-hour duodenal lipid infusion. Colonic sensory thresholds and tonic and phasic motor activity were assessed. RESULTS: Before randomization, reduced thresholds after vs. before lipid infusion were seen in both groups for all studied sensations. At 3 months, the colonic sensitivity before duodenal lipids did not differ between groups. Controls reduced their thresholds after duodenal lipids for gas (22 +/- 1.7 mm Hg vs. 16 +/- 1.6 mm Hg, p <.01), discomfort (29 +/- 2.9 mm Hg vs. 22 +/- 2.6 mm Hg, p <.01), and pain (33 +/- 2.7 mm Hg vs. 26 +/- 3.3 mm Hg, p <.01), whereas the hypnotherapy group reduced their thresholds after lipids only for pain (35 +/- 4.0 mm Hg vs. 29 +/- 4.7 mm Hg, p <.01). The colonic balloon volumes and tone response at randomization were similar in both groups. At 3 months, baseline balloon volumes were lower in the hypnotherapy group than in controls (83 +/- 14 ml vs. 141 +/- 15 ml, p <.05). In the control group, reduced balloon volumes during lipid infusion were seen (141 +/- 15 ml vs. 111 +/- 19 ml, p <.05), but not after hypnotherapy (83 +/- 14 ml vs. 80 +/- 16 ml, p >.20). CONCLUSION: Hypnotherapy reduces the sensory and motor component of the gastrocolonic response in patients with irritable bowel syndrome. These effects may be involved in the clinical efficacy of hypnotherapy in IBS.

[0891]
[Hypnosis in dental surgery]
Hermes D, Gerdes V, Trubger D, Hakim SG, Sieg P
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BACKGROUND. Surgical treatment under local anesthesia is commonly restricted by limited compliance of patients. Hypnosis may represent an alternative to sedation or general anesthesia. As the procedure demonstrated promising prospects during 1-year experience, the observed hypnosis-induced effects are now being evaluated in clinical studies. PATIENTS AND METHOD. The prospective study included 50 patients scheduled for dental surgery. All procedures were performed under standardized surgical conditions. The experimental group (n=25) received supplementary standardized tape hypnosis, whereas the control group received standard treatment (only local anesthesia). Individual and situative anxiety levels were determined by the State-Trait Anxiety Inventory (STAI). RESULTS. After simultaneous increase of preoperative state anxiety, anxiety levels in the hypnosis group showed a significant intraoperative reduction to baseline level, whereas intraoperative anxiety of the control group (n=25) remained unchanged. CONCLUSIONS. Hypnosis reduces intraoperative anxiety of oral and maxillofacial patients significantly. Further clinical studies on the use of hypnosis are considered useful.

[0892]
Cognitive change in patients undergoing hypnotherapy for irritable bowel syndrome
J Psychosom Res. 2004 Mar;56(3):271-8
Gonsalkorale WM, Toner BB, Whorwell PJ
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OBJECTIVE: Impaired quality of life and psychological distress are common in irritable bowel syndrome (IBS) and may be associated with unhelpful cognitions. Hypnotherapy (HT) is effective in improving both symptoms and quality of life in patients with IBS, and this study was designed to determine whether this improvement is reflected in cognitive change using a validated scale recently developed for use in such patients. METHOD: A total of 78 IBS patients completed a validated symptom-scoring questionnaire, the Hospital Anxiety and Depression (HAD) Scale and the Cognitive Scale for Functional Bowel Disorders (FBDs), before and after 12 sessions of gut-focused HT. RESULTS: HT resulted in improvement of symptoms, quality of life and scores for anxiety and depression (all Ps<.001). IBS-related cognitions also improved, with reduction in the total cognitive score (TCS; P<.001) and all component themes related to bowel function (all P<.001). Cognitions were related to symptom severity because the most abnormal cognitive scores were observed in patients with the highest symptom scores (P<.001). Furthermore, a reduction in symptom score following
treatment correlated with an improvement in the cognitive score (P<0.001). Regression analysis confirmed that the cognitive score had independence from the other scores and did not serve solely as a proxy for symptom improvement. **CONCLUSION:** This study shows that symptom improvement in IBS with HT is associated with cognitive change. It also represents an initial step in unravelling the many possible mechanisms by which treatments such as HT might bring about improvement.

[0893]
[Alternative methods for external cephalic version in the event of breech presentation: review of the literature]
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Fetal breech presentation at term is more and more treated by a planned cesarean section. Considering the increased maternal morbidity and mortality in relation to abdominal delivery versus vaginal birth, natural and innocuous methods have been proposed for the promotion of a spontaneous fetal cephalic version during the last two months of pregnancy. In order to stimulate fetal motility many techniques have been described, either advising postural methods (passive bridge, Indian version, knee-chest position) or using acupuncture (stimulation of the fifth toe and auricular points). Other techniques like chiropractic manipulations or hypnosis have also been tried. Unfortunately, most publications are retrospective and methodologically inaccurate, but it seems that their results may be favorably compared with that of the external cephalic version, a much more complex procedure, which is potentially dangerous and certainly time consuming and expensive. The only randomized controlled trial with a proven efficacy concerns moxibustion (burning herbs to stimulate the acupoint BL 67 or Zhiyin, located beside the outer corner of the fifth toenail).

[0894]
Focused analgesia and generalized relaxation produce differential hypnotic analgesia in response to ascending stimulus intensity
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This study was designed in order to examine the effects of different types of hypnotic suggestion on hypnotic analgesia. Generalized relaxation and focused analgesia were induced in seven high-hypnotizable (HH) and eight low-hypnotizable (LH) subjects. Subjects were not aware to which group they belonged. The two groups did not differ in their expectation rates to achieve analgesia under hypnosis. Pain intensity and unpleasantness were rated on visual analogue scales in response to painful electrical stimuli, delivered in random order in five ascending intensities. Both focused analgesia and generalized relaxation decreased pain intensity significantly (P<0.01). However, stimulus-intensity response curves differed under the two hypnotic conditions. As stimulus intensity became higher pain reduction was enhanced under focused analgesia, while a constant reduction occurred under generalized relaxation. The interaction between hypnotic state and stimulus intensity was significant for focused analgesia (P<0.05) but not for generalized relaxation (P>0.07). Difference became more pronounced when analyzed for HH subjects only (P<0.002 for analgesia, P<0.10 for relaxation). Pain reduction was significantly higher in HH than in LH subjects under focused analgesia (P<0.02) but not under generalized relaxation (P>0.5). We conclude that by utilizing two modes of hypnotic suggestions in response to ascending stimuli, we were able to discover two components of hypnotic analgesia. One shows a parallel shift in the stimulus-response function, has features similar to placebo and bears no clear relationship to hypnotic susceptibility. The other shows a slope change in the stimulus-response curve and has a positive relationship to hypnotic susceptibility.

[0895]
Testing of visceral sensitivity
J Physiol Pharmacol. 2003 Dec;54 Suppl 4:55-72
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Under normal circumstances most of the visceral input to the central nervous system is not perceived consciously. Visceral hypersensitivity associated with altered reflex activity seems to be a common pathophysiological mechanism in functional gastrointestinal disorders. Investigation of visceral sensitivity in humans is based on distension tests using barostat, or tensostat more recently. Tensostat may allow better standardization of distending stimuli, regardless of the capacity or compliance of the organ being tested. Other techniques include transmucosal electrical nerve stimulation, and chemical or thermal stimulation. Measurement of the responses to gut stimuli is based on the evaluation of conscious perception or objective responses, such as reflex activity or central processes. Recently, the assessment of the central responses has become available due to a variety of new brain imaging techniques. Several factors are thought to influence the results of visceral sensitivity studies: age, gender, physiological factors (postprandial testing) as well as psychological factors (stress, hypnosis, hypervigilance phenomenon). Technical conditions for performing tests like distension protocols may considerably affect the perception of sensory thresholds. Various mediators and pharmacological agents, in particular those acting on serotonin receptors, affect the sensory function of the gastrointestinal tract, and some of them have therapeutic potential in the treatment of visceral hypersensitivity.
Complementary and alternative cancer therapies: past, present and the future scenario
Shukla Y, Pal SK
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Use of complementary and alternative therapies is widespread among cancer patients. Throughout the world cancer patients try many questionable or unproven treatment methods. The reasons for adopting these therapies are complex and are related to the social and cultural contexts of their geographical locations. In case of severe illness, the desire to leave no stone unturned is a powerful motivator. In developing countries, ignorance, socioeconomics, and inadequate access to mainstream medical facilities are major factors that play an important role for patients opting for alternative therapies that are replacements for mainstream treatment. Whereas in developed countries a significant proportion of cancer patients try complementary therapies as adjuncts to mainstream care for management of symptoms and to improve quality of life. Many alternative therapies, including pharmacological and biological treatments, remain highly controversial but at the same time are very popular. Evidence from randomized trial supports the value of hypnosis for cancer pain and nausea; relaxation therapy and massage for anxiety; and acupuncture for nausea. This article reviews the different popular alternative cancer therapies practiced in India and neighboring south east Asian countries to project the current international scenario on complementary and alternative cancer therapies.

Charcot and German neuropsychiatry
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Jean-Martin Charcot (1825-1893), well known as the founder of modern neurology, was the most celebrated neurologist in the nineteenth century. His international success stemmed not only from mastery descriptions of various neurological disorders but also from his many contacts with scientists all over the world. The aim of this article is to review Charcot's ambivalent relationship to German neuropsychiatry of the time and to examine the German reception of his personality and work. Wilhelm Erb, Ludwig Hirt, Ernst von Leyden, Max Nonne, Adolph Strumpell, and other German physicians cultivated -to varying degrees - professional contacts with Charcot and, based on the fascination of his personality and significance of his work, were long and intensively influenced by the Salpetriere school. The extent of their admiration became apparent in 1882 by the award of an honorary doctorate to Charcot by the University of Würzburg. Along with increasingly severe criticism of Charcot’s research on hysteria and hypnosis, most German neuropsychiatrists became estranged, without neglecting his importance to the development of neurology in Germany.

Irritable bowel syndrome
Schmerz. 2004 Apr;18(2):130-5
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The prevalence of irritable bowel syndrome (IBS) ranges in all countries of the world between 6 and 25%, in Germany between 15 and 22%. The divergent rates of prevalence are mainly due to different definitions of IBS in epidemiological studies. In Germany, 20-50% of persons with IBS symptoms seek medical help. IBS patients produce high direct and indirect costs. The following psychophysiological mechanisms of IBS are presumed to be empirically validated: visceral hypersensitivity, postinfectious sequelae, psychiatric disorders, and psychosocial stress. Tricyclic antidepressant agents and psychotherapy (hypnosis, cognitive behavioral therapy, and psychodynamic therapy) are effective for treatment of IBS forms dominated by pain. In one controlled study, the combination of pharmacological therapy and cognitive behavioral therapy was superior to pharmacological therapy alone.

Perioperative use of medical hypnosis: Therapy options for anaesthetists and surgeons
Hermes D, Trubger D, Hakim SG, Sieg P
Klinik fur Kiefer- und Gesichtschirurgie, Universitätsklinikum Schleswig-Holstein/Campus Lubeck

BACKGROUND. Surgical treatment of patients under local anaesthesia is quite commonly restricted by limited compliance from the patient. An alternative to treatment under pharmacological sedation or general anaesthesia could be the application of medical hypnosis. With this method, both suggestive and autosuggestive procedures are used for anxiolysis, relaxation, sedation and analgesia of the patient. PATIENTS AND METHODS. During a 1-year period of first clinical application, a total of 207 surgical procedures on a non-selected collective of 174 patients were carried out under combined local anaesthesia and medical hypnosis. RESULTS. Medical hypnosis proved to be a standardisable and reliable method by which remarkable improvements in treatment conditions for both patient and surgeons were achievable. CONCLUSION. Medical hypnosis is not considered to be a substitute for conscious sedation or general anaesthesia but a therapeutic option equally interesting for anaesthetists and surgeons.
In response to "Hypnotic Enhancement of Cognitive-Behavioral Interventions for Pain: An Analogue Treatment Study"
Health Psychol. 2004 May;23(3):335
Schnall E
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Comments that the article by Milling, Levine, and Meunier (2003; see record 2003-05896-014) regarding hypnotic analgesia overlooked important relevant research, including at least one study that challenges their conclusions. Milling and colleagues stated that they know of only three studies that compared the pain-reducing effects of cognitive-behavioral interventions with those that added the element of hypnosis. They further pointed out that they must examine whether their findings, "based on the analogue treatment of experimental pain, apply to the treatment of clinical pain" (Milling et al., 2003, p. 412). However, other researchers (Faymonville et al., 1995) have already compared the analgesic effects of a hypnotic and a nonhypnotic relaxation intervention in patients undergoing plastic surgery. The present author further asserts that the work of Faymonville et al., may actually be superior to the work of Milling and colleagues. It is also commented that there have also been other clinical studies in the medical literature and their omission from the article's literature review was "disappointing." ((c) 2004 APA, all rights reserved).

[0901]
Does phase-modulation of applied 40-Hz transcerebral magnetic fields affect subjective experiences and hypnotic induction?
Percept Mot Skills. 2003 Dec;97(3 Pt 2):1031-7
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12 men and 12 women were exposed to a sham-field, a 5-Hz sine-wave magnetic field, a 40-Hz sine-wave magnetic field, or the latter field-phase modulated five times per sec. (5-Hz) for 30 min. between two administrations of the Spiegel's Hypnotic Induction Profile. To replicate the geometry that has produced significant increases in these scores in previous studies, the weak (1 microT) magnetic fields were applied over the right parietotemporal region through a modified helmet. The hypothesis that the enhanced suggestibility previously observed was due to an intrinsic phase-modulation of the fields was not supported. However, the ratings of overall pleasantness of the experiences were negatively correlated (r = -.36) with global geomagnetic activity at the time of the experiment. The pleasantness was ranked significantly greater by subjects exposed to the 40-Hz field (explaining 41% of the variance) relative to subjects exposed to the 5-Hz field who also reported more visual experiences within their left peripheral visual fields. The percentages of time alpha rhythms were measured over the temporal lobes (but not frontal or occipital lobes) during the treatments were moderately and positively correlated with scores on questionnaires administered before the experiment, from which the capacity to imagine, temporal lobe signs, and religious (but not exotic) beliefs were inferred. The groups exposed to either the 5-Hz or 40-Hz/5-Hz phase-modulated field displayed greater durations of alpha rhythms over the temporal lobes than the other two groups.

[0902]
Therapeutic utilization of spontaneous out-of-body experiences in hypnotherapy
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An out-of-body experience (OBE) is a unique dissociative event in which the person feels separated from his/her body. Studies and anecdotal reports have observed that this experience tends to appear spontaneously in stressful and hypnogogic situations. It often contributes to the person's later having a new perspective of himself and his conception of the world, and may influence his functioning and behavior. Despite its potential as a powerful therapeutic lever in hypnotherapy, little has been written about applying OBE in this milieu. The current article describes three individuals who were contending with different therapeutic issues (i.e., symbiotic involvement, somatization, and cessation of therapy) for whom spontaneous OBE was used therapeutically during hypnotherapy and proved to significantly advance the therapeutic processes. In accordance with the literature, and as observed in the presented cases, we have found that the OBE experience tends to appear in dissociative and highly suggestible subjects. Furthermore OBE may help those patients to cope with strongly anxiety-loaded issues that arise in therapy and may function, through the "body-self" detachment experience, as a therapeutic metaphor for promoting complex separational processes. In view of the cases described, a spontaneous OBE appearing in hypnotherapy is proposed as an effective therapeutic resource.

[0903]
Use of complementary therapies in pregnancy: The perceptions of obstetricians and midwives in South Australia
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Abstract Objective To examine South Australian obstetricians and midwives attitude's towards the use of complementary and alternative medicines (CAM) during pregnancy, to examine their referral patterns and their views on the usefulness and safety of these therapies during pregnancy. Design All members of the South Australian branch of the Royal Australian and New Zealand College of Obstetricians and Gynaecologists and a 50% sample of midwives belonging to the South Australian Branch of The Australian College of Midwives, were sent a postal self-completion questionnaire.
Results A response rate of 78% was obtained. Only 14% of doctors considered CAM was a threat to public health. Over 90% of midwives and obstetricians thought they should have some knowledge about CAM. A greater proportion of obstetricians (72%) held a view there needs to be an evidence base for CAM compared with 26% of midwives. The majority of obstetricians (68%) and midwives (79%) had formally referred a patient for use of one of the complementary therapies. Over 70% of obstetricians and midwives considered massage, acupuncture, vitamins, yoga, meditation and hypnosis to be useful and safe to use during pregnancy. Conclusion The majority of clinician's held positive views towards CAM and considered some complementary therapies to be useful and safe for use during pregnancy. Limited evidence exists on the safety and efficacy of these therapies and attention needs to be given to undertaking high quality randomised controlled trials.

Misleading postevent information and flashbulb memories
Memory. 2003 Nov;11(6):549-58
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The aim of this study was to create the conditions of a real discussion concerning the past in an experimental setting and examine their effect on subsequent recollections of important autobiographical events. A total of 55 adults described two episodes twice. The first episode was a typical news reception event and the second one represented a private event of particular personal significance. In between the two recall sessions, participants from the experimental group viewed two films. The first was a short televised account of the two events; the second was a corresponding videotaped description of the personal experiences of a middle-aged man. In addition, participants were asked to imagine what he had been talking about. Most of the participants from the experimental group incorporated elements of the man's description into their own subsequent accounts. In spite of this, they rated the accuracy of their post-test memories as very high. The implications for understanding distortion mechanisms in flashbulb memories are discussed.

Juvenile offenders' Miranda rights comprehension and self-reported likelihood of offering false confessions
Assessment. 2003 Dec;10(4):359-69
Goldstein NE, Condie LO, Kalbeitzer R, Osman D, Geier JL
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This study examined whether age, IQ, and history of special education predicted Miranda rights comprehension and the self-reported tendency to falsely confess to a crime among 55 delinquent boys. The Miranda Rights Comprehension Instruments-II, a revised version of Grisso's Instruments for Assessing Understanding and Appreciation of Miranda Rights, were developed for this study and are described in detail in this article. Results revealed that age, IQ, and special education were related to comprehension of Miranda rights. When Miranda comprehension, age, and IQ were simultaneously tested as predictor variables of the self-reported likelihood of false confessions, only age served as an independent predictor. Research and policy implications of this study are presented, and recommendations for use of the original and revised instruments are reviewed.

Correlates of the Gudjonsson Suggestibility Scale in delinquent adolescents
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Correlations between scores on the Gudjonsson Suggestibility Scale and a number of relevant personality characteristics, i.e., intelligence, memory, social inadequacy, social desirability, and fantasy proneness, were examined in a sample of 71 delinquent boys. Analysis showed that intelligence and memory were negatively related to suggestibility scores. That is, lower memory and intelligence were associated with higher suggestibility. No significant correlations were found between suggestibility and other personality characteristics.

A pilot randomized trial assessing the effects of autogenic training in early stage cancer patients in relation to psychological status and immune system responses
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Autogenic training (AT) is a type of meditation usually used for reducing stress. This pilot study describes how AT was used on a group of early stage cancer patients and the observed effect on stress-related behaviours and immune system responses. This was a randomized trial with 31 early stage breast cancer women, having received a lumpectomy and adjuvant radiotherapy. The women were randomized into two groups. Group 1 received a home visit only. Group 2 received a home visit and 2 months' weekly Autogenic training. At the beginning and end of the 2 monthly periods, the Hospital Anxiety and Depression Scale (HADS) and T and B cell markers were measured to give an indication of changes in immune system responses and measurement of anxiety and depression. At the end of the study, HADS scores and T
and B cell markers remained similar in the women who did not receive AT. The women receiving AT showed a strong statistical difference for an improvement in their HADS scores and those women observed in a meditative state as opposed to a relaxed state were found to have an increase in their immune responses. This study suggests AT as a powerful self-help therapy.

[0908]

Autogenic training reduces anxiety after coronary angioplasty: a randomized clinical trial
Am Heart J. 2004 Mar;147(3):E10
Kanji N, White AR, Ernst E
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OBJECTIVES: Autogenic training (AT) is a method of autosuggestion with some potential for reducing anxiety. This study tests whether AT lowers anxiety levels experienced by patients undergoing coronary angioplasty. METHODS: Fifty-nine patients were randomly assigned to receive regular AT or no such therapy as an adjunct to standard care for 5 months. The primary outcome measure was State Anxiety at 2 months. Qualitative information was generated by face-to-face interviews. RESULTS: State Anxiety showed a significant intergroup difference both at 2 and 5 months. This finding was corroborated by secondary outcome measures, for example, quality of life, and by qualitative information about patients' experiences. The results do not allow us to determine whether the observed effects are specific to AT or of a nonspecific nature. CONCLUSIONS: Our results suggest that AT may have a role in reducing anxiety of patients undergoing coronary angioplasty.

[0909]

Toward a phenomenology of trance logic in posttraumatic stress disorder
Psychol Rep. 2004 Apr;94(2):649-54
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Some induction procedures result in trance logic as an essential feature of hypnosis. Trance logic is a voluntary state of acceptance of suggestions without the critical evaluation that would destroy the validity of the meaningfulness of the suggestion. Induction procedures in real and simulated conditions induce a conflict between two contradictory messages in experimental hypnosis. In military induction the conflict is much more subtle involving society's need for security and its need for ethics. Such conflicts are often construed by the subject as trance logic. Trance logic provides an opportunity for therapists using the phenomenology of "presence" to deal with the objectified concepts of "avoidance," "numbing" implicit in this kind of dysfunctional thinking in Posttraumatic Stress Disorder. An individual phenomenology of induction procedures and suggestions, which trigger trance logic, may lead to a resolution of logical fallacies and recurring painful memories. It invites a reconciliation of conflicting messages implicit in phobias and avoidance traumas. Such a phenomenological analysis of trance logic may well be a novel approach to restructure the meaning of trauma.

[0910]

Response to Lynn, et al.'s "Evaluation of Woodard's theory of perceptually oriented hypnosis"
Psychol Rep. 2004 Apr;94(2):431-6
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In this article some misunderstandings of Perceptually Oriented Hypnosis presented in the recent evaluation by Lynn, et al. are pointed out. Perceptually Oriented Hypnosis emphasizes individual differences naturally occurring in the experience of everyday life or being-in-the-world and differentiation as major themes to understanding hypnosis. Woodard advocates that qualitative research enhances our understanding of hypnotic experiencing and allows us to examine hypnotic phenomena that elude the laboratory and control settings.

[0911]

The historical role of hypnosis in the theoretical origins of transference
Int J Clin Exp Hypn. 2004 Apr;52(2):113-31
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There has been a gradual evolution of the important construct of transference from ancient to modern times. Long before Franz Anton Mesmer, there were philosophers, theorists, and health professionals who emphasized the impact of interpersonal relationships on well-being and illness. While basically conceptualizing animal magnetism as a dynamic physical fluid, Mesmer was also aware of the impact of rapport and affect in the enhancement of magnetic treatment. Later neo-mesmerists, notably Puysegur and Deleuze, built on such theories. That emphasis continued through the 19th century to the time of Freud, whose construct of transference was derived from his personal experience with hypnosis and which has since become an integral part of modern psychodynamic theory and treatment.

[0912]

Cam Perry, Heraclitus, and hypnosis: an appreciative understanding
McConkey KM, Sheehan PW
The authors summarize personal, intellectual, and social influences on Campbell Perry's (1937-2003) life and research on hypnosis. His education in Australia reflected the influences of a public primary school, a prestigious private high school, and undergraduate and graduate work at Australia's oldest university. His approach to hypnosis was influenced initially by Gordon Hammer and Philip Sutcliffe, and his life generally was influenced by John Anderson, the leader of the Libertarian Society, the intellectual core of a broader group known as the Push. This group reflected in part the thinking of the pre-Socratic Greek philosopher, Heraclitus, who taught that change was the only reality. The article summarizes Perry's work on hypnosis and memory, and his contributions concerning uncancelled hypnotic suggestions, pain and surgery, and imagery and hypnotizability are summarized.

[0913]
Four decades of group hypnosis scales: what does item-response theory tell us about what we've been measuring?
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To overcome problems with previous psychometric approaches to hypnosis scales, the authors applied full-information factor analysis, based on multidimensional item-response theory (IRT), to a 39-year sample of 11,517 records of the Harvard Group Scale of Hypnotic Susceptibility, Form A (HGSBH: A). They also performed a comparable analysis on the standardization sample of the Waterloo-Stanford Group C Scale (WSGC). The HGSBH:A emerges as two factored, whereas the WSGC more closely approaches unidimensionality. The HGSBH:A factor structure and means show very little change over 4 decades. However, IRT-based item analysis on the HGSBH:A indicates that problems such as "pseudoguessing" on 2 items limit the quality of the item set. The authors propose alternative substantive interpretations of the traits that may underlie the two-factor structure.

[0914]
Reality monitoring in hypnosis: a pilot investigation
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In a pilot investigation of reality monitoring in hypnosis, 10 high and 10 low hypnotizable participants were administered a hypnotic suggestion to hallucinate a visual shape on a wall. For half the participants, an image was subtly projected onto the wall at the commencement of the suggestion and then subsequently removed. For the remaining participants, the projected image was initially absent and subsequently projected. Participants completed ratings of belief in the suggestion during hypnosis and also provided subjective reports of the suggestion during a subsequent Experiential Analysis Technique session. High hypnotizable participants who had the projected image introduced at the end of the suggestion provided comparable belief ratings when the image was present and absent. In contrast, highs who had the projected image presented first reported less belief when the image was absent than when it was present. Low hypnotizable participants rated the hallucination more strongly when the image was projected than when it was not projected. These pilot data are discussed in terms of developing a paradigm to objectively index the perceived reality of hypnotically suggested experiences.

[0915]
See clearly: suggestion, hypnosis, attention, and visual acuity
Int J Clin Exp Hypn. 2004 Apr;52(2):159-87
Raz A, Marinoff SP, Zephani ZR, Schweizer HR, Posner MI
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Some reports claim that positive suggestion (e.g., using hypnosis) can significantly improve visual acuity (e.g., in myopes). Based on behavioral, neuropsychological, and ophthalmological findings, the authors provide a critical account to review and challenge some of these data. While acknowledging the relative merits of hypnosis for investigating visual phenomena, an array of arguments converges to propose caveats to the apparent influence suggestion can exert on visual acuity. The authors argue that neither suggestion nor hypnotic phenomena are likely to significantly improve myopic vision and contend that a responsible scientific attitude should carefully outline what hypnosis and suggestion cannot do in addition to what they can. It seems likely that the small apparent influence of suggestion on visual acuity is mediated by changes in attention. The authors outline how attention can affect visual acuity.

[0916]
Does hypnotizability modulate the stress-related endothelial dysfunction?
Brain Res Bull. 2004 Apr 30;63(3):213-6
Jambrik Z, Santarcangelo EL, Ghelarducci B, Picano E, Sebastiani L
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Previous studies suggest that hypnotizability represents a protective factor against the cardiac effects of cognitive stress and that hypnosis prevents vascular stress-induced modifications in highly hypnotizable individuals. The aim of the experiment was to investigate whether a similar effect at vascular level is present in awake subjects with a high (Highs)
and a low (Lows) hypnotic susceptibility. Thus, brachial artery post-ischaemic flow-mediated vascular dilation (FMD) was evaluated non-invasively by ultrasound methodology during cognitive stress (mental computation) in Highs and Lows. Results showed that Highs, similarly to that previously observed in hypnotized Highs and in contrast with Lows, did not exhibit any stress-related endothelial dysfunction (FMD decrement). Thus, hypnotizability should be considered a protective factor against vascular disease.

[0917]
Predictors of alternative and complementary medicine use in inflammatory bowel disease: do measures of conventional health care utilization relate to use?
Am J Gastroenterol. 2004 May;99(5):889-93
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OBJECTIVE: Alternative and complementary therapies (ACM) have gained increasing attention in the past few years. It was our purpose to determine whether increased ACM use is associated with increased use of conventional health care resources. Additionally, demographics of use, subjective benefit, and cost were analyzed. METHODS: We enrolled 150 inflammatory bowel disease (IBD) patients from a tertiary care center and performed a phone survey of their ACM use in the past year. A population-based administrative database was accessed to extract data regarding use of conventional medicine (hospitalizations, doctor visits, and GI specific doctor visits). Patients were divided into three groups: (i) no ACM (n = 60) (ii) users of exercise, diet, and prayer (EDP) exclusively (n = 47) (iii) other ACM use (n = 43) which included those who may have used EDP as well as any of acupuncture, chiropractic, homeopathy, naturopathy, herbology, massage, relaxation, reflexology, hypnotherapy, aromatherapy, meditation, or support group. RESULTS: ACM was used by 60% (EDP 31%, other ACM 29%). There were no significant differences in use between the three groups by disease diagnosis, education level, employment status, use of IBD medications, number of hospitalizations, doctor visits, or GI specific doctor visits. The EDP group was more likely to be married (p = 0.006) and female (p = 0.04) compared to no ACM. The EDP group tended to be older than the no ACM (p = 0.001) and other ACM (p = 0.01). The other ACM had shorter disease duration than EDP (p = 0.04) and no ACM (p = 0.04). The most commonly used therapies were diet (45%), herbal (17%), exercise (15%), prayer (11%), and relaxation (10%). ACM was sought for pain/cramps (64%), diarrhea (60%), and gas/bloating (21%). Seventy-three percent of EDP interventions incurred no cost compared to 33% with other ACM (p &lt; 0.0001). The median annual amount spent on other ACM was $56 (range $0-$4800). Subjectively, patients felt helped by trials of EDP 95% of the time whereas other ACM helped 67% of the time (p &lt; 0.0001). CONCLUSIONS: ACM use could not be predicted by either greater or less hospitalizations, conventional doctor visits, or GI specific visits. ACM was sought mostly to palliate pain or diarrhea. Those using EDP are more likely to be older married women. Subjectively other ACM is of less benefit (67%) than EDP (95%). If doctor visits or hospitalizations represent degree of increased disease activity then this too is not predictive of using ACM.

[0918]
Pioneers of movement disorders: Georges Gilles de la Tourette
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Georges Albert Edouard Brutus Gilles de la Tourette (1857-1904), a French neurologist and pupil of Jean Martin Charcot at the Salpetriere hospital in Paris, has gained common recognition through his description of the 'Maladie des Tics'. This complex neuropsychiatric disorder, later known as the 'Tourette's syndrome', nowadays is accepted as a specific entity of complex neuropsychiatric disorder. Gilles had started working under Charcot (1825-1893), the first physician to occupy a designated chair of neurology of neuropsychiatric history, in 1884. Then the Salpetriere hospital was a centre of intensive research with an emphasis on hysteria and hypnosis. Tourette took an interest in hysteria, but also dedicated himself to various other neuropsychiatric disorders and to neuropathology. He published scientific works on epilepsy, neurasthenia and syphilitic myelitis. Although he devoted much time to his neuropsychiatric research and the publication of articles in medical journals, his career did not make significant progress, despite Charcot's unrestricted support. One reason was, that he disregarded questions, answers and problems, which were outside his interest fields. Hence, he was accused for having acquired an extremely filtered and one-sided knowledge. Also, his alienated and critical behaviour, which had not helped him to find many friends over the years, prevented him from professional promotion. In 1893 an assassination attempt on Gilles de la Tourette raised considerable public interest: Gilles was shot in his appartement in the Rue de l'Universite 39 by a young woman, who had been his patient in the Salpetriere and who claimed that she had been hypnotized without her agreement and thereby had lost her mental health. However, the patient was diagnosed with a disease nowadays called paranoid schizophrenia and therefore hypnosis was not attributed to any part of the disease. Due to episodes of melancholia and phases of delusions of grandeur and megalomania Gilles de la Tourette was forced to leave his hospital appointment in 1901. These symptoms and the corresponding neurological signs were attributed to the paretic neurosyphilis. He was institutionalized to the psychiatric hospital Cery near Lausanne, Switzerland. In the course of the following three years he became increasingly psychotic and demented, suffered from epileptic seizures and finally died in hospital on 22(nd) May 1904.

[0919]
"It's magic!" The effects of presentation modality on children's event memory, suggestibility, and confidence judgments
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The current study investigated the influence of presentation modality (live, video, and slide show) on children's memory, suggestibility, recognition, and metamemorial monitoring processes. A total of 270 children in three age groups (5- and 6-year-olds, 7- and 8-year-olds, and 9- and 10-year-olds) watched a magic show and were questioned about it 1 week later. The live show yielded more correct answers to nonleading questions, higher resistance to misleading questions, and better recognition memory than did the video condition, which in turn resulted in better performance than did the slide show. Although presentation modality raised the general level of memory performance, the effects were equally strong in all age groups and did not affect memory phenomena such as the size of the misinformation effect and confidence judgments.

[0920]
A missing link in suggestibility research: what is known about the behavior of field interviewers in unstructured interviews with young children?
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Despite suggestibility researchers' focus on adult behaviors that distort children's reports, whether behaviors examined in experimental work are used in the field is unknown. The current study presents a mutually exclusive and exhaustive hierarchical coding system that reflects interview questioning behaviors of concern in experimental work. The study examined 80 unstructured interviews conducted by 41 field interviewers with 40 children ages 3 to 7 about known events. Data on the use of leading and neutral questions are presented and include distinctions between accurate and inaccurate suggested information. In addition, analyses show that interviewers are consistent in their style of questioning and that a preinterview measure of interviewers' preference for a qualitative versus a quantitative interviewing style predicted the introduction of novel information into the interview.

[0921]
Effect of hypnotic sedation during percutaneous transluminal coronary angioplasty on myocardial ischemia and cardiac sympathetic drive
Am J Cardiol. 2004 Apr 15;93(8):1035-8
Baglini R, Sesana M, Capuano C, Gnecci-Ruscone T, Ugo L, Danzi GB
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Forty-six patients were randomized to receive drug (group 1) or hypnotic sedation (group 2) during percutaneous transluminal coronary angioplasty of the left anterior descending coronary artery. Intracoronary and standard electrocardiograms were continuously registered, and heart rate spectral variability was studied. Normalized units of low- and high-frequency components and the ratio of low to high frequency were measured during balloon inflations. The ST segment shifted at the first balloon inflation from 0.02 +/- 0.01 to 0.09 +/- 0.6 mm in group 1 and from 0.02 +/- 0.08 to 0.1 +/- 0.6 in group 2 mm (p <0.05). In group 1, the low-frequency band and the ratio of low to high frequency increased significantly during the first balloon inflation (from 59 +/- 10 to 75 +/- 7 normalized units and from 2.4 +/- 1.4 to 7.3 +/- 4.7, respectively; p <0.001). The increase of the ratio of low to high frequency was significantly related to ST shift (r = 0.706; p <0.01). In contrast, no significant variation of spectral parameters was found in group 2. The increase in cardiac sympathetic activity associated with balloon inflation and myocardial ischemia during percutaneous transluminal coronary angioplasty of the left anterior descending coronary artery was selectively eliminated by hypnosis but not by drug sedation.

[0922]
Providing misleading and reinstatement information a year after it happened: effects on long-term memory
Peterson C, Parsons T, Dean M
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The question addressed here is whether misleading suggestions made to children a year after target events had occurred will alter long-term recall. One group (3-13 years old when injured and treated in a hospital Emergency Room) were given both misleading and accurate reinstating information a year later, and recall of target events assessed both 1 week and another year later (i.e., 2 years post-injury). A control group had recall assessed both 1 and 2 years post-injury. Misleading had little effect on children's recall 1 week later, although a few misled details were reported. However, a year later virtually none of the misleading information was incorporated into long-term recall. Rather, children were more, not less, accurate when recalling details about which they had been misled. Results were attributed to target events having been highly memorable and well rehearsed via previous recalls, and detection of discrepancies between memory and misleading information focusing attention on targeted details.

[0923]
Colonial psychiatry, magic and religion. The case of mesmerism in British India
Hist Psychiatry. 2004 Mar;15 Pt 1(57):57-71
Emst W
This article is concerned with the development of early nineteenth-century Western medicine and psychiatry in relation to religion and magic during British colonial rule in India. The case of mesmerism is taken to illustrate that 'colonial medicine/psychiatry in India' itself was plural in nature, being made up of a variety of different, at times competing, strands. Religious connotations and references to spiritual enlightenment increasingly posed a peculiar problem to emerging Western science-based medicine in the nineteenth century. Mesmerism was met with as much hostility by an emerging Western medical orthodoxy as indigenous medical systems. The affiliation of mesmerism with Indian magical practices and religious customs contributed to its marginalization - despite or, rather, because of its popularity among members of the Indian nobility and middle classes, Indian patients and practitioners. The case of mesmerism also shows that awareness both of the domineering power of a gradually emerging medical 'imagined' mainstream and an analysis of the complex challenges faces by heterodoxy (as much as by orthodoxy) facilitate a more critical understanding of the development of colonial medicine and psychiatry in the East as well as, arguably, of medicine and psychiatry in Britain itself.

[0924]
A meta-analysis of the effect of guided imagery practice on outcomes
J Holist Nurs. 2004 Jun;22(2):164-79
Van Kuiken D
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Guided imagery is an intervention used by nurses in a variety of settings. It has been suggested that better outcomes will occur with continued practice. No studies were found that examined the relationship between practice duration and strength of outcomes. The focus of this meta-analysis was the effect size of guided imagery intervention studies with different durations. Statistical findings of 10 studies of various durations were converted to d statistics and plotted against the duration of study. The results show an increase in effect size of guided imagery over the first 5 to 7 weeks; however, the effect was decreased at 18 weeks.

[0925]
The brain-gut axis in irritable bowel syndrome - clinical aspects
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Irritable bowel syndrome (IBS) is the most common chronic gastrointestinal (GI) disorder, affecting about 20% of the world's population. Chronic abdominal pain or discomfort relieved by defecation and associated with altered bowel habits are the mainstay in diagnosis. The pathophysiology of IBS remains unknown. This biopsychosocial disorder involves dysregulation of the nervous system, altered intestinal motility, and increased visceral sensitivity. All of these result from dysregulation of the bidirectional communication between the gut with its enteric nervous system and the brain (the brain-gut axis), modulated by various psychosocial and environmental factors (e.g. infection, inflammation). Numerous neurotransmitters are found in the brain and gut that regulate GI activities, including 5-hydroxytryptamine (5-HT, serotonin) and its 5-HT3 and 5-HT4 receptors. The current approach to IBS patients is based on a positive diagnosis of the symptom complex, exclusion of underlying organic disease, and institution of a therapeutic trial. Traditional symptomatic treatment has included antidiarrheals, laxatives and bulking agents/fiber, low-dose tricyclic antidepressants, antispasmodics for pain, and 'alternative' therapies (e.g. psychotherapy, hypnotherapy). The scientific evidence supporting this therapy is limited. Novel approaches include visceral analgesics and serotonin agonists and antagonists. In patients with severe diarrhea, 5-HT3 receptor antagonists (e.g. alosetron) and selective M3-type anticholinergics are indicated, in constipation 5-HT4 agonists (e.g. tegaserod), and in pain alfa2-adrenergics (e.g. clonidine), cholecystokinin antagonists, kappa-opioid agonists (e.g. fedotozine), and neuropeptide antagonists; some of these agents are still being investigated. Understanding the brain-gut axis is crucial in the development of effective therapies for IBS.

[0926]
The neurobiology of pain, affect and hypnosis
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Recent neuroimaging studies have used hypnotic suggestion to distinguish the brain structures most associated with the sensory and affective dimensions of pain. This paper reviews studies that delineate the overlapping brain circuits involved in the processing of pain and emotions, and their relationship to autonomic arousal. Also examined are the replicated findings of reliable changes in the activation of specific brain structures and the deactivation of others associated with the induction of hypnosis. These differ from those parts of the brain involved in response to hypnotic suggestions. It is proposed that the activation of a portion of the prefrontal cortex in response to both hypnotic suggestions for decreased pain and to positive emotional experience might indicate a more general underlying mechanism. Great potential exists for further research to clarify the relationships among individual differences in reactivity to pain, emotion, and stress, and the possible role of such differences in the development of chronic pain.

[0927]
Hypnosis and existential psychotherapy with end-stage terminally ill patients
Am J Clin Hypn. 2004 Jan;46(3):201-13
Iglesias A

Existential Psychological Theory was employed as a conceptual and theoretical foundation for the use of hypnotically facilitated therapy in the management of intractable pain, nausea, and vomiting in 3 end-stage, terminally ill cancer patients. The existential principles of death anxiety, existential isolation, and existential meaninglessness were addressed with a combination of classic and Ericksonian techniques. The intractable nature of the presenting physical symptoms was conceptualized as a possible manifestation of the impact of the terminal prognosis. Direct hypnotic suggestions for the management of pain, nausea and vomiting were avoided. It was hypothesized that, as the existential conflicts associated with the patients' terminal status resolved, the physiological symptoms would become responsive to medication. After 6 sessions grounded in the principles of Existential Psychotherapy, the intractable status of the physical symptomatology remitted, and the patients responded to medical management. This paper addresses the usefulness of Existential Psychotherapy in hypnotic interventions for mediating somatic and psychosomatic symptomatology.

Gene expression and brain plasticity in stroke rehabilitation: a personal memoir of mind-body healing dreams
Rossi EL

In this personal memoir the author describes the progress of his rehabilitation from a stroke and the dream manifestations of his mind-body healing. He also shares his reminiscences about Erickson's physical difficulties as well as Erickson's naturalistic or activity-dependent approach to therapeutic hypnosis and rehabilitation and emphasizes what he considers the least understood and most under appreciated aspect of Erickson's hypnotherapy—the fact that his patients frequently experienced intense emotional experiences as they accessed and replayed their traumas in a therapeutic manner. He also speculates about the neural mechanisms of his healing from the standpoint of his new neuroscience theory which includes the novelty-numinosum-neurogenesis effect.

Symptom removal: the twentieth century experience
Am J Clin Hypn. 2004 Jan;46(3):229-38
Weitzenhoffer AM

The twentieth century hypnosis literature regarding the use of direct symptom removal with hypnosis is in strong contrast with that of the nineteenth. It shows much ambivalence about the use of symptom removal. Objections, largely based on conclusions drawn from psychoanalytic theory, led many twentieth century psychotherapists to reject direct symptom removal. However, a certain amount of empirical evidence, scattered through the literature, has accumulated during the twentieth century to support this rejection. The lack of satisfactory twentieth century statistics and of nineteenth century details concerning hypnotic interventions that were used, makes it impossible to satisfactorily account for the discrepancy in experiences of the nineteenth and twentieth centuries. Although therapists did not altogether abandon working directly with symptoms, many opted instead for modifying and manipulating them by suggestion instead of completely removing them, usually allowing the patient to retain a psychodynamically suitable substitute. Here again a lack of adequate statistics prevents one from being able to properly appraise the effectiveness of this approach which has remained the preferred one for a number of therapists.

Using hypnosis to facilitate resolution of psychogenic excoriations in acne excoriee
Am J Clin Hypn. 2004 Jan;46(3):239-45
Shenefelt PD

Hypnotic suggestion successfully alleviated the behavioral picking aspect of acne excoriee des jvenes filles in a pregnant woman who had been picking at the acne lesions on her face for 15 years. Acne excoriee is a subset of psychogenic or neurotic excoriation. Conventional topical antibiotic treatment was used to treat the acne. Compared with other treatments for uncomplicated acne excoriee, hypnosis is relatively brief and cost-effective and is non-toxic in pregnancy.

Self-hypnosis relapse prevention training with chronic drug/alcohol users: effects on self-esteem, affect, and relapse
Am J Clin Hypn. 2004 Apr;46(4):281-97
Pekala RJ, Maurer R, Kumar VK, Elliott NC, Masten E, Moon E, Salinger M

This study evaluated the effectiveness of a self-hypnosis protocol with chronic drug and alcohol patients in increasing self-esteem, improving affect, and preventing relapse against a control, a transtheoretical cognitive-behavioral (TCB), and
a stress management (attention-placebo) group. Participants were 261 veterans admitted to Substance Abuse Residential Rehabilitation Treatment Programs (SARRTPs). Participants were assessed pre- and postintervention, and at 7-week follow-up. Relapse rates did not significantly differ across the 4 groups at follow-up: 87% of those contacted reported abstinence. At follow-up, the participants in the 3 treatment conditions were asked how often they practiced the intervention materials provided them. Practicing and minimal-practicing participants were compared against the control group for each of the 3 interventions via MANOVAs/ANOVAs. Results revealed a significant Time by Groups interaction for the hypnosis intervention, with individuals who played the self-hypnosis audiotapes "at least 3 to 5 times a week" at 7-week follow-up reporting the highest levels of self-esteem and serenity, and the least anger/impulsivity, in comparison to the minimal-practice and control groups. No significant effects were found for the transtheoretical or stress management interventions. Regression analyses predicted almost two-thirds of the variance of who relapsed and who did not in the hypnosis intervention group. Hypnotic susceptibility predicted who practiced the self-hypnosis audiotapes. The results suggest that hypnosis can be a useful adjunct in helping chronic substance abuse individuals with their reported self-esteem, serenity, and anger/impulsivity.

[0932]
Hypnosis to facilitate uncomplicated birth
Am J Clin Hypn. 2004 Apr;46(4):299-312
Mehl-Madrona LE
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Prior research by the author showed that psychosocial factors distinguished complicated from uncomplicated birth outcome. The purpose of this study was to determine if prenatal hypnosis could facilitate uncomplicated birth. Following a psychosocial assessment, 520 pregnant women in their first or second trimester of pregnancy were randomized to receiving prenatal hypnosis or attention-only groups. The author provided all of the hypnosis in a manner similar to that taught by David Cheek. The goal was to reduce fear of birth and parenthood; to reduce anxiety; to reduce stress; to identify specific fears that might complicate the labor process (addressing them whenever possible); and to prepare women for the experience of labor. The attention-only group was matched to a no-contact comparison group. Women receiving prenatal hypnosis had significantly better outcomes than women who did not. Further assessment suggested that hypnosis worked by preventing negative emotional factors from leading to an complicated birth outcome. Attention only was associated with minimal differences in outcome over the no-contact group. The routine prenatal use of hypnosis could improve obstetric outcome.

[0933]
Reflections on hypnotizability and its impact on successful surgical hypnosis: a sole anesthetic for septoplasty
Am J Clin Hypn. 2004 Apr;46(4):313-21
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While hypnosis has been a significant medical tool through the ages, its use has been, at best, capricious. After the development and widespread use of ether, hypnosis has been mostly relegated to the role of an adjunct to chemical anesthesia. The present paper describes a case where hypnosis was used as the sole anesthetic for a septoplasty. The chronology of the surgery, hypnotic suggestion and strategies used as well as the clinician's responses are described. The paper highlights relevant clinical issues such as the hypnotic capacity of the patient, associated hypnotic phenomena, enhancing trance, and maximizing the hypnotic capacity by "meeting them where they are".

[0934]
Electrophysiological alterations during hypnosis for ego-enhancement: a preliminary investigation
Am J Clin Hypn. 2004 Apr;46(4):323-44
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EEG activity at the midfrontal (Fz) region was recorded during pre- and postbaselines, live hypnotic induction, arm levitation and progressive relaxation (PNR) deepening, and therapeutic ego-enhancing suggestions among 60 college student volunteers, previously screened with the Stanford Hypnotic Susceptibility Scale, Form C. Comparisons across conditions for delta, theta, alpha, and beta activity were made between low, moderate, high, and very high hypnotizable groups. Results indicated (a) significant increases in theta EEGs across the hypnosis process with a peak at PNR and a drop in theta thereafter to termination, with highs showing significantly more dramatic effects than moderates; (b) a similar inverted U-shaped pattern for beta EEGs across hypnosis conditions, with very highs significantly higher in beta power than moderates and lows, and with highs significantly higher than moderates; (c) general profile differences between the highs for theta and the highs and very highs for beta in comparison to the moderates and lows, with peak theta and beta power occurring during ego-enhancing suggestions for more highly hypnotizable participants; (d) a drop in alpha EEGs across the trance process with a return to baseline after hypnosis, with moderates showing significantly lower alpha power; and (e) an increase in delta power across conditions to PNR and then a decrease to post-hypnosis baseline, with moderates significantly lower than highs.

[0935]
The efficacy of hypnosis in the reduction of procedural pain and distress in pediatric oncology: a systematic review
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Children who suffer from cancer have to endure regular, painful medical procedures that are associated with a considerable degree of psychosocial distress. Hypnosis has been successfully employed in the management of pain and distress in the adult population, but is not well studied in pediatric populations. This review systematically evaluates the systematic research conducted in the field of procedure-related pain management in pediatric oncology within the context of a nationally agreed framework for the assessment of research evidence. It is concluded that there is not currently enough robust research evidence to recommend that hypnosis should form part of best practice guidelines for the management of procedure-related pain in pediatric oncology. However, there is sufficient evidence to justify larger-scale, appropriately controlled studies. A number of recommendations are made regarding future research.

Complementary and alternative medical approaches to treating adult neurogenic communication disorders: a review
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PURPOSE: This paper reviews studies investigating the effectiveness of treating adult neurogenic communication disorders with complementary and alternative medicines (CAM). CAM is gradually experiencing recognition as a viable treatment approach for a variety of disorders by practitioners and patients. Some patients are using CAM as an adjunct to traditional rehabilitation. Additionally, speech-language pathologists are increasingly using CAM in treating communication disorders. METHOD: This review provides a description of various CAM techniques including acupuncture, hypnosis, relaxation training, dreamwork, biofeedback and homeopathy/herbal medicine. Investigations exploring the effectiveness of each of these approaches as they have been applied to aphasia, motor speech disorders, and cognitive impairments are discussed. RESULTS AND CONCLUSIONS: Little scientific inquiry into the effectiveness of CAM in the treatment of aphasia, motor speech disorders, and cognitive impairments has occurred. Many of the reviewed studies demonstrate inconsistent results; use limited sample sizes; do not include quantitative measures of cognitive, linguistic or motor speech skills; and are poorly reported. This review suggests that further exploration of this area is required before any strong conclusions regarding effectiveness and efficacy of these techniques can be made.

An argument for a qualitative research approach to hypnotic experiencing and perceptually oriented hypnosis
Psychol Rep. 2004 Jun;94(3 Pt 1):955-66
Woodard FJ
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An argument for the significance of a qualitative research approach to hypnotic experiencing and a perceptually oriented view of hypnotic experiencing is presented with hypnosis framed in phenomenological, humanistic, and perceptual terms. An outline of threads of thought in Popper's writings are consistent with such a perspective. Qualitative approaches are noted and support for theoretical discussions leading to deeper understanding of issues of hypnotic experiencing, such as unconscious processes, nonlinear experiences, and researchers' countertransference are examined. Some limitations of current quantitative approaches to examining hypnotic experiencing and myths about qualitative research are discussed.

Sensory-motor cortex activity modulation by hypnotic susceptibility and hypnosis during finger movement
Arch Ital Biol. 2004 Mar;142(2):77-85
Gemignani A, Tosetti M, Montanaro D, Biagi L, Ghelarducci B, Guazzelli M, Santarcangelo EL
Department of Physiology and Biochemistry, University of Pisa, Italy

The aim of the experiment was to study whether the activity of the primary sensory-motor (S1/M1), supplementary motor (SMA) and pre-motor (PMA) areas during fingers movement is modulated by hypnotic susceptibility and hypnosis. Cortical activity was studied through functional Magnetic Resonance Imaging (fMRI) during a finger-to-thumb opposition task in awake (Highs) and hypnotized highly susceptible (H-Highs) as well as in awake non susceptible subjects (Lows). Results did not show any significant difference in sensory-motor areas activation between Highs and Lows (trait effect) and between Highs and H-Highs (state effect). The activation in 3 subjects among Highs and only 1 among Lows (out of 5) of the caudal S1, receiving the most part of the cutaneous input, appears noteworthy and prompts further investigation on possible hypnotizability-related differences in sensory-motor integration.

Does hypnotizability affect human upright stance?
Arch Ital Biol. 2004 May;142(3):285-96
Santarcangelo EL, Rendo C, Carpaneto J, Dario P, Micera S, Carli G
Department of Physiology and Biochemistry, University of Pisa, Italy
Subjects highly (Highs) and low susceptible to hypnosis (Lows) show different imagery and attentional capabilities and also peculiar somatomotor, vegetative and electroencephalographic differences in basal and task conditions. Since attention is one of the main component of hypnotic susceptibility and also a relevant factor for postural control, the aim of the experiment was to study actual differences between Highs and Lows at the eyes closure during upright stance. Visual and motor imagery as well as attentional/disattentional capabilities were evaluated through psychological tests. Posture was monitored though Elite systems during upright stance with open and closed eyes. At the eyes closure, Highs and Lows exhibited a different body sway modulation. Possible different compensation mechanisms are suggested for the two groups and interactions between attentional/arousal systems responsible of hypnotic phenomenology and postural control are underlined.

[0940]
Hypnosis for schizophrenia
Cochrane Database Syst Rev. 2004;(3):CD004160
Izquierdo SA, Khan M
[further informations not available]

BACKGROUND: Many people with schizophrenia continue to experience symptoms despite the use of conventional treatments. Alternative therapies such as hypnosis, in conjunction with conventional treatments, may prove beneficial to them. OBJECTIVES: To investigate the use of hypnosis for people with schizophrenia or schizophrenia-like illnesses compared to standard care and other interventions. SEARCH STRATEGY: We searched the Cochrane Schizophrenia Group's Register (January 2003), contacted the Cochrane Complementary Medicine Field for additional searching, hand searched references of included or excluded studies and made personal contact with authors of relevant trials. SELECTION CRITERIA: All randomised or double blind controlled trials that compared hypnosis with other treatments or standard care for people with schizophrenia. DATA COLLECTION AND ANALYSIS: Studies were reliably selected, quality assessed and data extracted. Data were excluded where more than 50% of participants in any group were lost to follow up. For binary outcomes we calculated a fixed effects risk ratio (RR) and its 95% confidence interval (CI). MAIN RESULTS: We included three studies (total n=149). When hypnosis was compared with standard treatment no one left between 1-8 weeks (n=70, 2 RCTs, Risk Difference 0.00 CI -0.09 to 0.09). Mental state scores were unaffected (n=60, 1 RCT, MD BPRS by 1 week -3.6 CI -12.05 to 4.8) as were measures of movement disorders and neurocognitive function. Compared with relaxation, hypnosis was also acceptable (n=106, 3 RCTs, RR leaving the study early 2.00 CI 0.2 to 2.15) and had no discernable effect on mental state (n=60, 1 RCT, MD BPRS by 1 week -3.4 CI -11.4 to 4.6), movement disorders or neurocognitive function. Hypnosis was as acceptable as music (Sibelius) by 4 weeks (n=36, RR leaving the study early 5.0, CI 0.3 to 97.4). REVIEWERS' CONCLUSIONS: The studies in this field are few, small, poorly reported and outdated. Hypnosis could be helpful for people with schizophrenia but to ascertain this requires better designed, conducted and reported randomised studies.

[0941]
Psychological treatments for posttraumatic stress disorder: recommendations for the clinician based on a review of the literature
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This article reviews available research data supporting the use of psychotherapy in the treatment of posttraumatic stress disorder (PTSD). The authors highlight how this evidence might inform clinical choices in treating PTSD, as well as demonstrating how assumptions based on gaps in the available literature may be misleading. The authors first discuss findings concerning a number of interventions that are commonly used in the treatment of trauma victims or patients with PTSD: critical incident stress debriefing, psychoeducation, exposure therapy, eye movement desensitization reprocessing, stress inoculation therapy, trauma management therapy, cognitive therapy, psychodynamic psychotherapy, and hypnotherapy. They also discuss a number of treatment strategies that have recently been studied in PTSD, including imagery rehearsal, memory structure intervention, interpersonal psychotherapy, and dialectical behavior therapy. PTSD is associated with significant symptomatic morbidity, although desired outcomes in clinical practice are typically related more to reduction in social, interpersonal, and occupational impairment. The most methodologically robust studies, which have typically examined cognitive or behavioral treatments, indicate that psychotherapy helps to relieve symptom severity; however, there is no consistent information about whether these interventions are helpful in improving other domains of impairment and associated disability, even though these problems are often the greatest concern to patients. Nor does the available evidence indicate when, and for whom, various psychotherapeutic interventions should be provided, or whether different modalities of treatment can and should be combined, or sequentially offered, as is often done in specialized treatment programs. Clinicians should keep these issues in mind in reviewing the literature on current (and future) clinical research. Unfortunately, the current evidence base on psychotherapy for PTSD gives only limited guidance concerning clinical choices in managing PTSD. The authors therefore provide some clinical guidelines based on the literature for clinicians treating patients with PTSD.
The Autogenic Training (AT) is a well-established relaxation technique and psychotherapy tool. We report the use of nonlinear routines, the Multi-scaled Time-Frequency-Distribution (mTFD) for the graphical display of vegetative rhythms, and Post-Event-Scan (PES) for the direct visual identification of coupling between physiological subsystems. Applying these methods to time series of respiration, arterial blood pressure, and cutaneous forehead blood content fluctuations in controls (n = 11) or AT-experts (ATE, n = 11) induced psychomotor drive reduction during orthostatic stress allowed the instantaneous identification of a 0.15 Hz-rhythm. This rhythm prevailed in ATE significantly longer resulting a significantly robust 1:1 coupling between cutaneous blood content fluctuations and respiration. Consequently, we hypothesize that the "0.15 Hz-rhythm" in the cutaneous blood content fluctuations described previously which was associated with the subjective experience of profound psychomotor relaxation reflects an order-order transition in peripheral signals of central nervous origin. Results produced with the aid of these analytic tools support the efficacy of the AT induced, synergetic relaxation response.

[0943]
Hypnosis in Sweden during the twentieth century - the life and work of John Bjorkhem
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In this paper we present a study of hypnosis in Swedish medicine during the twentieth century. We focus on the life and work of the hypnotist and Swedish physician John Bjorkhem. He was a controversial person and his therapeutic ideas were not accepted in the medical establishment. The biography of Bjorkhem and the history of hypnosis in Swedish medicine during the twentieth century are intimately related to each other. We describe an outsider in medicine, both with respect to person and topic. In the case of Bjorkhem the situation was especially complicated because of his multidisciplinary activities, with three different faculties involved. Finally we deal with the condition of a pioneer, and his struggle for acceptance and understanding.

[0944]
Physicians and complementary-alternative medicine: training, attitudes, and practices in Hawaii
Chan PS, Wong MM

INTRODUCTION: There were only few studies addressing the physicians' training, attitudes, and utilization of complementary and alternative medicine (CAM) therapies, compared to the well-documented escalating use of CAM among consumers. Patients who use CAM, however often do not disclose their utilization to their physicians. This study thus surveyed knowledge, attitudes, and practices of complementary and alternative medicine among physicians on the island of Oahu in Hawaii. The Hawaii Medical Service Association (HMSA) provided physicians' names and contact information. METHOD: This is a descriptive study with a questionnaire that was mailed to all physicians on the list. A total of 299 physicians responded to this survey. Response rate was 17.45%. RESULTS: Physicians reported having moderate acknowledge in acupuncture, massage, prayer/spiritualty chiropractic, hypnosis and meditation. They recognized the value of these treatments and refer their patients to have these treatments. On the other hand, homeopathy naturopathy, electromagnetic therapies, therapeutic/healing touch, and nutriceuticals were consistently rated as having no role in conventional medicine, strongly opposed to in practice, or would not refer patients to. Respondents felt CAM could be most effective for pain, musculoskeletal, psychological conditions and smoking cessation.

DISCUSSIONS: Results indicated that the respondents had knowledge about prayer/spiritualty, massage, chiropractic, meditation, hypnosis, and acupuncture, and also rated them as playing a role in conventional medicine, and would refer or have referred patients to. When they had little knowledge about naturopathy, electromagnetic therapies, nutriceuticals, and homeopathy, they rated these therapies as having no role in conventional medicine, and were strongly opposed to in practice or would not refer patients to. Respondents reported the least know about the Ayurveda and Native American medicine. However, there was no significant correlation between negative attitude and practice patterns. Similarly therapeutic touch and chiropractic were perceived as therapies, but no role in conventional medicine although the respondents reported having some knowledge of these therapies. Thus, knowledge may not be necessarily associated with negative attitudes and practice patterns.

[0945]
[The role of imagination in modern medicine]
Schott H.

In Renaissance and early modern times, the concept of imagination (Latin imaginatio) was essential for the (natural) philosophical explanation of magic processes, especially in the anthropology of Paracelsus. He assumed that imagination was a natural vital power including cosmic, mental, phychical, and physical dimensions. The Paracelsians criticized traditional humor pathology ignoring their theory of 'natural magic'. On the other hand, they were criticized by their adversaries as charlatans practicing 'black magic'. About 1800, in between enlightenment and romanticism, the healing concept of 'animal magnetism' (Mesmerism) evoked an analogous debate, whether 'magnetic' phenomena originated from a real (physical) power (so-called, 'fluidum') or were just due to fancy or imagination (German Einbildungskraft). At the end of the 19th century, the French internist Hippolyte Bernheim created-against the background of medical hypnosis
('hypnotism') as a consequence of Mesmerism - his theory of suggestion and autosuggestion: a new paradigm of psychological respectively psychosomatic medicine, which became the basis for the concept of, 'placebo' in modern biomedicine. From now on, all the effects of 'alternative medicine' could easily be explained by the 'placebo-effect', more or less founded - at least unconsciously - on fraud.

[0946]
Pseudoseizures
Indian Pediatr. 2004 Jul;41(7):673-9
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Pseudoseizures are paroxysmal alterations in behavior that resemble seizures but are without any organic cause. They are recognized by various terms. Pseudoseizures are found in about one fourth of all patients seen with hysteria and 20% of those referred to epilepsy clinic. Pseudoseizures are often difficult to differentiate because there are client based or clinician based factors leading to misdiagnosis. Detailed history, observation, psychological testing and laboratory investigations are used for correct diagnosis. Pseudoseizures are not only to be differentiated from various forms of epilepsy but also from disorders like malingering, somatization disorder, hyperventilation, migraine, syncope etc. Management consists of making the patient and relatives aware about the causation and diagnosis. Psychotherapy (supportive and psycho-dynamic), behavior therapy (biofeedback, relaxation), drugs (anxiolytic and anti-depressants), hypnosis and placebo are used for treatment. The correct recognition is helpful in avoiding physical tests and the unnecessary use of antiepileptic drugs.

[0947]
Complementary and alternative medicine for labor pain: a systematic review
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OBJECTIVES: The purpose of this study was to systematically review the literature for, and critically appraise, randomized controlled trials of any type of complementary and alternative therapies for labor pain. STUDY DESIGN: Six electronic databases were searched from their inception until July 2003. The inclusion criteria were that they were prospective, randomized controlled trials, involved healthy pregnant women at term, and contained outcome measures of labor pain. RESULTS: Our search strategy found 18 trials. Six of these did not meet our inclusion criteria. The remaining 12 trials involved acupuncture (2), biofeedback (1), hypnosis (2), intracutaneous sterile water injections (4), massage (2), and respiratory autogenic training (1). CONCLUSION: There is insufficient evidence for the efficacy of any of the complementary and alternative therapies for labor pain, with the exception of intracutaneous sterile water injections. For all the other treatments described it is impossible to make any definitive conclusions regarding effectiveness in labor pain control.

[0948]
Competition: how hypnosis can help women to hold their own in the workplace
Hornyak LM

This paper takes the perspective that competitive strivings in self and others have been an area of difficulty for women and that gender socialization has played a significant role. The author discusses elements of competition that seem toxic for women and proposes descriptors of healthy competition. It is proposed that hypnosis provides a suitable method for neutralizing negative elements and promoting adaptive responses in competitive situations. Five applications of hypnotic methods are illustrated through two case examples.

[0949]
Intensive therapy: utilizing hypnosis in the treatment of substance abuse disorders
Potter G

Hypnosis was once a viable treatment approach for addictions. Then, due to hypnosis being used for entertainment purposes many professionals lost confidence in it. However, it has now started to make a comeback in the treatment of substance abuse. The approach described here, using hypnosis for treatment, is borrowed from studies effectively treating alcoholism by using intensive daily sessions. Combining the more intense treatment of 20 daily sessions with hypnosis is a successful method to treat addictions. The treatment has been used with 18 clients over the last 7 years and has shown a 77 percent success rate for at least a 1-year follow-up.

[0950]
Can hypnosis reduce hot flashes in breast cancer survivors? A literature review
Elkins G, Marcus J, Palamara L, Stearns V
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Hot flashes are a significant problem for many breast cancer survivors and can cause discomfort, insomnia, anxiety, and decreased quality of life. In the past, the standard treatment for hot flashes has been hormone replacement therapy. However, recent research has found an increased risk of breast cancer in women receiving hormone replacement therapy. As a result, many menopausal women and breast cancer survivors reject hormone replacement therapy and many women want non-pharmacological treatment. In this critical review we assess the potential use of hypnosis in reducing the frequency and intensity of hot flashes. We conclude that hypnosis is a mind-body intervention that may be of significant benefit in treatment of hot flashes and other benefits may include reduced anxiety and improved sleep. Further, hypnosis may be a preferred treatment because of the few side-effects and the preference of many women for a non-hormonal therapy. Two case studies are included to illustrate hypnosis for hot flashes. However this intervention has not been adequately studied. We discuss an NIH-funded randomized clinical trial of hypnosis for hot flashes in breast cancer survivors that is presently being conducted.

[0951]
Nocturnal enuresis: behavioral treatments
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Nocturnal enuresis is a common problem. Physiologic and environmental factors are thought to have a role in the etiology and treatment of this condition. This article discusses the association between enuresis and behavioral or emotional problems. Common behavioral treatments are described, and evidence for their efficacy is reviewed. A brief discussion of hypnosis and acupuncture is included.

[0952]
[Psychogenic disorders: concepts, terminology and classification]
Neurologia. 2004 Sep;19(7):377-85
Arias M
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The neurological interest on functional or psychogenic disorders (mental or physical disturbances with no organic basis, generally unleashed by stressful situations) has been receiving increasingly more interest over the last few years. In this article we review concepts, terms and classifications of these disorders, very different over time and among different authors. Psychogenic disorders are divided into: a) dissociation (with memory, consciousness and self-identity impairment), and b) disturbances with somatizations, divided into somatoform (unconscious), factitious (voluntary search for patient's role) and malingering (searching for material gain). Special emphasis is placed on conversion or hysteria, included in somatoform disorders. New findings in functional neuroimaging are analyzed. These new data suggest an important role of unconscious and involuntary inhibition in loss of volition (similar to hypnosis and different from malingering). Normal activity in certain brain areas (motor or sensory cortex) is blocked by other areas related to emotional integration (anterior cingular and orbitofrontal cortex). The neurologist's role is important to achieve an early diagnosis of psychogenic disturbances, particularly convulsive ones. This means the use of fewer economic resources and better prognosis for the patient.

[0953]
Anomalous control: When 'free-will' is not conscious
Conscious Cogn. 2004 Sep;13(3):646-54
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The conscious feeling of exercising 'free-will' is fundamental to our sense of self. However, in some psychopathological conditions actions may be experienced as involuntary or unwilling. We have used suggestion in hypnosis to create the experience of involuntariness (anomalous control) in normal participants. We compared a voluntary finger movement, a passive movement and a voluntary movement suggested by hypnosis to be 'involuntary.' Hypnosis itself had no effect on the subjective experience of voluntariness associated with willed movements and passive movements or on time estimations of their occurrence. However, subjective time estimates of a hypnotically-suggested, 'involuntary' finger movement were more similar to those for passive movements than for voluntary movements. The experience of anomalous control is qualitatively and quantitatively different from the normal conscious experience of a similar act produced intentionally. The experience of anomalous control may be produced either by pathology, or, in our case, by suggestion.

[0954]
A systematic review of psychological therapies for nonulcer dyspepsia
Am J Gastroenterol. 2004 Sep;99(9):1817-22
Soo S, Forman D, Delaney BC, Moayyedi P
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OBJECTIVES: We conducted a systematic review to determine the effectiveness of psychological interventions including
Community mental health clinicians are likely to find their case loads composed of women who have complicated trauma.

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Chaikin ND, Prout MF
Am J Orthopsychiatry. 2004 Apr;74(2):160-73

Treating complex trauma in women within community mental health

Am J Orthopsychiatry. 2004 Apr;74(2):160-73
Chaikin ND, Prout MF
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Professional Hypnosis Databank - page 232 of 889 - by Alberto Torelli, hypnologist
histories. In response to the absence of comprehensive treatment for trauma survivors within the community mental health system, an alternative model, Overcoming Pain and Adversity in Life (OPAL) is offered. As an intensive treatment program, OPAL is structured in a triphase format to accommodate the individual needs of each woman and to promote symptom reduction and/or resolution.

[0958]
Medical-legal issues in Charcot's neurologic career
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OBJECTIVE: Trace the medical-legal involvement of the 19th century clinical neurologist Jean-Martin Charcot.
BACKGROUND: The two major neurologic concerns of the 1800s that involved legal questions were topics of particular academic interest to Charcot: post-traumatic neurologic syndromes and the behavioral consequences of hysteria and hypnotherapy. Although Charcot's medical views influenced several nonmedical fields, including art, poetry, and drama, his impact on medical-legal issues has not been examined. METHODS: Original documents from the Bibliotheque Charcot at the Salpetriere Hospital in Paris, legal documents, and publications from Charcot's era were examined. RESULTS: Although his involvement in medical-legal affairs was a modest element of Charcot's multifaceted career, he was involved in four different types of medical-legal activities: as a cited authority in the medical-legal literature, as an author of articles within medical-legal contexts, as a subpoenaed expert consultant, and as an expert examiner. CONCLUSIONS: Charcot's involvement demonstrates the long tradition of an interface between neurology and legal medicine and provides a model for highly limited but authoritative involvement by academic neurologists in medical-legal affairs.

[0959]
Role of suggestion in odor-induced mood change
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The effects of ambient odor (lavender, neroli or placebo) and suggestions related to the effects of an odor (relaxing, stimulating or none) on mood were explored. Mood of 90 undergraduate women was assessed using physiological measures (heart rate and skin conductance) and the self-report Profile of Mood States questionnaire. Analysis indicated that physiological measures were influenced by suggestion in predictable directions. Relaxing odors yielded decreases in heart rate and skin conductance, with stimulating odors yielding the reverse effects under equivalent conditions. These data further support the notion that expectations play a significant role in mediating odor-evoked mood changes.

[0960]
The effect of intellectual disability on children's recall of an event across different question types
Law Hum Behav. 2004 Jun;28(3):273-94
Agnew SE, Powell MB
Deakin University, Burwood, Australia

This research examined the performance of 80 children aged 9-12 years with either a mild and moderate intellectual disability when recalling an innocuous event that was staged in their school. The children actively participated in a 30-min magic show, which included 21 specific target items. The first interview (held 3 days after the magic show) provided false and true biasing information about these 21 items. The second interview (held the following day) was designed to elicit the children's recall of the target details using the least number of specific prompts possible. The children's performance was compared with that of 2 control groups; a group of mainstream children matched for mental age and a group of mainstream children matched for chronological age. Overall, this study showed that children with either a mild or moderate intellectual disability can provide accurate and highly specific event-related information. However, their recall is less complete and less clear in response to free-narrative prompts and less accurate in response to specific questions when compared to both the mainstream age-matched groups. The implications of the findings for legal professionals and researchers are discussed.

[0961]
[Efficacy of treatment with hard and soft occlusal appliance in TMD]
Refuat Hapeh Vehashinayim. 2004 Jul;21(3):52-8, 94
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Temporomandibular disorders (TMD) include clinical disorders involving the masticatory muscles, the temporomandibular joints (TMJ) and the adjacent structures. TMD was recognized as a main source for pains in the orofacial area, which are not caused from dental origin, and is defined by the American Academy of Orofacial Pain (AAOP) as a sub-group within the frame of musculoskeletal disorders. The main etiology for TMD has not been found yet. The customary treatments for this disorder include treatment with occlusal splints, physiotherapy, medicaments, behavioral-cognitive treatment, hypnosis, acupuncture and surgery that should be considered only if all conservative treatments were unsuccessful. Occlusal splint is the most common and efficient treatment for TMD patients proved by many studies with a successful
rate of 70-90%. The following article reviews the different opinions in the treatment of TMD with special attention to hard and soft occlusal appliances. Based upon much research, and despite the many disagreements regarding its efficacy, the hard splint is a customary application which has the most successful outcome in patients who suffer from functional disorders of the masticatory system. The stabilization splint has an important benefit for being a non-penetrating and reversible appliance. However, despite this, the dentist should evaluate the joint or muscular problem, and seriously consider the various available treatments before deciding to use the appliance as a means of treatment.

Brief hypnotherapy of severe depression linked to sexual trauma: a case study
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Traumatic events of many sorts result in the now familiar symptoms of posttraumatic stress disorder (PTSD). Many accounts have been published of the helpful role of hypnosis in symptom amelioration when the symptom onset is immediate, or even delayed, following the trauma. For some patients, though, a virtual collapse of adaptive functioning occurs after long periods of relatively symptom-free functioning. For such individuals, the relevance of the earlier trauma to their current problems may not be recognized, either by those treating them or by themselves. This case study is an attempt to illustrate treatment strategies that may be helpful in such cases, based on a good treatment outcome with a seriously ill woman, where hypnosis was an integral part of a brief, but intensive, in patient treatment program.

Can anecdotes add to an understanding of hypnosis?
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Concordia University, Montreal, Quebec, Canada

This paper emphasizes the importance of anecdotes, in conjunction with experimental data and careful clinical observation, for an understanding of hypnosis. Anecdotes are presented that bear on (a) individual differences in hypnotizability, (b) the stereotypes of hypnosis, (c) the importance of careful wording in preparing experimental subjects and clinical patients for hypnosis, (d) the notion of hypnosis as involving a partial, but not complete, setting aside of critical judgment, which permits the hypnotized person to engage in fantasy and make-believe, (e) confabulation in hypnotic age regression, (f) the differentiation of hypnotic and therapeutic suggestion, (g) the nature of hypnotic suggestion, and (h) some experiences with the posthypnotic persistence of an uncanceled suggestion.

An empirical test of Woody and Bowers's dissociated-control theory of hypnosis
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Woody and Bowers's dissociated-control theory predicts impaired performance on tasks indexing frontally mediated supervisory attentional functions during hypnosis, especially for high susceptibles. This prediction is tested using Stroop task behavioral performance to measure aspects of anterior-mediated supervisory attentional function. All measures of anterior-mediated attentional functions significantly declined during hypnosis. Interactions be-tween susceptibility and hypnosis condition showed specific changes among hypnotized high susceptibles. Total Stroop errors (failures of attentional suppression) were significantly higher in hypnosis for high, but not low, susceptibles. Tellegen's experiential mental set was highest for hypnotized highs. Use of rehearsal strategy (instrumental set) decreased significantly in hypnosis but more so for highs than lows. Results suggest that "absorption" in hypnosis may be a consequence of dissociated anterior attentional control. It is proposed that dissociated control emerges from the functional disconnection of left dorsolateral prefrontal cortex and anterior cingulate cortex.

Posthypnotic amnesia for autobiographical episodes: influencing memory accessibility and quality
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The authors examined the impact of posthypnotic amnesia on the accessibility and quality of personal memories. High, medium, and low hypnotizable individuals recalled two autobiographical episodes and rated those memories. During hypnosis, subjects were given a posthypnotic amnesia suggestion that targeted one of the episodes. After hypnosis, they recalled and rated their memories of the episodes. The posthypnotic amnesia suggestion influenced the accessibility and quality of autobiographical memory for high and some medium, but not low, hypnotizable participants. The article discusses these findings in terms of investigating and understanding the impact of posthypnotic amnesia on autobiographical memory.
The behavioral and psychophysiological alterations during recall in patients with trauma disorders often resemble phenomena that are seen in hypnosis. In studies of emotional recall as well as in neuroimaging studies of hypnotic processes similar brain structures are involved: thalamus, hippocampus, amygdala, medial prefrontal cortex, anterior cingulate cortex. This paper focuses on cross-correlations in traumatic recall and hypnotic responses and reviews correlations between the involvement of brain structures in traumatic recall and processes that are involved in hypnotic responsiveness. To further improve uniformity of results of brain imaging specifically for traumatic recall studies, attention is needed for standardization of hypnotic variables, isolation of the emotional process of interest (state), and assessment of trait-related differences.

[0967]
The impact of stage hypnosis on audience members and participants
MacKillop J, Jay Lynn S, Meyer E
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Before and after a stage hypnosis performance, 67 audience members and 6 participants completed the Hypnotic Attitudes Questionnaire (HAQ), the Posthypnotic Experience Scale (PES), and several questions related to attitudes about performing in public. Audience members' beliefs about hypnosis (HAQ total and factor scores), experience ratings (PES factor scores: pleasantness, anger/irritability, anxiety), and responses to the performance-related questions changed in a positive direction after the performance. The participants in the show reported no significant pre- to postperformance changes. However, there were indications that the on stage participants exhibited generally favorable attitudes toward hypnosis and performing before they engaged in the actual performance.

[0968]
Legal outcomes for children who have been sexually abused: the impact of child abuse assessment center evaluations
Child Maltreat. 2004 Aug;9(3):263-76
Joa D, Edelson MG
Liberty House

Fifty children who were seen at a Child Abuse Assessment Center (CAAC) were matched on age and relationship to perpetrator with 51 children not evaluated at a CAAC to determine whether the groups differed in legal outcomes in cases of sexual abuse. CAAC children were significantly more likely to have cases filed rather than no-actioned, to have more overall counts charged in filed cases, to have more counts charged against biological fathers and stepfathers who were alleged perpetrators, and to have a greater number of defendants pleading or being found guilty compared to cases involving children not seen at the CAAC. There were also significantly more cases filed for 4- to 6-year-olds and children at least 12 years old if they were seen at the CAAC. The implications of the results are discussed in light of the use of CAACs.

[0969]
Increased anterior corpus callosum size associated positively with hypnotizability and the ability to control pain
Brain. 2004 Aug;127(Pt 8):1741-7. Epub 2004 Jul 01
Horton JE, Crawford HJ, Harrington G, Downs JW 3rd
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This is the first MRI study to report differences in brain structure size between low and highly hypnotizable, healthy, right-handed young adults. Participants were stringently screened for hypnotic susceptibility with two standardized scales, and then exposed to hypnotic analgesia training to control cold pressor pain. Only the highly hypnotizable subjects (HHs) who eliminated pain perception were included in the present study. These HHs, who demonstrated more effective attentional and inhibitory capabilities, had a significantly larger (P < 0.003) rostrum, a corpus callosum area involved in the allocation of attention and transfer of information between prefrontal cortices, than low hypnotizable subjects (LHs). These results provide support to the neuropsychophysiological model that HHs have more effective frontal attentional systems implementing control, monitoring performance and inhibiting unwanted stimuli from conscious awareness, than LHs.

[0970]
Cerebral activation during hypnotically induced and imagined pain
Neuroimage. 2004 Sep;23(1):392-401
Derbyshire SW, Whalley MG, Stenger VA, Oakley DA
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The continuing absence of an identifiable physical cause for disorders such as chronic low back pain, atypical facial pain, or fibromyalgia, is a source of ongoing controversy and frustration among pain physicians and researchers. Aberrant cerebral activity is widely believed to be involved in such disorders, but formal demonstration of the brain independently
generating painful experiences is lacking. Here we identify brain areas directly involved in the generation of pain using hypnotic suggestion to create an experience of pain in the absence of any noxious stimulus. In contrast with imagined pain, functional magnetic resonance imaging (fMRI) revealed significant changes during this hypnotically induced (HI) pain experience within the thalamus and anterior cingulate (ACC), insula, prefrontal, and parietal cortices. These findings compare well with the activation patterns during pain from nociceptive sources and provide the first direct experimental evidence in humans linking specific neural activity with the immediate generation of a pain experience.

[0971]
Complementary therapies for cancer-related symptoms
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Relief of cancer-related symptoms is essential in the supportive and palliative care of cancer patients. Complementary therapies such as acupuncture, mind-body techniques, and massage therapy can help when conventional treatment does not bring satisfactory relief or causes undesirable side effects. Controlled clinical trials show that acupuncture and hypnotherapy can reduce pain and nausea. Meditation, relaxation therapy, music therapy, and massage mitigate anxiety and distress. Pilot studies suggest that complementary therapies may treat xerostomia, hot flashes, and fatigue. Botanicals or dietary supplements are popular but often problematic. Concurrent use of herbal products with mainstream medical treatment should be discouraged.

[0972]
Diagnostic and therapeutic strategies in the irritable bowel syndrome
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The management of patients with irritable bowel syndrome (IBS) is a frequent, yet challenging task in both primary care and gastroenterology practice. A diagnostic strategy guided by keen clinical judgment should focus on positive symptom criteria and on the absence of alarm symptoms. In younger patients lacking alarm features, invasive testing has a low-yield. The presence of food intolerance and underlying celiac disease should be excluded. The usefulness of fecal tests such as calprotectin and lactoferrin to exclude organic bowel disease is not adequately established. In patients with moderate to severe symptoms who fail initial therapeutic trials, further tests can be performed in tertiary care settings, such as transit measurement and tests for diagnosing pelvic floor dysfunction. Treatment strategies for IBS are currently directed at the predominant symptoms. In diarrhea-predominant IBS, opioids (e.g. loperamide) and the 5-HT(3) receptor antagonist alosetron are efficacious. In constipation-predominant IBS, fiber and bulk laxatives are traditionally used, but their efficacy is variable and may worsen symptoms. The 5-HT(4) receptor agonist tegaserod is efficacious in female patients with IBS and constipation. In patients with IBS and abdominal pain, antispasmodics and antidepressants can be used, with the best evidence supporting the prescription of tricyclic antidepressants. The efficacy of psychological treatments in terms of relieving the symptoms of IBS is still uncertain. Limited evidence suggests that anti-enkephalinase agents, somatostatin analogues, alpha(2)-receptor agonists, opioid antagonists, selective serotonin reuptake inhibitors, probiotics and herbal treatments may be useful in IBS patients.

[0973]
Salient findings: extraordinary examples of tailoring the design to the question in laboratory and practice
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A summary of 3 papers of special interest to researchers and clinicians that appeared in the general scientific and medical literatures. All are robust, empirically grounded studies, however, each differs in its approach and design. These studies are exemplars of customizing design to the question asked and the opportunities afforded by setting. The first addresses delusions of alien control in the human brain; the second examines mechanisms accounting for the efficacy of hypnosis in the treatment of irritable bowel syndrome; the third is an extraordinarily clever empirically grounded N-of-1 case study tracking the behavioral treatment of a teenager with motor and vocal tics. Taken together, these three studies illustrate the variety of research designs that can be used to bring evidence to bear on important matters of theory and practice.

[0974]
Pain-Reduction Strategies in Hypnotic Context and Hypnosis: ERPs and SCRs During a Secondary Auditory Task
De Pascalis V, Bellusci A, Gallo C, Magurano MR, Chen AC
University of Rome La Sapienza Rome Italy

Pain-rating scores were obtained from 10 high, 10 medium, and 10 low hypnotizable subjects who were holding a painful cold bottle in their left hands and were exposed to pain reduction treatments while they were performing a secondary
oddball task. All subjects received suggestions of dissociative imagery and focused analgesia as cognitive strategies for pain reduction. The following measures were obtained for tone targets of the auditory oddball task: (a) reaction time; (b) P300 peak amplitude of the event-related potentials; (c) skin conductance levels and skin conductance responses. Focused analgesia produced the most pain reduction in high, but not medium or low, hypnotizable subjects who showed shorter reaction times, higher central and parietal P300 peaks, and higher skin conductance responses. These findings were discussed vis-a-vis the dissociated-control model assuming that capacity demands of hypnotic suggestion are low.

[0975]
Acceptance of medical hypnosis by oral and maxillofacial patients
Hermes D, Hakim SG, Sieg P
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Prognosis in surgical treatment of diseases of the oral and maxillofacial region under local anesthesia is quite commonly restricted by compliance by the patient. An alternative approach, medical hypnosis, has not been used in oral and maxillofacial surgery to any significant degree. As such, hypnosis treatment also depends to a great extent on the cooperation of the patient, and it would seem advisable to collect information concerning the individual motivation for accepting such a treatment option. The questionnaire consisted of 21 questions and was handed out to patients of the department. A total of 310 questionnaires were evaluated statistically, and the result shows a high level of acceptance of medical hypnosis by patients being treated surgically in the oral and maxillofacial region. The authors conclude that the effectiveness of this treatment option should be examined in clinical studies.

[0976]
A teaching model of hypnosis in psychiatric-residency training
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A stepwise hypnosis-training model for psychiatric residents is presented as used in the Netherlands. Hypnosis is presented to residents as an intervention that can be incorporated into the treatment of various types of disorders in structured, time-limited units. The model takes into account the usual reluctance and insecurity of the psychiatric resident, who is usually encountering hypnosis for the first time.

[0977]
Confirmatory factor analysis of the valencia scale on attitudes and beliefs toward hypnosis: an international study
Capafons A, Cabanas S, Espejo B, Cardena E
University of Valencia Spain

Cognitions held about hypnosis have an important impact on areas such as initial rapport and hypnotic-treatment compliance. The Valencia Scale on Attitudes and Beliefs toward Hypnosis may be the first instrument specifically geared to the Spanish-speaking population. Besides measuring these cognitions, the scale can also help evaluate the effect of clinical and experimental manipulations on people's attitudes and beliefs toward hypnosis. The article presents a confirmatory factor analysis using a sample from 5 different countries (N=2,402). Test-retest analyses were also carried out. The authors found statistical confirmation for an 8-factor model solution: automatism, help, personal control, interest, magical solution, collaboration, memory, and marginal.

[0978]
Facilitating memory with hypnosis, focused meditation, and eye closure
Wagstaff GF, Brunas-Wagstaff J, Cole J, Knapton L, Winterbottom J, Crean V, Wheatcroft J
University of Liverpool UK

Three experiments examined some features of hypnotic induction that might be useful in the development of brief memory-facilitation procedures. The first involved a hypnosis procedure designed to facilitate face identification; the second employed a brief, focused-meditation (FM) procedure, with and without eye closure, designed to facilitate memory for an emotional event. The third experiment was a check for simple motivation and expectancy effects. Limited facilitation effects were found for hypnosis, but these were accompanied by increased confidence in incorrect responses. However, eye closure and FM were effective in facilitating free recall of an event without an increase in errors. FM reduced phonemic fluency, suggesting that the effectiveness of FM was not due to simple changes in expectancy or motivation.

[0979]
Novel pharmacologic options in the treatment of neuropathic pain
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Neuropathic pain is highly prevalent in the United States, occurring in up to 4 million people. Many changes affecting the
A continuum of hypnotherapeutic interactions: from formal hypnosis to hypnotic conversation

CONCLUSIONS: Dyspnea may provide patients with a way of expressing their reactions to perceived or anticipated stress. Thus, stress reduction interventions may prove very helpful in resolving this symptom. However, in some cases associated with stressful situations, or that it reduced the chances of having to experience an uncomfortable situation. For example, a girl with dyspnea resulting from vocal cord dysfunction realized during hypnosis that she developed her symptom in order to prevent herself from talking about information that might cause discomfort were it disclosed. As soon as the patient decided that she could trust herself to handle the information appropriately, her symptom resolved.

Suggestion, hypnosis and hypnotherapy: a survey of use, knowledge and attitudes of anaesthetists
Coldrey JC, Cyna AM
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Clinical hypnosis is a skill of using words and gestures (frequently called suggestions) in particular ways to achieve specific outcomes. It is being increasingly recognised as a useful intervention for managing a range of symptoms, especially pain and anxiety. We surveyed all 317 South Australian Fellows and trainees registered with ANZCA to determine their use, knowledge of, and attitudes towards positive suggestion, hypnosis and hypnotherapy in their anaesthesia practice. The response rate was 218 anaesthetists (69%). The majority of respondents (63%) rated their level of knowledge on this topic as below average. Forty-eight per cent of respondents indicated that there was a role for hypnotherapy in clinical anaesthesia, particularly in areas seen as traditional targets for the modality, i.e. pain and anxiety states. Nearly half of the anaesthetists supported the use of hypnotherapy and positive suggestions within clinical anaesthesia. Those respondents who had experience of clinical hypnotherapy were more likely to support hypnosis teaching at undergraduate or postgraduate level when compared with those with no experience.

Hypnotherapeutic ego strengthening with male South African coronary artery bypass patients
de Klerk JE, du Plessis WF, Steyn HS, Botha M

Morbidity (i.e., elevated anxiety and depression) is a common feature of coronary artery bypass surgery (CABS) patients, pre- and postoperatively. Since hypnotherapy can possibly reduce morbidity in CABS patients, the aim of this study was to determine the feasibility of hypnotherapeutic ego strengthening (HES) to facilitate patient coping with concomitant anxiety and depression. Fifty patients were randomly assigned to a non-intervention control group (n = 25) and an experimental group (n = 25) and exposed to a pre- and postoperative HES intervention. Anxiety and depression were assessed with the Beck Depression Inventory and Profile of Mood States, administered preoperatively, at discharge, and at 6-week follow-up. Findings confirmed large practical reductions of anxiety and depression in the experimental group and were maintained at follow-up, while a trend towards increased depression levels occurred in the control group. Although not generalizable, results suggest broadened applications of hypnotherapy with patients in cardiac centers.

Stressors associated with dyspnea in childhood: patients’ insights and a case report
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OBJECTIVE: To highlight the concept that stress can be associated with dyspnea in children. METHODS: A chart review identified 22 patients (age range, 9-17 years) referred to a pediatric pulmonologist, who were offered instruction in self-hypnosis for treatment of dyspnea that persisted despite medical therapy. Patients were offered the opportunity to use hypnosis to gain insight into the causes of their dyspnea. RESULTS: The dyspnea resolved in 18 of the 22 patients within 1 month of instruction in self-hypnosis for relaxation and symptom reduction. Eight of the 22 patients (age range, 11-16 years) chose to use hypnosis for insight. Using automatic word processing, they explained that their dyspnea was associated with stressful situations, or that it reduced the chances of having to experience an uncomfortable situation. For example, a girl with dyspnea resulting from vocal cord dysfunction realized during hypnosis that she developed her symptom in order to prevent herself from talking about information that might cause discomfort were it disclosed. As soon as the patient decided that she could trust herself to handle the information appropriately, her symptom resolved. CONCLUSIONS: Dyspnea may provide patients with a way of expressing their reactions to perceived or anticipated stress. Thus, stress reduction interventions may prove very helpful in resolving this symptom. However, in some cases gaining an insight into the potential cause of the dyspnea may increase the effectiveness of therapy.

[0980]
[0981]
[0982]
[0983]
Hypnotherapeutic interactions can be mapped on a continuum from formal hypnosis to hypnotic conversation. Unlike the structured forms of formal hypnosis, hypnotic conversation relies upon utilizing the client’s responses, both verbal and non-verbal, to facilitate therapeutic process. In this paper, we illustrate this continuum with a series of anecdotal clinical examples starting with formal hypnosis and moving incrementally towards hypnotic conversation. Finally, we offer an example similar in appearance to formal hypnosis, but now described in the context of hypnotic conversation. We are neither putting forth a theory nor offering a new perspective for those who research hypnosis as a phenomenon. Rather, these ideas and metaphors serve to broaden the framework of what constitutes hypnotic interaction so as to evoke new opportunities for increasing therapeutic efficiency and efficacy.

[0984]
General practitioners believe that hypnotherapy could be a useful treatment for irritable bowel syndrome in primary care
Cox S, de Lusignan S, Chan T
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BACKGROUND: Irritable bowel syndrome is a common condition in general practice. It occurs in 10 to 20% of the population, but less than half seek medical assistance with the complaint. METHODS: A questionnaire was sent to the 406 GPs listed on the West Sussex Health Authority Medical List to investigate their views of this condition and whether they felt hypnotherapy had a place in its management RESULTS: 38% of general practitioners responded. The achieved sample shared the characteristics of target sample. Nearly half thought that irritable bowel syndrome (IBS) was a “nervous complaint” and used a combination of “the placebo effect of personal care,” therapeutic, and dietary advice. There is considerable divergence in the perceived effectiveness of current approaches. Over 70% thought that hypnotherapy may have a role in the management of patients with IBS; though the majority (68%) felt that this should not be offered by general practitioners. 84% felt that this should be offered by a qualified hypnotherapist, with 40% feeling that this should be offered outside the health service. CONCLUSIONS: General practitioners vary in their perceptions of what constitutes effective therapy in IBS. They are willing to consider referral to a qualified hypnotherapist.

[0985]
Kinematic strategies for lowering of upper limbs during suggestions of heaviness: a real-simulator design
Exp Brain Res. 2004 Oct 21; [Epub ahead of print]
Santarcangelo EL, Cavallaro E, Mazzoleni S, Marano E, Ghelarducci B, Dario P, Micera S, Sebastiani L
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The aim of the experiment was to study possible differences between the kinematic strategies for the "involuntary" arm lowering of hypnotized highly susceptible subjects (H-Highs) and for the voluntary movement of non-hypnotizable simulators (Sims) during suggestions of arm heaviness (Part I). In addition, a comparison between awake susceptible subjects (W-Highs) and H-Highs was carried out to clarify the specific role of the hypnotic state and hypnotizability (Part II). Subjects' absorption and attentional/imagery capabilities were evaluated through neuropsychological tests. Their arm movements were monitored three-dimensionally at hand, wrist and elbow level through a Polhemus Fastrack system. A final interview collected self-reports concerning the perception of movement involuntariness. Neuropsychological tests showed better "absorption" and imagery capabilities in Highs. In the interview, H-Highs perceived a higher involvement in the task and greater involuntariness and difficulties in contrasting the arm lowering than the Sims. Kinematic analysis showed significant differences between H-Highs and Sims for arm displacements along the vertical axis and on the horizontal plane. In fact, the former lowered the left arm earlier and to a greater degree than the right arm; on the horizontal plane, a forearm flexion was observed for H-Highs on the right side. On comparing W-Highs and H-Highs, hypnosis appeared to magnify the waking motor strategies, but also to induce specific changes, mainly concerning the horizontal plane. These results cannot be interpreted on the basis of "role playing" and socio-cognitive factors. They are believed to be due to a balance between the effectiveness of the frontal executive control towards the selection of behaviors and movement automaticity, which is in line with the neo-dissociation theory of hypnosis.

[0986]
Applied psychophysiology, clinical biofeedback, and rehabilitation neuropsychology: a case study--mild traumatic brain injury and post-traumatic stress disorder
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This article presents a case study of a 39-year-old European American married woman with a history of child and adolescent incest, marital rape, and physical abuse from her husband for more than 10 years. She was referred to a pain clinic for treatment of headaches and Tourette's syndrome. The client was evaluated with the Ackerman-Banks Neuropsychological Rehabilitation Battery to identify neuropsychological strengths and weaknesses. The Vulnerability to Stress Audit was used to identify life events that were positively and negatively influencing her life. The client was treated for mild traumatic brain injury, post-traumatic stress disorder, cognitive difficulties, impulsivity, confabulation, low frustration tolerance, and inability to evaluate and make decisions about socially appropriate behaviors. Treatment involved traditional psychotherapy, hypnosis, cognitive rehabilitation, biofeedback training, electromyography, finger
temperature, and blood pressure.

[0987]
Perception and modulation of pain in waking and hypnosis: functional significance of phase-ordered gamma oscillations
Pain. 2004 Nov;112(1-2):27-36
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Somatosensory event-related phase-ordered gamma oscillations (40-Hz) to electric painful standard stimuli under an odd-ball paradigm were analyzed in 13 high, 13 medium, and 12 low hypnotizable subjects during waking, hypnosis, and post-hypnosis conditions. During these conditions, subjects received a suggestion of Focused Analgesia to produce an obstructive hallucination of stimulus perception; a No-Analgesia treatment served as a control. After hypnosis, a post-hypnotic suggestion was given to draw waking subjects into a deep hypnosis with opened eyes. High hypnotizables, compared to medium and low ones, experienced significant pain and distress reductions for Focused Analgesia during hypnosis and, to a greater extent, during post-hypnosis condition. Correlational analysis of EEG sweeps of each individual revealed brief intervals of phase ordering of gamma patterns, preceding and following stimulus onset, lasting approximately six periods. High and medium hypnotizables showed significant reductions in phase-ordered gamma patterns for Focused Analgesia during hypnosis and post-hypnosis conditions; this effect was found, however, more pronounced in high hypnotizables. Phase-ordered gamma scores over central scalp site predicted subject pain ratings across Waking-Pain and Waking-Analgesia conditions, while phase-ordered gamma scores over frontal scalp site predicted pain ratings during post-hypnosis analgesia condition. During waking conditions, this relationship was present in high, low and medium hypnotizables and was independent of stimulus intensity measures. This relationship was unchanged by hypnosis induction in the low hypnotizable subjects, but not present in the high and medium ones during hypnosis, suggesting that hypnosis interferes with phase-ordered gamma and pain relationship.

[0988]
Critique of claims of improved visual acuity after hypnotic suggestion
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Psychological approaches to improving vision present an enticing alternative to invasive procedures and corrective lenses; hypnotic suggestion is one such technique. During the past 60 years, multiple studies have documented improvements in the vision of myopic individuals after hypnotic interventions. Given the increasing interest in behavioral and alternative approaches, we have reviewed the pertinent studies to evaluate their validity. We delineate various shortcomings in these reports, including potential methodological caveats, problems with experimental controls, and controversial data interpretation. Overall, the data do not seem to support hypnosis as a viable option for significant long-term improvement of myopia. However, hypnosis can increase one’s subjective feeling of enhanced visual acuity by affecting higher cognitive functions, such as attention, memorization, and perceptual learning, which could influence performance on visual tasks.

[0989]
Alternative therapies for tobacco dependence
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For both hypnotherapy and acupuncture, the evidence of any effect is anecdotal. There are insufficient rigorous studies that are homogeneous in design or results to allow a reliable conclusion on whether or not these therapies are effective. At best, individual smokers who choose one of these interventions for preference should not be discouraged provided that they are informed about the state of the evidence.

[0990]
Update on nonpharmacologic approaches to relieve labor pain and prevent suffering
J Midwifery Womens Health. 2004 Nov-Dec;49(6):489-504
Simkin P, Bolding A

The control of labor pain and prevention of suffering are major concerns of clinicians and their clients. Nonpharmacologic approaches toward these goals are consistent with midwifery management and the choices of many women. We undertook a literature search of scientific articles cataloged in CINAHL, PUBMED, the Cochrane Library, and AMED databases relating to the effectiveness of 13 non-pharmacologic methods used to relieve pain and reduce suffering in labor. Suffering, which is different from pain, is not an outcome that is usually measured after childbirth. We assumed that suffering is unlikely if indicators of satisfaction were positive after childbirth. Adequate evidence of benefit in reducing pain exists for continuous labor support, baths, intradermal water blocks, and maternal movement and positioning. Acupuncture, massage, transcutaneous electrical nerve stimulation, and hypnosis are promising, but they require further

Professional Hypnosis Databank - page 240 of 889 - by Alberto Torelli, hypnotologist
study. The effectiveness of childbirth education, relaxation and breathing, heat and cold, acupressure, hypnosis, aromatherapy, music, and audioanalgesia are either inadequately studied or findings are too variable to draw conclusions on effectiveness. All the methods studied had evidence of widespread satisfaction among a majority of users.

[0991]
Use of complementary and alternative medicine among United States adults: the influences of personality, coping strategies, and social support
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Background. Although patterns of utilization of complementary and alternative medicine (CAM) in the community have begun to be described, few studies have addressed the relationships between dispositional psychological factors and the use of CAM. The aim of this study was to examine the associations between CAM use and personality, coping strategies, and perceived social support in a representative sample of adults in the United States. Methods. Data were drawn from the Midlife Development in the United States Survey (MIDUS), a representative sample of 3,032 adults aged 25-74 in the US population. We analyzed use of acupuncture, biofeedback, chiropractic, energy healing, exercise/movement therapy, herbal medicine, high-dose megavitamins, homeopathy, hypnosis, imagery techniques, massage, prayer/spiritual practice, relaxation/mediation, and special diet within the last year. Multiple logistic regression analyses were used to evaluate the association of personality, dispositional coping strategies (primary and secondary control), and perceived social support and strain with CAM use, controlling for sociodemographic factors, medical care access, and physical and mental disorders. Results. Openness was positively associated with the use of all types of CAM except manipulative body-based methods. Extroversion was inversely correlated with the use of mind-body therapies. Primary control was inversely and secondary control directly correlated with the use of CAM. Perceived friend support was positively associated with the use of mind-body therapies, manipulative body-based methods, and alternative medical systems. Perceived partner strain was positively associated with the use of biologically based therapies, and family strain increased the odds of manipulative body-based methods. Conclusions. This study is the first to document a significant association between specific domains of personality, coping strategies, and social support, and the use of CAM among adults in the general population. Understanding the relationships between psychological factors and CAM use may help researchers and health care providers to address patients' needs more effectively and to achieve better adherence to treatment recommendations.

[0992]
Clinical hypnosis modulates functional magnetic resonance imaging signal intensities and pain perception in a thermal stimulation paradigm
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OBJECTIVE: This study was designed to describe regional changes in blood oxygenation level dependent signals in functional magnetic resonance images (fMRI) elicited by thermal pain in hypnotized subjects. These signals approximately identify the neural correlates of the applied stimulation to identify neuroanatomic structures involved in the putative effects of clinical hypnosis on pain perception. METHODS: After determination of the heat pain threshold of 12 healthy volunteers, fMRI scans were performed at 1.5 Tesla by using echoplanar imaging technique during repeated painful heat stimuli. Activation of brain regions in response to thermal pain during hypnosis (using a fixation and command technique of hypnosis) was compared with responses without hypnosis. RESULTS: With hypnosis, less activation in the right anterior cingulate gyrus, the middle cingulate gyrus, precuneus, and the visual cortex was found. An increased activation was seen in the anterior basal ganglia and the left anterior cingulate cortex. There was no difference in activation within the right anterior cingulate gyrus in our fMRI studies. No activation was seen within the brainstem and thalamus under either condition. CONCLUSION: Our observations indicate that clinical hypnosis may prevent nociceptive inputs from reaching the higher cortical structures responsible for pain perception. Whether the effects of hypnosis can be explained by increased activation of the left anterior cingulate cortex and the basal ganglia as part of a possible inhibitory pathway on pain perception remains speculative given the limitations of our study design.

[0993]
Does dissociation offer a useful explanation for psychopathology?
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BACKGROUND: Dissociation is often conceptualised as an altered state of consciousness, a trance-like state in which normal barriers between conscious and unconscious memories, desires and beliefs break down and other amnestic barriers emerge. This review explores whether it is likely that there is a neurophysiology of pathological dissociative processes that will elucidate management. METHOD: A critical reading of current research, sourced through Medline and Psychinfo searches from 1990 to 2002, using subject headings: dissociative disorders, hypnosis and stress disorder (post-traumatic), as well as keywords: dissociation, hypnosis and trance. RESULTS: Current knowledge does not support the notion of dissociation as a discrete brain state or process. CONCLUSIONS: Psychiatric and neurophysiological
research and theory development are better directed towards individual components that contribute to dissociative experience. Copyright (c) 2004 S. Karger AG, Basel.

[0994] [Integration of psychodynamic imaginative trauma therapy in a modified psychoanalytic concept of an inpatient psychotherapy unit]
Psychiatr Prax. 2004 Nov;31 Suppl 1:S88-90
[Article in German]
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Results of latest neurobiological trauma-research suggest that many psychic disorders like personality disorders with complex traumatisation in patient's history and co-morbidities should better be treated as posttraumatic disorders. This is important for any therapy planning: should a modified psychoanalytic approach (like TFP by Kernberg) with emphasis on interpreting the transference-relation be preferred for patients with Borderline personality disorder or - diagnosing the same patients as complex posttraumatic stress disorder - a phase oriented trauma-specific approach. As such PITT combines psychodynamic understanding with hypnotherapeutic and imaginative methods. Crucial points are an active and supporting therapeutic relation, safety and reduction of stress, focus on all individual resources and use of imaginative ways for stabilization and later trauma-confrontation work.

[0995] Functional dyspepsia
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PURPOSE OF REVIEW: Functional dyspepsia is a common disorder, most of the time of unknown etiology and with variable pathophysiologic therapy. Therapy has been and still is largely empirical. Data from recent studies provide new clues for targeted therapy based on knowledge of etiology and pathophysiologic mechanisms. RECENT FINDINGS: The role of Helicobacter pylori gastritis in the pathogenesis of functional dyspepsia has been defined: It is causative in a small minority of patients. Associations between (groups of) symptoms and pathophysiologic mechanisms have been established, but there is much overlap and interaction, and their relevance for the individual patient is uncertain, especially because of the variability of symptoms over time. Little progress has been made in pharmacotherapy of functional dyspepsia, but exploratory studies show interesting new options. Hypnotherapy seems a promising alternative. SUMMARY: For the time being, diagnostic strategies for patients with suspected functional dyspepsia continue to be directed at excluding other disorders, in particular peptic ulcer disease and gastroesophageal reflux disease. In the presence of reflux symptoms, acid inhibitory therapy, preferably with a proton pump inhibitor, is a rational choice; otherwise, therapy is still empirical. Hypnotherapy is an option that could be seriously considered.

[0996] Breech presentation: increasing maternal choice
Complement Ther Nurs Midwifery. 2004 Nov;10(4):233-8
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Pregnant women with a third trimester breech presentation are almost invariably offered Caesarean section as the mode of delivery of first choice, especially when external version has failed to turn the fetus to cephalic. However, increasingly women are resorting to alternatives, to avoid either operative delivery or manipulative intervention in late pregnancy. This paper reviews some of the options for women with breech presentation, focusing especially on integrating these options into conventional maternity care.

[0997] [Laparoscopy under local anaesthesia and hypnoanaesthesia about 35 cholecystectomies and 15 inguinal hemia repair]
[Article in French]
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OBJECTIVE: To present hypnosedation and the feasibility of this technique performed for laparoscopic procedure. STUDY DESIGN: Retrospective and descriptive study of feasibility. PATIENTS AND METHODS: Hypnosis can significantly reduce intraoperative requirements of intravenous sedation for surgery under local anaesthesia. Modifications of surgical procedure: laparoscopic surgery under local anaesthesia and hypnosis is performed using a subcutaneous lifting of anterior abdominal wall. Insufflation is only used to push out smoke. If patient or surgical uncomfort happens, moral contract with patient includes convert to general anaesthesia. RESULTS: We performed 35 cholecystectomies; 13 needed convert to general anaesthesia, mainly for peritoneal pain induced by CO(2) insufflation; 22 procedures were completed with patients' satisfaction. Upon 15-hemia repairs, only one patient needed convert to general anaesthesia, for dissection difficulty. CONCLUSION: Probably hypnosis can't be extent to intraperitoneal laparoscopic procedures. On the
other hand interest of hypnosis performed for extraperitoneal laparoscopic hernia repair must be explored.

A phenomenological and perceptual research methodology for understanding hypnotic experiencing
Psychol Rep. 2004 Dec;95(3 Pt 1):887-904
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Phenomenology and perceptual psychology opens up the essential meanings of hypnosis by presenting a qualitative method as an alternative to the current predominant quantitative method in the study of hypnosis. Scales that measure susceptibility from behavioral and cognitive aspects abound in the hypnosis literature, but understanding the structure of hypnotic experiencing is yet to come. A new qualitative approach to researching hypnotic experiencing by combining aspects of phenomenological research as in work of Giorgi, Moustakas, and Wertz, familiarity with Husserl's philosophy, and a perceptual psychological research method (cf. work by Combs, Richards, & Richards and by Wasiczko). The author utilized this combined methodology to formulate the theory of Perceptually Oriented Hypnosis. This methodology enables the therapist or professional and patient or client to share benefits from the effects of their hypnotic experiencing in its intersubjective sense. This method can be applied in numerous life situations such as teaching and therapy in addition to the experimental situation.

Chronic neuropathic pain: issues in patient education
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Chronic neuropathic pain is difficult to diagnose and treat. For the patient, multiple aspects of his or her life may be altered, including physical, emotional, and spiritual health, as well as the ability to work, and family and social relationships. Successful treatment plans require more than just pharmacotherapy. Patients often need to receive a lot of information about complex regimens related to both pharmacologic and nonpharmacologic strategies. Additionally, patients with neuropathic pain need nursing support and guidance to help them master the self-management and coping skills required to minimize pain flares, while optimizing mood and functioning. A number of specific strategies are available based on the cognitive-behavioral model. These include the ability to interpret changes in pain in a helpful way, engagement in health promoting behaviors (including diet and exercise), and the development of an action plan for coping with pain exacerbations. A central element in this approach is to help patients become experts in understanding and managing their pain, then addressing the toll it has taken on their emotions, daily activities, and important relationships. Self-initiated techniques, such as relaxation, imagery, and hypnosis, can also be used to alter the subjective experience of pain. This article presents an overview of patient education approaches useful in the management of chronic pain.

The terms berserk and going berserk reflect the violent and ferocious warriors and ruthless murderers of Scandinavia and Northern Europe, active from before the Viking age until the advent of Christianity. The main source on the phenomenon is the Old Norse literature, mainly the Icelandic sagas with their sober descriptive accounts of the berserks and their behaviour. The berserks are frequently depicted as having had antisocial character traits; often as bullies who evince, by way of autosuggestion, an enormous and uncontrollable rage, slaughtering and killing. They felt no pain and hardly took in the environment they lived in. The fits were followed by exhaustion or sleep. Although the phenomenon waned completely by the advent of Christianity, it can hardly be discarded as just myth or folklore. Most likely it could be explained as a kind of dissociative reaction. The widespread idea of toadstool as causative agent is at best debatable. The conceptions of pre-Christian heathenism about the human mind are of importance to the understanding of suggestibility and capacity for trance reaction. The condition is considered a culture-bound syndrome. Comparisons are drawn to lycanthropy (werewolf madness), frequently considered an identical phenomenon. Clinically (i.e. historically) it was mainly something different, namely psychotic conditions.

Use of complementary and alternative medicine among American women
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INTRODUCTION AND BACKGROUND: Although women are increasingly using complementary and alternative (CAM)
therapies, a national profile characterizing women who use CAM has yet to be described. The purpose of this study is to provide prevalence estimates of recent CAM use among American women and to examine sociodemographic and other characteristics associated with use. METHODS: Data from the 1999 National Health Interview Survey are used for the analysis. Three operational definitions of recent CAM use are employed (any CAM, type-specific, and domain-specific use). All proportions and prevalence estimates are weighted and standard errors are adjusted to account for complex sample design; weighted logistic regression (with coefficient variance adjustment) is also used. RESULTS: Overall, 33.5% of American women used CAM in the past 12 months. Spiritual healing/prayer and herbal medicine are the most commonly used, and hypnosis, biofeedback, and energy healing are the least common. Multivariate results show that women who are older, have more education, poorer health, or live in the west or midwest (versus south) are more likely to use CAM. Compared to whites, blacks, Hispanics, and Asians are less likely to use CAM. Foreign-born women, those with lower income, or who live in the Northeast are also less likely to use CAM. Insurance status is not independently associated with CAM use. CONCLUSIONS AND DISCUSSION: This study provides one of the first comprehensive investigations of CAM use among American women. Future research examining the determinants of CAM use, incorporating attitudinal and health conditions, as well as clinical efficacy, effectiveness, and health outcome studies of specific CAM therapies are warranted.

[1002] Effect of self-hypnosis on hay Fever symptoms - a randomised controlled intervention study
Psychother Psychosom. 2005;74(3):165-72
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BACKGROUND: Many people suffer from hay fever symptoms. Hypnosis has proved to be a useful adjunct in the treatment of conditions where allergic phenomena have an important role. METHODS: Randomised parallel group study over an observation period of two consecutive pollen seasons. Outcome data include nasal flow under hypnosis, pollinosis symptoms from diaries and retrospective assessments, restrictions in well-being and use of anti-allergic medication. We investigated 79 patients with a mean age of 34 years (range 19-54 years; 41 males), with moderate to severe allergic rhinitis to grass or birch pollen of at least 2 years duration and mild allergic asthma. The intervention consisted of teaching self-hypnosis during a mean of 2.4 sessions (SD 1.7; range 2-5 sessions) and continuation of standard anti-allergic pharmacological treatment. RESULTS: Of 79 randomised patients, 66 completed one, and 52 completed two seasons. Retrospective VAS scores yielded significant improvements in year 1 in patients who had learned self-hypnosis: pollinosis symptoms -29.2 (VAS score, range 0-100; SD 25.4; p &lt; 0.001), restriction of well-being -26.2 (VAS score, range 0-100; SD 28.7; p &lt; 0.001). In year 2, the control group improved significantly having learned self-hypnosis as well: pollinosis symptoms -24.8 (SD 29.1; p &lt; 0.001), restriction of well-being -23.7 (SD 30.0; p &lt; 0.001). Daily self-reports of subjects who learnt self-hypnosis do not show a significant improvement. The hazard ratio of reaching a critical flow of 70% in nasal provocation tests was 0.333 (95% CI 0.157-0.741) after having learnt and applied self-hypnosis.

[1003] Use of complementary and alternative medicine among United States adults: the influences of personality, coping strategies, and social support
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BACKGROUND: Although patterns of utilization of complementary and alternative medicine (CAM) in the community have begun to be described, few studies have addressed the relationships between dispositional psychological factors and the use of CAM. The aim of this study was to examine the associations between CAM use and personality, coping strategies, and perceived social support in a representative sample of adults in the United States. METHODS: Data were drawn from the Midlife Development in the United States Survey (MIDUS), a representative sample of 3,032 adults aged 25-74 in the US population. We analyzed use of acupuncture, biofeedback, chiropractic, energy healing, exercise/movement therapy, herbal medicine, high-dose megavitamins, homeopathy, hypnosis, imagery techniques, massage, prayer/spiritual practice, relaxation/mediation, and special diet within the last year. Multiple logistic regression analyses were used to evaluate the association of personality, dispositional coping strategies (primary and secondary control), and perceived social support and strain with CAM use, controlling for sociodemographic factors, medical care access, and physical and mental disorders. RESULTS: Openness was positively associated with the use of all types of CAM except manipulative body-based methods. Extroversion was inversely correlated with the use of mind-body therapies. Primary control was inversely and secondary control directly correlated with the use of CAM. Perceived friend support was positively associated with the use of mind-body therapies, manipulative body-based methods, and alternative medical systems. Perceived partner strain was positively associated with the use of biologically based therapies, and family strain increased the odds of manipulative body-based methods. CONCLUSIONS: This study is the first to document a significant association between specific domains of personality, coping strategies, and social support, and the use of CAM among adults in the general population. Understanding the relationships between psychological factors and CAM use may help researchers and health care providers to address patients' needs more effectively and to achieve better adherence to treatment recommendations.

[1004]
OBJECTIVE: Voiding cystourethrography (VCUG) is a commonly performed radiologic procedure in children that can be both painful and frightening. Given the distress that some children experience during the VCUG and the need for children to be alert and cooperative during the procedure, finding a psychological intervention that helps children to manage anxiety, distress, and pain is clearly desirable. This study was designed to examine whether relaxation and analgesia facilitated with hypnosis could reduce distress and procedure time for children who undergo this procedure. METHODS: Forty-four children who were scheduled for an upcoming VCUG were randomized to receive hypnosis (n = 21) or routine care (n = 23) while undergoing the procedure. The sample consisted of 29 (66%) girls and 15 (34%) boys with a mean age of 7.6 years (SD: 2.5; range: 4-15 years). Ethnic/racial backgrounds were 72.7% white, 18.2% Asian, 4.5% Latino, 2.3% black, and 2.3% Filipino. The mean number of previous VCUGs was 2.95 (SD: 2.51; mode: 2; range: 1-15). Potential participants were identified through computerized hospital records of upcoming VCUGs. Parents were contacted by telephone and invited to participate if their child was eligible. To be eligible for the study, the child must have undergone at least 1 previous VCUG, been at least 4 years of age at that time, and experienced distress during that procedure, and both the child and the participating parent had to be English speaking. Each eligible child and parent met with the research assistant (RA) before the day of the scheduled procedure for an initial assessment. Children were queried regarding the degree of crying, fear, and pain that they had experienced during their most recent VCUG. Parents completed a series of parallel questions. Immediately after this assessment, those who were randomized to the hypnosis condition were given a 1-hour training session in self-hypnotic visual imagery by a trained therapist. Parents and children were instructed to practice using the imaginal self-hypnosis procedure several times a day in preparation for the upcoming procedure. The therapist was also present during the procedure to conduct similar exercises with the child. The majority (83%) of those who were randomized to the routine care control group chose to participate in a hospital-provided recreation therapy program (offered as part of routine care). The program includes demonstration of the procedure with dolls, relaxation and breath work training, and assistance during the procedure. On the day of the VCUG, the RA met the family at the clinic before the procedure, and both the child and the parent rated the child's present level of fearfulness. During the procedure, the RA recorded observational ratings of the child's emotional tone and behavior and timed the overall procedure and its phases. Immediately after the VCUG, the child was asked how much crying, fear, and pain he or she had experienced during the procedure; the parent rated the child's experience on the same dimensions and also how traumatic the procedure had been (both generally and compared with their previous one), and the medical staff rated the degree of procedural difficulty. Outcomes included child reports of distress during the procedure, parent reports of how traumatic the present VCUG was compared with the previous one, observer ratings of distress during the procedure, medical staff reports of the difficulty of the procedure overall, and total procedural time. RESULTS: Results indicate significant benefits for the hypnosis group compared with the routine care group in the following 4 areas: (1) parents of children in the hypnosis group compared with those in the routine care group reported that the procedure was significantly less traumatic for their children compared with their previous VCUG procedure; (2) observational ratings of typical distress levels during the procedure were significantly lower for children in the hypnosis condition compared with those in the routine care condition; (3) medical staff reported a significant difference between groups in the overall difficulty of conducting the procedure, with less difficulty reported for the hypnosis group; and (4) total procedural time was significantly shorter-by almost 14 minutes—for the hypnosis group compared with the routine care group. Moderate to large effect sizes were obtained on each of these 4 outcomes. CONCLUSIONS: Hypnotic relaxation may provide a systematic method for improving the overall medical care of children with urinary tract abnormalities and may be beneficial for children who undergo other invasive medical procedures. Because the VCUG is an essential part of the evaluation of urinary tract infections and vesicoureteral reflux in children, lower distress during the procedure may improve patient and family compliance with initial as well as follow-up evaluations. These findings augment the accumulating literature demonstrating the benefits of using hypnosis to reduce distress in the pediatric setting. The present findings are noteworthy in that this study was a controlled, randomized trial conducted in a naturalistic medical setting. In this context, we achieved a convergence of subjective and objective outcomes with moderate to large effect sizes, including those that may have an impact on patient care and procedure cost, that were consistently supportive of the beneficial effects of hypnosis—a noninvasive intervention with minimal risk. The findings, therefore, have immediate implications for pediatric care. Limitations of this study include the lack of participant and staff blindness to the child's condition assignment, which could have introduced bias into reports. However, the objective procedural time differences between groups were consistent with the other, more subjective outcome findings. The sample was also small and primarily white in ethnic/racial makeup, which may have restricted our ability to detect some differences and may limit the generalizability of findings to more representative samples. In addition, the sample comprised children who had already undergone at least 1 VCUG during which they had had difficulty. Consequently, additional research is needed to determine whether hypnosis would be helpful to those who are undergoing their first VCUG. Additional limitations, clinical observations, and directions for future research are also discussed.

[1005]
The art of alleviating pain in greek mythology
Neurosurgery. 2005 Jan;56(1):178-85; discussion 185-6
Ture H, Ture U, Gogus FY, Valavanis A, Yasargil MG.
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We reviewed many of the essential Greek myths to identify the methods used at that time to relieve the pain of both illness and surgery, and we discovered many pioneering methods. Both gods and demigods implemented these methods to ease pain, to conduct surgery, and, on occasion, to kill mythological beings. The myths describe the three most common components of anesthesia: hypnosis, amnesia, and (an)algesia. Drugs and music-aided hypnosis were two of the most common methods used to treat emotional and surgical pain. This article identifies highlights in the development of concepts to treat pain in Greek mythology. The examples found in the Greek myths remind us of the historical significance of pain treatment.

[1006] Jaw clenching modulates sensory perception in high- but not in low-hypnotizable subjects
J Orofac Pain. 2005 Winter;19(1):76-81
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AIMS: To investigate the effect of jaw clenching on the sensations evoked at segmental and nonsegmental levels by painful and nonpainful stimuli and in relation to hypnotic susceptibility. METHODS: The effect of jaw clenching on painful and nonpainful sensations on the face and leg was studied in high-hypnotizable (HH) and low-hypnotizable (LH) subjects. Sixteen healthy subjects were selected and assigned to either the HH group (n = 8) or the LH group (n = 8). Painful and nonpainful electrical stimuli were delivered in random order to the face and leg. The subjects rated the intensity of the evoked sensation on a visual analog scale (VAS) while clenching or not clenching their jaw. RESULTS: Jaw clenching significantly attenuated the VAS sensory ratings of all the subjects under various conditions (F(1-31) = 6.15, P &lt; .02). When the HH and LH subjects were analyzed separately, jaw clenching was found to be effective in reducing sensations only in the HH subjects (F(1-15) = 8.30, P = .01), only those evoked in the face (segmental level), and only those evoked by nonpainful stimuli (tied Z = 2.52, tied P &lt; .02). CONCLUSION: Sensory modulation produced by jaw clenching may be related to hypnotic susceptibility. On the whole, jaw clenching had a weak, local effect in modulating sensation, in contrast to its known widespread effect on motor behavior.

[1007] The vulvodynia guideline
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OBJECTIVE: To provide a review of the literature and make known expert opinion regarding the treatment of vulvodynia. MATERIALS AND METHODS: Experts reviewed the existing literature to provide new definitions for vulvar pain and to describe treatments for this condition. RESULTS: Vulvodynia has been redefined by the International Society for the Study of Vulvovaginal Disease as vulvar discomfort in the absence of gross anatomic or neurologic findings. Classification is based further on whether the pain is generalized or localized and whether it is provoked, unprovoked, or both. Treatments described include general vulvar care, topical medications, oral medications, injectables, biofeedback and physical therapy, dietary changes with supplementations, acupuncture, hypnotherapy, and surgery. No one treatment is clearly the best for an individual patient. CONCLUSIONS: Vulvodynia has many possible treatments, but very few controlled trials have been performed to verify efficacy of these treatments. Provided are guidelines based largely on expert opinion to assist the patient and practitioner in dealing with this condition.

[1008] Sexual abuse of boys
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TOPIC: Sexual abuse in childhood can disable self-esteem, self-concept, relationships, and ability to trust. It can also leave psychological trauma that compromises a boy's confidence in adults. While some boys who willingly participate may adjust to sexual abuse, many others face complications, such as reduced quality of life, impaired social relationships, less than optimal daily functioning, and self-destructive behavior. These problems can respond to treatment if detected. PURPOSE: In this paper, we examine the prevalence, characteristics, psychological consequences, treatment, and coping patterns of boys who have been sexually abused and their failure to disclose abuse unless asked during a therapeutic encounter. Nurses have a responsibility to detect the clues to sexual abuse, diagnose the psychological consequences, and advocate for protection and treatment. SOURCES USED: Computerized literature search of the Medline and PsychInfo literature and books on sexual abuse of boys. CONCLUSIONS: Psychological responses to abuse such as anxiety, denial, self-hypnosis, dissociation, and self-mutilation are common. Coping strategies may include being the angry avenger, the passive victim, rescuer, daredevil, or conformist. Sexual abuse may precipitate runaway behavior, chronic use of sick days, poor school or job performance, costly medical, emergency and or mental health visits. In worst cases, the boy may decide that life is not worth living and plan suicide. The nurse has a key role to play in screening, assessing, and treating sexual abuse children.
Gassner's exorcism—not Mesmer's magnetism—is the real predecessor of modern hypnosis
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Usually, Mesmer is considered to be the real predecessor of modern hypnosis and, consequently, of psychotherapy. The author questions this commonly accepted view and asserts that Gassner's therapeutic approach was much more elaborate and psychologically oriented than Mesmer's. In light of the present understanding of psychotherapeutic and hypnotherapeutic techniques, Gassner's methods can be characterized as a special kind of hypnotic training in self-control. The author describes Gassner's kind of exorcism and its similarities to hypnotherapy and goes into personal and sociocultural factors relevant to the debate surrounding Gassner's theory and procedure. It was the most heated dispute of the Enlightenment that took place in Munich around 1775 with Mesmer as an important part of it. The author discusses whether Father Gassner, rather than Mesmer, is the real predecessor of modern hypnosis.

Reality monitoring in hypnosis: a real-simulating analysis
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The extent to which hypnotic suggestions are perceived as real is central to understanding hypnotic response. This study indexed the reality attributed to hypnotic suggestion through subtle projection of a visual image during simultaneous suggestion for a visual hallucination that resembled the projected image. Twenty real hypnotized and 20 simulating nonhypnotized participants were administered a hypnotic induction and given a suggestion to hallucinate a shape, and then the projected image was introduced. Following the hypnosis session, an Experiential Analysis Technique was employed to index experiential responses. Real, but not simulating, participants made comparable reality ratings when the projected image was absent and present. Reals, but not simulators, also reported more effort in maintaining belief in the suggestion when the projection was absent. These findings suggest that the reality attributed to a hypnotic suggestion cannot be attributed to demand characteristics.

Hypnotic emotional numbing: a study of implicit emotion
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Twenty high hypnotizable and 20 low hypnotizable participants were administered a hypnotic induction and then presented with emotionally distressing and neutral visual images. Half the participants were administered a suggestion for emotional numbing. Participants were then asked to rate the valence of neutral words that were preceded by subliminal presentations of the negative and neutral images. Whereas highs who received the emotional-numbing suggestion reported comparable ratings of the words following presentations of the negative and neutral images, highs in the control condition and lows in both conditions reported more positive ratings of words that were preceded by the negative stimuli. These findings suggest that the subliminally presented negative stimuli led participants to rate the subsequent neutral words more positively. In contrast, hypnotic emotional numbing diminished this pattern in highs. These results are discussed in terms of the influence of hypnotic emotional numbing at a preattentive stage of processing.

The phenomenology of deep hypnosis: quiescent and physically active
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To study the phenomenology of hypnotic virtuosos, the author employed a 2 (hypnosis vs. control) x 3 (quiescent, pedaling a stationary bike, having a motor pedal the bike) within-subjects design with quantitative and qualitative measures. In a "neutral hypnosis" context with the only suggestion being to go as deeply into hypnosis as possible, participants reported alterations in body image, time sense, perception and meaning, sense of being in an altered state of awareness, affect, attention, and imagery. They also mentioned less self-awareness, rationality, voluntary control, and memory. Analyses of the 3 physical conditions showed that hypnotic experiences were overall similar, although quiescence was more conducive to alterations of body image and reports of depth. These results suggest that hypnotic virtuosos have alterations of consciousness that can be better conceptualized as distinct states rather than being on a continuum.

"Hypnopuncture"—a dental-emergency treatment concept for patients with a distinctive gag reflex
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The present case report describes a newly developed dental treatment concept for patients with a distinctive gag reflex. "Hypnopuncture" is a combination therapy of hypnosis and acupuncture. Its simple, fast, and effective application autonomous of the cause makes it a valuable tool for dental-emergency treatment procedures. Physiologic and psychological aspects of gagging are influenced at the same time. The protocol is illustrated in the case of a 76-year-old patient with a severe gag reflex who was successfully treated by this combination approach. Necessary and effective therapeutic measures from both acupuncture and hypnosis are portrayed.

[1014]
A long-term therapeutic treatment for patients with a severe gag reflex
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"Hypnopuncture," a combination treatment of hypnosis and acupuncture, provides a therapeutic treatment plan for long-term therapy for patients with a distinctive gag reflex. The treatment is applied independently of the cause. In cases of emergency treatment in dentistry, the immediate compliance of a patient is of utmost importance. The long-term goal of any therapeutic measure is control of the gag reflex. A new treatment protocol is illustrated in the case of a 50-year-old patient with a severe gag reflex. After only 5 visits, dental treatment could be conducted without any auxiliary means. Hypnosis is applied in the form of hypnosedation (not as psychotherapy), while stereognosis occupies a central position for desensitization.

[1015]
Salient findings: A potentially groundbreaking study on the neuroscience of hypnotizability, a critical review of hypnosis' efficacy, and the neurophysiology of conversion disorder
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Three papers of special interest to researchers and clinicians alike have recently appeared in the general scientific and medical literatures. Two of these papers are original research studies that employ brain-imaging technologies, one using Magnetic Resonance Imaging (MRI), the other position emission tomography (PET). A third paper is a comprehensive review of the empirical findings on the clinical use of hypnosis in pediatric oncology. The research study using MRI technology is extraordinary, because it is the first to document differences in brain morphology between high hypnotizable and low hypnotizable individuals. Arguably, if its findings replicate, the study could be one of the most important developments in scientific hypnosis since the genesis of the Stanford scales 45 years ago. The PET study notes differences in brain activation during intentionally simulated and hypnotically experienced paralysis. The review article examines empirical work addressing the efficacy of hypnosis for procedural pain in pediatric oncology.

[1016]
On false premises and the hypnotic enhancement effect: reply to Schnall (2004)
Health Psychol. 2005 Jan;24(1):112
[Comment on: Health Psychol. 2004 May;23(3):335]
Milling LS.
Replies to the comments by E. Schnall (see record 2004-13299-016) on the current author's original article (see record 2003-05896-014), which examined whether adding hypnosis enhances cognitive-behavioral pain treatments. Here, the author addresses Schnall's critique point-by-point, and concludes that --Schnall aside-- a voluminous body of research has clearly established that both hypnosis and cognitive-behavioral treatments are useful for reducing pain, and all evidence from a small but growing literature currently suggests that there is no benefit in adding one procedure to the other.

[1017]
Hypnotherapy in the treatment of irritable bowel syndrome
Eur J Gastroenterol Hepatol. 2005 Jan;17(1):15-20
Gonsalkorale WM, Whorwell PJ.
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There is accumulating and compelling evidence that hypnotherapy is an effective treatment for irritable bowel syndrome. Recently, studies have shown that hypnotherapy has beneficial effects that are long lasting, with most patients maintaining improvement, and with decreased consultation and medication needs in the long term. The particular gut directed approach used, which is aimed at normalizing and controlling gut function, is also described. While the mechanisms of how hypnotherapy brings about its therapeutic effect are not fully known, changes in colonic motility and rectal sensitivity have been demonstrated, although changes in central processing and psychological effects may also play a role.

[1018]
Reconceptualizing children's suggestibility: bidirectional and temporal properties

Professional Hypnosis Databank - page 248 of 889 - by Alberto Torelli, hypnologist
Child Dev. 2005 Jan-Feb;76(1):40-53
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Forty-one children (3 to 7 years) were exposed to a staged event and later interviewed by 1 of 41 professional interviewers. All interviews were coded with a detailed, mutually exclusive, and exhaustive coding scheme capturing adult behaviors (leading questions vs. neutral) and child behaviors (acquiescence vs. denial) in a temporally organized manner. Overall, interviewers’ use of leading questions did not result in increased acquiescence as previously found. However, one specific type of leading question (i.e., inaccurate misleading) was followed by acquiescence. Lagged sequential analyses showed that it was possible to predict directly from child-to-child behavior, effectively skipping the intervening adult behavior. This result raises questions about the current conceptualization that suggestibility is driven by adult behaviors.

[1019]
The body's story: a case report of hypnosis and physiological narration of trauma
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Adult Posttraumatic Stress Disorder secondary to childhood sexual abuse is clinically complicated by its increasingly noted deficient linguistic recording of the abuse, perhaps partially explaining consequent difficulties with verbalizing in therapy. A single case illustrates that hypnotically utilizing the body-emotion register of encrypted sexual abuse trauma may not only afford more naturalistic retrieval and purgation of the experience, but may also provide the very medium for the healing narrative required for recovery. The patient's original and continuing therapist was also present as support and observer for all but 1 of 25 hypnosis sessions. Treatment gains were robust at 3-year follow up. This case suggests that effective treatment for sexual abuse PTSD may in some instances reside in more nonverbally sensitive interventions not aiming to prove, probe, or process linguistic reconstructions of memory. This is the first published report of such a bodily narrative in hypnosis.

[1020]
Hypnosis and irritable bowel syndrome: a review of efficacy and mechanism of action
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Irritable bowel syndrome (IBS) is a functional gastrointestinal disorder characterized by abdominal pain, distension, and an altered bowel habit for which no cause can be found. Despite its prevalence, there remains a significant lack of efficacious medical treatments for IBS to date. In this paper we reviewed a total of 14 published studies (N=644) on the efficacy of hypnosis in treating IBS (8 with no control group and 6 with a control group). We concluded that hypnosis consistently produces significant results and improves the cardinal symptoms of IBS in the majority of patients, as well as positively affecting non-colonic symptoms. When evaluated according to the efficacy guidelines of the Clinical Psychology Division of American Psychological Association, the use of hypnosis with IBS qualifies for the highest level of acceptance as being both efficacious and specific. In reviewing the research on the mechanism of action as to how hypnosis works to reduce symptoms of IBS, some evidence was found to support both physiological and psychological mechanisms of action.

[1021]
Utilizing hypnotic and ego-state therapy to facilitate healthy adaptive differentiation in the treatment of sexual disorders
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Much of the literature focuses on the pathology that falls to the far right of the Watkins (1997) differentiation-dissociation continuum, such as Dissociative Identity Disorder and Dissociative Disorder NOS. Adding a "far left" to this continuum, as well as a construct of what the "far left" looks like, makes apparent the value of healthy adaptive differentiation for those individuals that fall to the "far left" of the spectrum; those who don't differentiate enough. A discussion of sexual dysfunction at this end of the continuum and cases of Hypoactive Sexual Desire Disorder and Vaginismus demonstrate the clinical effectiveness of an approach combining hypnosis and ego-state therapy to facilitate healthy adaptive differentiation.

[1022]
Three failures of direct suggestion in psychogenic dermatitis followed by successful intervention
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Three adult cases of psychogenic dermatitis of atypical presentation were treated with direct suggestion under hypnosis (DSUH), which included suggestions for developing cooling, soothing and healing numbness in the affected areas. After a
trial of 5 sessions over a period of 2 months, the results in all 3 cases were determined to be unappreciable and unsuccessful. The patients were subsequently treated with hypnoanalysis including ideomotor questioning, regression to onset, and reframing followed by direct suggestions under hypnosis (DSUH) for healing of all affected areas except a negotiated index finger on the nondominant hand. This technique proved an effective treatment that extinguished the flair-ups in 6 visits or less over a period of 2 months. These cases were followed at intervals of up to 1 year and no evidence of relapse found.

[1023]
Haiku: language, communication, and hypnosis
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This article will illustrate how effective hypnotic communication closely resembles the Haiku form. Working with the Haiku form is an effective and dynamic approach that encourages the therapists to keep their awareness sharpened and observation astute. Haiku is not just a type of poetry; it is a way of looking at the world with a heightened level of attentiveness. Crafting effective and evocative hypnotic suggestions requires that the therapist become immersed in the world of passion, images, sounds, sights, opposites, humor, creativity, and perceptive consciousness. Enhancing our skills of observation is an important aspect of the continuing experience of the hypnotherapist. The Haiku method can help us enhance our observation and utilize what we observe in developing evocative hypnotic suggestions that help the client access their internal representational systems to stimulate their healing response. A systematized method for learning to write Haiku is presented.

[1024]
Integrative therapy for fibromyalgia: possible strategies for an individualized treatment program
South Med J. 2005 Feb;98(2):177-84
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One of the most complex patient treatment situations encountered by the clinician is the patient who presents with the cluster of signs and symptoms that lead to the diagnosis of fibromyalgia syndrome. While physicians focus primarily on pharmacologic treatment, a number of nonpharmacologic modalities have been shown to benefit patients as well. No one therapy is uniformly effective in every patient; treatment programs consisting of a combination of pharmacologic and nonpharmacologic therapies must be individualized to the patient, and the clinician may have to try several different modalities before reaching an optimal improvement in the patient's symptoms.

[1025]
Complementary and alternative medicine use by psychiatric inpatients
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82 psychiatric inpatients hospitalized for acute care were interviewed about their use of complementary and alternative medicine (CAM) modalities. The clinical diagnoses of respondents included Depressive Disorder (61%), Substance Abuse (26%), Schizophrenia (9%), and Anxiety Disorders (5%). Analysis indicated that 63% used at least one CAM modality within the previous 12 mo. The most frequently used modality was herbal therapies (44%), followed by mind-body therapies such as relaxation or mental imagery, hypnosis, meditation, biofeedback (30%), and spiritual healing by another (30%). Physical modalities such as massage, chiropractic treatment, acupuncture, and yoga were used by 21% of respondents. CAM therapies were used for a variety of reasons ranging from treatment of anxiety and depression to weight loss. However, most respondents indicated they did not discuss such use with their psychiatrist or psychotherapist.

[1026]
Hypnotherapy in radiotherapy patients: a randomized trial
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PURPOSE: To determine whether hypnotherapy reduces anxiety and improves the quality of life in cancer patients undergoing curative radiotherapy (RT). METHODS AND MATERIALS: After providing written informed consent, 69 patients were randomized between standard curative RT alone (36 controls) and RT plus hypnotherapy (33 patients). Patients in the hypnotherapy group received hypnotherapy at the intake, before RT simulation, before the first RT session, and halfway between the RT course. Anxiety was evaluated by the State-Trait Anxiety Inventory DY-1 form at six points. Quality of life was measured by the Rand Medical Outcomes Study 36-item Health Survey (SF-36) at five points. Additionally, patients answered a questionnaire to evaluate their experience and the possible benefits of this research project. RESULTS: No statistically significant difference was found in anxiety or quality of life between the hypnotherapy and control groups. However, significantly more patients in the hypnotherapy group indicated an improvement in mental
Hypnotic modulation of flow-mediated endothelial response to mental stress

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Post-ischaemic flow mediated dilation of peripheral arteries (FMD) is transiently reduced during mental stress. This experiment was aimed at assessing whether hypnosis, which is a powerful relaxation technique, modulated the FMD response to mental stress in subjects with different hypnotic susceptibility. Results showed that hypnotic relaxation prevented the expected stress-related reduction of FMD only in highly hypnotizable subjects, suggesting a protective role of hypnotisability against vascular damage.

'It's still bending': verbal suggestion and alleged psychokinetic ability

Br J Psychol. 2005 Feb;96(Pt 1):115-27
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Some alleged psychics appear to be able to deform metallic objects, such as keys and cutlery, by thought alone. This paper describes two studies that examined whether one aspect of these demonstrations could be created by verbal suggestion. In the first study, participants were shown a videotape in which a fake psychic placed a bent key on a table. Participants in one condition heard the fake psychic suggest that the key was continuing to bend, whilst those in the other condition did not. Participants in the suggestion condition were significantly more likely to report that the key continued to bend. These findings were replicated in the second study. In addition, participants who reported that the key continued to bend displayed a significantly higher level of confidence in their testimony than others, and were significantly less likely to recall that the fake psychic had suggested the continued bending of the key. Neither experiment revealed any differences between participants who expressed a prior belief in the paranormal compared with those who did not. The paper discusses the implications of these results for the psychology of suggestion and the assessment of eyewitness testimony for anomalous events.

Brain correlates of subjective reality of physically and psychologically induced pain

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Meaningful behavior requires successful differentiation of events surfacing from one's mind from those arising from the external world. Such judgements may be especially demanding during pain because of the strong contribution from psychological factors to this experience. It is unknown how the subjective reality of pain (SRP) is constructed in the human brain, and neuronal mechanisms of the subjective reality are poorly understood in general. To address these questions, 14 suggestion-prone healthy subjects rated reality of pain that was induced either by laser pulses to the skin or by hypnotic suggestion during functional MRI. Both pain states were associated with activation of the brain's pain circuitry. During laser stimulation, the sensory parts of this circuitry were activated more strongly, and their activation strengths correlated positively with the SRP. During suggestion-induced pain, the reality estimates were lower and correlated positively with activation strengths in the rostral and perigenual anterior cingulate cortex and in the percingulate regions of the medial prefrontal cortex; a similar trend was evident during laser-induced pain. These findings support the view that information about sensory-discriminative characteristics of pain contributes to the SRP. Differences in such information between physically and psychologically induced pain, however, could be quantitative rather than qualitative and therefore insufficient for judging the reality of pain without knowledge about the source of this information. The medial prefrontal cortex is a likely area to contribute to such source monitoring.

Hypnotherapy did not reduce anxiety or improve the quality of life in cancer patients undergoing curative RT. The absence of statistically significant differences between the two groups contrasts with the hypnotherapy patients' own sense of mental and overall well-being, which was significantly greater after hypnotherapy. It cannot be excluded that the extra attention by the hypnotherapist was responsible for this beneficial effect in the hypnotherapy group. An attention-only control group would be necessary to control for this effect.

Post-ischaemic flow mediated dilation (FMD) of peripheral arteries is transiently reduced during mental stress. This experiment was aimed at assessing whether hypnosis, which is a powerful relaxation technique, modulated the FMD response to mental stress in subjects with different hypnotic susceptibility. Results showed that hypnotic relaxation prevented the expected stress-related reduction of FMD only in highly hypnotizable subjects, suggesting a protective role of hypnotisability against vascular damage.
common beliefs and myths that affect the management of pain in children. We provide a review of the pain literature that focuses on the integration of mind-body therapies into the management of procedure-related pain, headache, and recurrent abdominal pain in children.

[1031]
Can words hurt? Patient-provider interactions during invasive procedures
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Patients are often prepared for procedural discomforts with descriptions of pain or undesirable experiences. This practice is thought to be compassionate and helpful, but there is little data on the effect of such communicative behavior. This study assesses how such descriptions affect patients' pain and anxiety during medical procedures. The interactions of patients with their healthcare providers during interventional radiological procedures were videotaped during a previously reported 3-arm prospective randomized trial assessing the efficacy of self-hypnotic relaxation. One hundred and fifty-nine videos of the standard care and attention control arms were reviewed. All statements that described painful or undesirable experiences as warning before potentially noxious stimuli or as expression of sympathy afterwards were recorded.

Patients' ratings of pain and anxiety on 0-10 numerical scales (0=No Pain, No Anxiety at All and 10=Worst Pain Possible, Terrified) after the painful event and/or sympathizing statement were the basis for this study. Warning the patient in terms of pain or undesirable experiences resulted in greater pain (P&lta;0.05) and greater anxiety (P&lta;0.001) than not doing so. Sympathizing with the patient in such terms after a painful event did not increase reported pain, but resulted in greater anxiety (P&lta;0.05). Contrary to common belief, warning or sympathizing using language that refers to negative experiences may not make patients feel better. This conclusion has implications for the training in medical communication skills and suggests the need for randomized trials testing different patient-practitioner interactions.

[1032]
Source recall enhances children's discrimination of seen and heard events
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The effects of rehearsing actions by source (slideshow vs. story) and of test modality (picture vs. verbal) on source monitoring were examined. Seven- to 8-year-old children (N = 30) saw a slideshow event and heard a story about a similar event. One to 2 days later, they recalled the events by source (source recall), recalled the events without reference to source (no-source-cue recall), or engaged in no recall. Seven to 8 days later, all children received verbal and picture source-monitoring tests. Children in the source recall group were less likely than children in the other groups to claim they saw actions merely heard in the story. No-source-cue recall impaired source identification of story actions. The picture test enhanced recognition, but not source monitoring, of slide actions. Increasing the distinctiveness of the target events (Experiment 2) allowed the picture test to facilitate slideshow action discrimination by children in the no-recall group. (c) 2005 APA, all rights reserved.

[1033]
Kinematic strategies for lowering of upper limbs during suggestions of heaviness: a real-simulator design
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The aim of the experiment was to study possible differences between the kinematic strategies for the "involuntary" arm lowering of hypnotized highly susceptible subjects (H-Highs) and for the voluntary movement of non-hypnotizable simulators (Sims) during suggestions of arm heaviness (Part I). In addition, a comparison between awake susceptible subjects (W-Highs) and H-Highs was carried out to clarify the specific role of the hypnotic state and hypnotizability (Part II). Subjects' absorption and attentional/imagery capabilities were evaluated through neuropsychological tests. Their arm movements were monitored three-dimensionally at hand, wrist and elbow level through a Polhemus Fastrack system. A final interview collected self-reports concerning the perception of movement involuntariness. Neuropsychological tests showed better "absorption" and imagery capabilities in Highs. In the interview, H-Highs perceived a higher involvement in the task and greater involuntariness and difficulties in contrasting the arm lowering than the Sims. Kinematic analysis showed significant differences for H-Highs and Sims for arm displacements along the vertical axis and on the horizontal plane. In fact, the former lowered the left arm earlier and to a greater degree than the right arm; on the horizontal plane, a forearm flexion was observed for H-Highs on the right side. On comparing W-Highs and H-Highs, hypnosis appeared to magnify the waking motor strategies, but also to induce specific changes, mainly concerning the horizontal plane. These results cannot be interpreted on the basis of "role playing" and socio-cognitive factors. They are believed to be due to a balance between the effectiveness of the frontal executive control towards the selection of behaviors and movement automaticity, which is in line with the neo-dissociation theory of hypnosis.

[1034]
A review of gagging problems in dentistry: 2. Clinical assessment and management
Dent Update. 2005 Mar;32(2):74-6, 78-80
Dickinson CM, Fiske J.
A pronounced gag reflex can be a severe limitation to a patient’s ability to accept dental care and for a clinician’s ability to provide it. It can compromise all aspects of dentistry from diagnostic procedures to active treatment and can be distressing for all concerned. Many ‘management’ techniques have been described. This paper describes the different categories of treatment used to manage people with pronounced gag reflexes.

[1035]
Integrative oncology: complementary therapies for pain, anxiety, and mood disturbance
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Many people with cancer experience pain, anxiety, and mood disturbance. Conventional treatments do not always satisfactorily relieve these symptoms, and some patients may not be able to tolerate their side effects. Complementary therapies such as acupuncture, mind-body techniques, massage, and other methods can help relieve symptoms and improve physical and mental well-being. Self-hypnosis and relaxation techniques help reduce procedural pain. Acupuncture is well documented to relieve chronic cancer pain. Massage and meditation improve anxiety and other symptoms of distress. Many dietary supplements contain biologically active constituents with effects on mood. However, not all complementary therapies are appropriate or useful, and even helpful complementary modalities may not be optimal under some circumstances. Situations when precaution is indicated include acute onset of symptoms and severe symptoms, which require immediate mainstream intervention. Dietary supplements are associated with serious negative consequences under some circumstances. The authors summarize the research on these modalities and discuss the rationale, expectation, and necessary precautions involved with combining complementary therapies and mainstream care. Practical clinical issues are addressed.

[1036]
A randomized controlled trial of an internet-based treatment for chronic headache
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Chronic headache is a significant public health problem in Western nations. Although controlled trials demonstrate the efficacy and cost-effectiveness of face-to-face behavioral therapy, most headache sufferers have limited access to these treatments. Delivery of behavioral interventions using Internet technology has the potential to reach a larger number of headache sufferers and reduce the burden of disease. This randomized controlled study evaluated an Internet-delivered behavioral regimen composed of progressive relaxation, limited biofeedback with autogenic training, and stress management versus a symptom monitoring waitlist control. Treatment led to a significantly greater decrease in headache activity than symptom monitoring alone. Thirty-nine percent of treated individuals showed clinically significant improvement on self-report measures of headache symptoms at post-treatment. At two-month follow-up, 47% of participants maintained improvement. Treatment had a significant impact on general headache symptoms and headache-related disability. There was a 35% within-group reduction of medication usage among the treated subjects. The Internet program was more time-efficient than traditional clinical treatment. Treatment and follow-up dropout rates, 38.1% and 64.8%, respectively, were typical of behavioral self-help studies. This approach to self-management of headache is promising; however, several methodological and ethical challenges need to be addressed.

[1037]
The anterior cingulate cortex contains distinct areas dissociating external from self-administered painful stimulation: a parametric fMRI study
Pain. 2005 Apr;114(3):347-57
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The anterior cingulate cortex (ACC) has a pivotal role in human pain processing by integrating sensory, executive, attentional, emotional, and motivational components of pain. Cognitive modulation of pain-related ACC activation has been shown by hypnosis, illusion and anticipation. The expectation of a potentially noxious stimulus may not only differ as to when but also how the stimulus is applied. These combined properties led to our hypothesis that ACC is capable of distinguishing external from self-administered noxious tactile stimulation. The combined properties led to our hypothesis that ACC is capable of distinguishing external from self-administered noxious tactile stimulation. Thermal contact stimuli with noxious and non-noxious temperatures were self-administered or externally applied at the resting right hand in a randomized order. Two additional conditions without any stimulus-eliciting movements served as control conditions to account for the certainty and uncertainty of the impending stimulus. Calculating the differences in the activation pattern between self-administered and externally generated stimuli revealed three distinct areas of activation that graded with perceived stimulus intensity: (i) in the posterior ACC with a linear increase during external but hardly any modulation for the self-administered stimulation, (ii) in the midcingulate cortex with activation patterns independent of the mode of application and (iii) in the perigenual ACC with increasing activation during self-administered but decreasing activation during externally applied stimulation. These data support the functional segregation of the human ACC: the posterior ACC may be involved in the prediction of the sensory consequences of pain-related action, the midcingulate cortex in pain intensity coding and the...
perigenual ACC is related to the onset uncertainty of the impending stimuli.

[1038] Premedication in children: hypnosis versus midazolam
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BACKGROUND: The main objectives of premedication in children are to facilitate the separation from the parents, to reduce preoperative anxiety, to smooth the induction of anesthesia and to lower the risk of postoperative behavioral disorders. The most common technique is sedative premedication with midazolam. Hypnosis enables a state of relaxation to be achieved and has never been evaluated as a premedication technique. The aim of the present study was to evaluate the efficacy of hypnosis on anxiety and perioperative behavioral disorders versus midazolam. METHODS: Fifty children from 2 to 11 years of age were randomized into two groups: group H received hypnosis as premedication; group M were given 0.5 mg x kg(-1) midazolam orally, 30 min before surgery. Preoperative anxiety was evaluated using the Modified Yale Preoperative Anxiety Scale (mYPAS) score when arriving in the department (T1), when entering the operating room (T2), and when fitting the facemask (T3). Postoperative behavioral disorders were evaluated using the Posthospitalization Behavioral Questionnaire (PHBQ) at days 1, 7 and 14. RESULTS: The two groups showed no significant difference preoperatively with the PHBQ: (M) 21 (17-25) vs (H) 20 (8-25) and mYPAS score: (M) 28 (23-75) vs (H) 23 (23-78). The number of anxious children was less during induction of anesthesia in the hypnosis group (T3: 39% vs 68%) (P < 0.05). Postoperatively, hypnosis reduced the frequency of behavior disorders approximately by half on day 1 (30% vs 62%) and day 7 (26% vs 59%). CONCLUSIONS: Hypnosis seems effective as premedication in children scheduled for surgery. It alleviates preoperative anxiety, especially during induction of anesthesia and reduces behavioral disorders during the first postoperative week.

[1039] Hypnosis in contemporary medicine
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Hypnosis became popular as a treatment for medical conditions in the late 1700s when effective pharmaceutical and surgical treatment options were limited. To determine whether hypnosis has a role in contemporary medicine, relevant trials and a few case reports are reviewed. Despite substantial variation in techniques among the numerous reports, patients treated with hypnosis experienced substantial benefits for many different medical conditions. An expanded role for hypnosis and a larger study of techniques appear to be indicated.

[1040] Tape recorded hypnosis in oral and maxillofacial surgery--basics and first clinical experience
Hermes D, Truebger D, Hakim SG, Sieg P.
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BACKGROUND: Surgical treatment of diseases of the oral and maxillofacial region under local anaesthesia is quite commonly restricted by limited patient compliance. 'Medical Hypnosis' could be an alternative to treatment under pharmacological sedation. With this method, both autosuggestive and other suggestive procedures are used for anxiolysis, relaxation, sedation and analgesia of the patient. The purpose of this paper was to see whether there could be any potential for this treatment when operating on oral and maxillofacial patients. METHODS: During a 1-year-trial period, 209 operations under combined local anaesthesia/medical hypnosis were carried out on 174 non-preselected patients between the ages of 13 and 87 years. The surgical range covered oral, plastic and reconstructive, oncological, septic and trauma operations. RESULTS: Medical hypnosis turned out to be a reliable and standardizable method with high patient compliance. Remarkable improvements in treatment conditions for both patient and surgeons were achieved in 93% of cases. CONCLUSION: Controlled clinical studies are now necessary to obtain objective data on the effectiveness of hypnosis-induced intraoperative effects in oral and maxillofacial surgery.

[1041] The additive benefit of hypnosis and cognitive-behavioral therapy in treating acute stress disorder
Bryant RA, Moulds ML, Guthrie RM, Nixon RD.
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This research represents the first controlled treatment study of hypnosis and cognitive-behavioral therapy (CBT) of acute stress disorder (ASD). Civilian trauma survivors (N=87) who met criteria for ASD were randomly allocated to 6 sessions of CBT, CBT combined with hypnosis (CBT-hypnosis), or supportive counseling (SC). CBT comprised exposure, cognitive restructuring, and anxiety management. CBT-hypnosis comprised the CBT components with each imaginal exposure
Integration of hypnosis with acupuncture: possible benefits and case examples

Integration of complementary and alternative medicine in a major pediatric teaching hospital: an initial overview

OBJECTIVE: To describe the establishment of a multidisciplinary team of complementary and alternative medicine (CAM) providers and educators in an urban pediatric hospital and affiliated medical school. BACKGROUND: Pediatric CAM use is increasing. Physicians are interested in CAM-related education but few programs had been developed in pediatrics. In 1998, Children's Hospital Boston established the Center for Holistic Pediatric Education and Research (CHPER), a CAM multidisciplinary team providing clinical services, education, and research. METHOD: A retrospective review describing data from patient consultation notes, CAM lectures, clinical practice guidelines, curriculum materials, team meeting minutes, and team member manuscripts and publications. RESULTS: Over 5.5 years, CHPER staff provided over 2100 consults: acupuncture, massage, holistic pediatrician, relaxation therapies, biofeedback, hypnosis, and bio-pharmaceutics. Acupuncture and massage therapies were incorporated into a Clinical Practice Guideline. Formal education was delivered through didactic sessions, workshops, self-learning modules, clinical observation, and clinical practice. CHPER faculty published 1 book and 64 articles on CAM-related topics. CONCLUSION: An interdisciplinary team of CAM clinicians and educators can be integrated into an urban pediatric teaching hospital to provide CAM medical education and clinical services.

Idiopathic Dyspepsia

Idiopathic dyspepsia refers to pain and/or discomfort perceived in the epigastrium that is not secondary to organic, systemic, or metabolic diseases. Symptoms may overlap with those of gastroesophageal reflux disease and irritable bowel syndrome. Gastrointestinal motor disorders, hypersensitivity to mechanical or chemical stimuli, and psychosocial factors can act individually or in concert to induce the symptoms of dyspepsia. Accordingly, there is no single therapy, and treatment must be individualized. Eradication of Helicobacter pylori infection rarely achieves symptom improvement. Treatment of idiopathic dyspepsia should begin by reassuring the patient about the benign nature of the syndrome and educating them on the knowledge that has been achieved in recent years regarding potential causes of the syndrome. Both prokinetic and antisecretory drugs have been reported to improve dyspeptic symptoms, but results are not completely convincing. Although well-designed studies demonstrate superiority of proton pump inhibitors over placebo, it should be noted that patients with nonerosive gastroesophageal reflux disease were invariably included; when these patients are excluded, the benefit of antisecretory medications is questionable. We suggest that patients with idiopathic dyspepsia be initially treated according to the predominant symptom. Those with epigastric pain/burning should receive a trial with standard doses of proton pump inhibitors for 4 to 8 weeks, whereas prokinetic patients should be prescribed at recommended doses for similar periods of time to patients with nonpainful dyspeptic symptoms such as posprandial fullness, early satiety, nausea, or vomiting. Nonresponders may benefit from combination therapies or short trials with higher doses of drugs. Visceral analgesics and antidepressants can also be prescribed alone or in combinations with other therapeutic strategies. Recent studies demonstrate utility for psychologic therapy and hypnotherapy, although truly controlled studies are difficult in this area. Herbal medicines deserve further evaluation.

Hypnosis in human sexuality problems

This is a general overview of the use of hypnosis in five aspects of human sexuality where problems or pathology may move patients to seek therapy. These are gender identity, sexual orientation, sexual preferences, sexual functioning and sexual mores. The article emphasizes two main hypnotic techniques that respect the patient's existential experiences regarding his/her own sexuality. The use of hypnosis proposed here is patient-centered, permissive and utilizing the patient's imagery and other inner resources. Several clinical vignettes illustrate the theoretical points with the intention of giving the reader an opportunity for identification with these cases.

Integration of hypnosis with acupuncture: possible benefits and case examples
Acupuncture treatment uses ultrafine needles which are inserted into specified points on the skin (acupoints). Acupuncture can help alleviate pain and inflammation, possibly through the increased release of pituitary beta-endorphins and ACTH. Hypnosis can also help alleviate pain syndromes, and may have centrally mediated immunomodulatory effects. The use of these 2 treatments simultaneously may potentially assist and augment the effects of each another. Two case reports where both treatments are used together are presented: One showing how hypnosis can help in the treatment of painful acupoints, the other how the response to acupuncture may be augmented by hypnosis in the treatment of headache. Controlled trials of this combined treatment are warranted.

[1046]
Awake-alert hypnosis in the treatment of panic disorder: a case report
Iglesias A, Iglesias A.

An individual developed a lifestyle-limiting case of Panic Disorder that threatened to interfere with her raison d'etre: To participate in the exclusive lifestyle of her community. The panic episodes started to cripple her social calendar and as the "season" came into full swing her coveted role of chairwoman of various philanthropic functions came into peril. A variant of awake-alert hypnosis had to be created for this case. Hypnosis consisting of eye closure with relaxation was out of the question. The authors created an induction technique and specific suggestions based on the Waterford glassware, as focal point, with the purpose of not only inducing awake-alert hypnosis but also of executing a series of specific strategies, tailored to abort the incipient panic episodes.

[1047]
Successful repeated hypnotic treatment of warts in the same individual: a case report
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We report on a case of a female patient who was successfully treated with hypnosis for warts on 2 occasions separated by an interval of 7 years. Of note is the fact that she had low expectations regarding the benefit to be derived from hypnosis and did not at first appear to be highly hypnotizable.

[1048]
Psychological interventions for non-ulcer dyspepsia
Cochrane Database Syst Rev. 2005 Apr 18;(2):CD002301
Soo S, Moayyedi P, Deeks J, Delaney B, Lewis M, Forman D.

BACKGROUND: Studies have also shown that non-ulcer dyspepsia (NUD) patients have higher scores of anxiety, depression, neurotism, chronic tension, hostility, hypochondriasis and tendency to be more pessimistic when compared with the community controls. However, the role of psychological interventions in NUD remains uncertain. OBJECTIVES: This review aims to determine the effectiveness of psychological interventions including psychotherapy, psychodrama, cognitive behaviour therapy, relaxation therapy and hypnosis in the improvement of either individual or global dyspepsia symptom scores and quality of life scores in patients with NUD. SEARCH STRATEGY: Trials were identified by searching the Cochrane Controlled Trials Register (Issue 3-1999), MEDLINE (1966-99), EMBASE (1988-99), PsycLIT (1987-1999) and CINAHL (1982-99). Bibliographies of retrieved articles were also searched and experts in the field were contacted. Searches were updated on 10 December 2002 and 21 January 2004. The searches were re-run on 24 January 2005 and no new trials were found. SELECTION CRITERIA: All randomised controlled trials (RCTs) or quasi-randomised studies assessing the effectiveness of psychological interventions (including psychotherapy, psychodrama, cognitive behavioural therapy, relaxation therapy and hypnosis) for non-ulcer dyspepsia (NUD) were identified. DATA COLLECTION AND ANALYSIS: Data collected included both individual and global dyspepsia symptom scores and quality of life (QoL) scores. MAIN RESULTS: We identified only four trials each using different psychological interventions; three presented results in a manner that did not allow synthesis of the data to form a meta-analysis. All trials suggested that psychological interventions benefit dyspepsia symptoms and this effect persists for one year. However, all trials used statistical techniques that adjusted for baseline differences between groups. This should not be necessary for a randomised trial that is adequately powered suggesting that the sample size was too small. Unadjusted data was not statistically significant. The other problems of psychological intervention included low recruitment and high drop out rate, which has been shown to be greater in patients receiving group therapy. AUTHORS' CONCLUSIONS: There is insufficient evidence from this review to confirm the efficacy of psychological intervention in NUD.

[1049]
Psychological treatment of post-traumatic stress disorder (PTSD)
Cochrane Database Syst Rev. 2005 Apr 18;(2):CD003388
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BACKGROUND: Psychological interventions are widely used in the treatment of post-traumatic stress disorder (PTSD). OBJECTIVES: To perform a systematic review of randomised controlled trials of all psychological treatments except eye movement desensitisation and reprocessing following the guidelines of the Cochrane Collaboration. SEARCH STRATEGY: Systematic searches of electronic bibliographic databases, hand search of the Journal of Traumatic Stress, searches of reference lists, known websites and discussion fora, and personal communication with key workers. SELECTION CRITERIA: Types of studies - Any randomised controlled trial of a psychological treatment. Types of participants - Adults suffering from traumatic stress symptoms for three months or more. Types of interventions - Trauma-focused cognitive behavioural therapy/exposure therapy (TFCBT); stress management (SM); other therapies (supportive therapy, non-directive counselling, psychodynamic therapy and hypnotherapy); group cognitive behavioural therapy (group CBT). Types of outcomes - Severity of clinician rated traumatic stress symptoms. Secondary measures included self-reported traumatic stress symptoms, depressive symptoms, anxiety symptoms, adverse effects and dropouts. DATA COLLECTION AND ANALYSIS: Data was entered using the Review Management software. Quality assessments were performed. The data were analysed for summary effects using the RevMan 4.2 programme. MAIN RESULTS: Twenty-nine studies were included in the review. With regards to reduction of clinician assessed PTSD symptoms TFCBT did significantly better than waitlist/usual care (standardised mean difference (SMD) = -1.36; 95% CI, -1.88 to -0.84; 13 studies; n = 609). There was no significant difference between TFCBT and SM (SMD = -0.27; 95% CI, -0.71 to 0.16; 6 studies; n = 239). TFCBT did significantly better than other therapies (SMD = -0.81; 95% CI, -1.19 to -0.42; 3 studies; n = 120). Stress management did significantly better than waitlist/usual care (SMD = -1.14; 95% CI, -1.62 to -0.67; 3 studies; n = 86) and than other therapies (SMD = -1.22; 95% CI, -2.09 to -0.35; 1 study; n = 25). There was no significant difference between other therapies and waitlist/usual care control (SMD = -0.43; 95% CI, -0.90 to 0.04; 2 studies; n = 72). Group TFCBT was significantly better than waitlist/usual care (SMD = -0.72; 95% CI, -1.14 to -0.31). AUTHORS' CONCLUSIONS: There was evidence that individual TFCBT, stress management and group TFCBT are effective in the treatment of PTSD. Other non-trauma focused psychological treatments did not reduce PTSD symptoms as significantly. There was some evidence that individual TFCBT is superior to stress management in the treatment of PTSD at between 2 and 5 months following treatment, and also that TFCBT was also more effective than other therapies. There was insufficient evidence to determine whether psychological treatment is harmful. There was some evidence of greater dropout in active treatment groups.

[1050]
Psychological interventions for overweight or obesity
Cochrane Database Syst Rev. 2005 Apr 18;(2):CD003818
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BACKGROUND: Overweight and obesity are global health problems which are increasing throughout the industrialised world. If left unchecked, they will continue to contribute to the ever increasing noncommunicable disease burden. OBJECTIVES: To assess the effects of psychological interventions for overweight or obesity as a means of achieving sustained weight loss. SEARCH STRATEGY: Studies were obtained from searches of multiple electronic bibliographic databases. The date of the latest search was June 2003. SELECTION CRITERIA: Trials were included if the fulfilled the following criteria: 1) they were randomised controlled clinical trials of a psychological intervention versus a comparison intervention, 2) one of the outcome measures of the study was weight change measured by any method, 3) participants were followed for at least three months, 4) the study participants were adults (18 years or older) who were overweight or obese (BMI &gt; 25 kg/m(2)) at baseline. DATA COLLECTION AND ANALYSIS: Two people independently applied the inclusion criteria to the studies identified and assessed study quality. Disagreement was resolved by discussion or by intervention of a third party. Meta-analyses were performed using a fixed effect model. MAIN RESULTS: A total of 36 studies met the inclusion criteria and were included in the review. Overall, 3495 participants were evaluated. The majority of studies assessed behavioural and cognitive-behavioural weight reduction strategies. Cognitive therapy, psychotherapy, relaxation therapy and hypnotherapy were assessed in a small number of studies. Behaviour therapy was found to result in significantly greater weight reductions than placebo when assessed as a stand-alone weight loss strategy (WMD -2.5 kg; 95% CI -1.7 to -3.3). When behaviour therapy was combined with a diet / exercise approach and compared with diet / exercise alone, the combined intervention resulted in a greater weight reduction. Studies were heterogeneous however the majority of studies favoured combining behaviour therapy with dietary and exercise interventions to improve weight loss. Increasing the intensity of the behavioural intervention significantly increased the weight reduction (WMD -2.3 kg; 95% CI -1.4 to -3.3). Cognitive-behaviour therapy, when combined with a diet / exercise intervention, was found to increase weight loss compared with diet / exercise alone (WMD -4.9 kg; 95% CI -7.3 to -2.4). No data on mortality, morbidity or quality of life were found. AUTHORS' CONCLUSIONS: People who are overweight or obese benefit from psychological interventions, particularly behavioural and cognitive-behavioural strategies, to enhance weight reduction. They are predominantly useful when combined with dietary and exercise strategies. The bulk of the evidence supports the use of behavioural and cognitive-behavioural strategies. Other psychological interventions are less rigorously evaluated for their efficacy as weight loss treatments.

[1051]
Complementary and miscellaneous interventions for nocturnal enuresis in children
Cochrane Database Syst Rev. 2005 Apr 18;(2):CD005230
Glazener CM, Evans JH, Cheuk DK.
BACKGROUND: Nocturnal enuresis (bedwetting) is a socially disruptive and stressful condition which affects around 15 to 20% of five year olds, and up to 2% of young adults. OBJECTIVES: To assess the effects of complementary interventions and others such as surgery or diet on nocturnal enuresis in children, and to compare them with other interventions. SEARCH STRATEGY: We searched the Cochrane Incontinence Group Specialised Register (searched 22 November 2004), the Traditional Chinese Medical Literature Analysis and Retrieval System (TCMLARS) (January 1984 to June 2004) and the reference lists of relevant articles. SELECTION CRITERIA: All randomised or quasi-randomised trials of complementary and other miscellaneous interventions for nocturnal enuresis in children were included except those focused solely on daytime wetting. Comparison interventions could include no treatment, placebo or sham treatment, alarms, simple behavioural treatment, desmopressin, imipramine and miscellaneous other drugs and interventions. DATA COLLECTION AND ANALYSIS: Two reviewers independently assessed the quality of the eligible trials, and extracted data. MAIN RESULTS: In 15 randomised controlled trials, 1389 children were studied, of whom 703 received a complementary intervention. The quality of the trials was poor: four trials were quasi-randomised, five showed differences at baseline and ten lacked follow up data. The outcome was better after hypnosis than imipramine in one trial (relative risk (RR) for failure or relapse after stopping treatment 0.42, 95% confidence interval (CI) 0.23 to 0.78). Psychotherapy appeared to be better in terms of fewer children failing or relapsing than both alarm (RR 0.28, 95% CI 0.09 to 0.85) and rewards (0.29, 95% CI 0.09 to 0.90) but this depended on data from only one trial. Acupuncture had better results than sham control acupuncture (RR for failure or relapse after stopping treatment 0.67, 95% CI 0.48 to 0.94) in a further trial. Active chiropractic adjustment had better results than sham adjustment (RR for failure or relapse after stopping treatment 0.74, 95% CI 0.60 to 0.91). However, each of these findings came from small single trials, and need to be verified in further trials. The findings for diet and faradization were unreliable, and there were no trials including homeopathy or surgery. AUTHORS' CONCLUSIONS: There was weak evidence to support the use of hypnosis, psychotherapy, acupuncture and chiropractic but it was provided in each case by single small trials, some of dubious methodological rigour. Robust randomised trials are required with efficacy, cost-effectiveness and adverse effects carefully monitored.

[1052]
Identification of children who may benefit from self-hypnosis at a pediatric pulmonary center
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BACKGROUND: Emotional difficulties can trigger respiratory symptoms. Thus, children presenting with respiratory complaints may benefit from a psychological intervention. The purpose of this study was to define the proportion of patients referred to a Pediatric Pulmonary Center who may benefit from instruction in self-hypnosis, as a psychological intervention. METHODS: A retrospective chart review was conducted for all newly referred patients to the SUNY Upstate Medical University Pediatric Pulmonary Center during an 18 month period beginning January 1, 2000. Patients were offered hypnosis if they presented with symptoms or signs suggestive of psychological difficulties. Hypnosis was taught in one or two 15-45 minute sessions by a pediatric pulmonologist. RESULTS: Of 725 new referrals, 424 were 0-5 years old, 193 were 6-11 years old, and 108 were 12-18 years old. Diagnoses of anxiety, habit cough, or vocal cord dysfunction accounted for 1% of the 0-5 year olds, 20% of the 6-11 year olds, and 31% of the 12-18 year olds. Hypnotherapy was offered to 1% of 0-5 year olds, 36% of 6-11 year olds, and 55% of 12-18 year olds. Of 81 patients who received instruction in self-hypnosis for anxiety, cough, chest pain, dyspnea, or inspiratory difficulties, 75% returned for follow-up, and among the returning patients 95% reported improvement or resolution of their symptoms. CONCLUSION: A large number of patients referred to a Pediatric Pulmonary Center appeared to benefit from instruction in self-hypnosis, which can be taught easily as a psychological intervention.

[1053]
The effect of mental stress on the non-dipolar components of the T wave: modulation by hypnosis
Psycosomat Med. 2005 May-Jun;67(3):376-83
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OBJECTIVE: Mental or emotional stress-induced ventricular arrhythmias and sudden cardiac death are thought to be mediated by the autonomic nervous system and ischemia. In the absence of ischemia, increased inhomogeneity of repolarization is thought to be important. We tested the hypotheses that in the absence of ischemia, mental stress may modulate repolarization by changing autonomic balance; and mental relaxation induced by hypnosis may offset the potentially adverse effects of stress on the cardiac electrophysiology. METHODS: Twelve healthy volunteers (6 male, age 18-35, mean 25 years) experienced a series of different emotions intended to induce a wide range of autonomic response (42 test epochs) on two separate occasions, with and without hypnosis, with continuous electrocardiogram recording. Low- (LF) and HF (high-frequency) heart rate variability was measured and ventricular repolarization was assessed using the relative T-wave residua (proportion of nondipolar components of the T wave) calculated for the T-onset - T peak (TWR-peak T), T peak -T end (TWR-end T), and the whole T wave (TWR). RESULTS: Emotionally induced changes in LF and LF/HF ratio correlated with changes in TWR, e.g., (R = 0.51, p < .001; R = 0.59, p < .0001; and R = 0.59, p < .0001, and TWR-peak T), T peak -T end (TWR-end T), and the whole T wave (TWR). RESULTS: Emotionally induced changes in LF and LF/HF ratio correlated with changes in TWR, e.g., (R = 0.51, p < .001; R = 0.59, p < .0001; and R = 0.59, p < .0001; and TWR-peak T), T peak -T end (TWR-end T), and the whole T wave (TWR). RESULTS: Emotionally induced changes in LF and LF/HF ratio correlated with changes in TWR, e.g., (R = 0.51, p < .001; R = 0.59, p < .0001; and R = 0.59, p < .0001; and TWR-peak T), T peak -T end (TWR-end T), and the whole T wave (TWR). RESULTS: Emotionally induced changes in LF and LF/HF ratio correlated with changes in TWR, e.g., (R = 0.51, p < .001; R = 0.59, p < .0001; and R = 0.59, p < .0001; and TWR-peak T), T peak -T end (TWR-end T), and the whole T wave (TWR). RESULTS: Emotionally induced changes in LF and LF/HF ratio correlated with changes in TWR, e.g., (R = 0.51, p < .001; R = 0.59, p < .0001; and R = 0.59, p < .0001; and TWR-peak T), T peak -T end (TWR-end T), and the whole T wave (TWR).
increased LF power (1,205 ms²) versus 624 ms², p < .003 for hypnotized versus nonhypnotized state), HF power (1,619 ms² versus 572 ms²), p < .0004), and reduced LF/HF ratio (1.0 versus 1.5, p < .052) and was associated with a marked reduction in the changes in repolarization in response to emotion, e.g., 10.7 x 10(-6) versus 5.0 x 10(-6), p < .03 for TWR. CONCLUSIONS: a) Mental stress in the absence of ischemia altered repolarization inhomogeneity via change in the autonomic balance. b) Mental relaxation induced by hypnosis greatly reduced the effect of mental stress on repolarization. c) These findings may have implications for arrhythmogenesis.

[1054] Complementary and alternative pain therapy in the emergency department
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One primary reason patients go to emergency departments is for pain relief. Understanding the physiologic dynamics of pain, pharmacologic methods for treatment of pain, as well CAM therapies used in treatment of pain is important to all providers in emergency care. Asking patients about self-care and treatments used outside of the emergency department is an important part of the patient history. Complementary and alternative therapies are very popular for painful conditions despite the lack of strong research supporting some of their use. Even though evidence-based studies that are double blinded and show a high degree of interrater observer reliability do not exist, patients will likely continue to seek out CAM therapies as a means of self-treatment and a way to maintain additional life control. Regardless of absolute validity of a therapy for some patients, it is the bottom line: "It seems to help my pain." Pain management distills down to a very simple endpoint, patient relief, and comfort. Sham or science, if the patient feels better, feels comforted, feels less stressed, and more functional in life and their practices pose no health risk, then supporting their CAM therapy creates a true wholistic partnership in their health care. CAM should be relatively inexpensive and extremely safe. Such is not always the case, as some patients have discovered with the use of botanicals. It becomes an imperative that all providers be aware of CAM therapies and informed about potential interactions and side effects when helping patients manage pain and explore adding CAM strategies for pain relief. The use of regulated breathing, meditation, guided imagery, or a massage for a pain sufferer are simple but potentially beneficial inexpensive aids to care that can be easily employed in the emergency department. Some CAM therapies covered here, while not easily practiced in the emergency department, exist as possibilities for exploration of patients after they leave, and may offer an improved sense of well-being and empowerment in the face of suffering and despair. The foundations of good nutrition, exercise, stress reduction, and reengagement in life can contribute much to restoring the quality of life to a pain patient. Adding non-drug therapies of physical therapy, cognitive-behavioral therapy, TENS, hypnosis, biofeedback, psychoanalysis, and others can complete the conventional picture. Adding in simple mind/body therapies, touch therapies, acupuncture, or others may be appropriate in select cases, and depending on the circumstances, may effect and enhance a conventional pain management program. Armed with an understanding of pain dynamics and treatments, practitioners can better meet patient needs, avoid serious side effects, and improve care when addressing pain management in the emergency department.

[1055] [Migraine and headache in childhood]
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In childhood and adolescence, migraine is the main primary headache. This diagnosis is extensively underestimated and misdiagnosed in pediatric population. Lacks of specific biologic marker, specific investigation or brain imaging reduce these clinical entities too often to a psychological illness. Migraine is a severe headache evolving by stereotyped crises associated with marked digestive symptoms (nausea and vomiting); throbbing pain, sensitivity to sound or to light are usual symptoms; the attack is sometimes preceded by a visual or sensory aura. During attacks, pain intensity is severe, most of children must lie down. Abdominal pain is frequently associated, rest brings relief and sleep ends often the attack. The prevalence of the migraine varies between 5% and 10% in childhood. At childhood, headache duration is quite often shorter than in adult population, it is more often frontal, bilateral (2/3 of cases) that one-sided. Migraine is a disabling illness: children with migraine lose more school days in a school year, than a matched control group. Migraine episodes are frequently triggered by several factors: emotional stress (school pressure, vexation, excitement, upset), hypoglycemia, lack of sleep or excess (week end migraine), sensorial stimulation (loud noise, bright light, strong odor, heat or cold)..., sympathetic stimulation (sport, physical exercise). Attack treatments must be given at the early beginning of the crisis; oral dose of ibuprofen (10 mg/kg) is recommended. If the oral route is not available when nausea or vomiting occurs, the rectal or nasal routes have then to be used. Non pharmacological treatments (relaxation training, self hypnosis, biofeedback) have shown to have good efficacy as prophylactic measure. Daily prophylactic pharmacological treatments are prescribed in second line after failure of non-pharmacological treatment.

[1056] Physiological and pathophysiological down-regulation of cough
Respir Physiol Neurobiol. 2005 May 4; [Epub ahead of print]
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Recent clinical studies have emphasized the up-regulation (sensitization) of cough in pathological conditions of the airways. However there are also many situations where voluntary and reflex cough can be down-regulated. These include: (1) chemical stimulation of breathing by hypercapnia or hypoxia or both, establishing that cough sensitivity can be inversely related to drive to breathing; (2) voluntary inhibition of cough, probably similar in mechanism to the depression of cough that can be induced by hypnosis and other branches of alternative medicine; (3) the placebo effect of many antitussive treatments; (4) sleep; (5) general anaesthesia; (6) central nervous disorders such as coma, stroke, Parkinson's disease and several other conditions where the defect in the protective reflexes may lead to aspiration pneumonia; (7) increased activity in various afferent inputs from viscera in the thorax and abdomen; (8) a number of bronchopulmonary clinical disorders. The list is long, but regrettably the nervous mechanisms of these down-regulations have been little studied. In addition there are a number of situations, such as exercise, coitus, talking and singing which, while important to coughing humans, have been not investigated in relation to cough. Most of the studies have been with experimental animals, and their extension to human research is desirable. In view of the importance of cough and other defensive reflexes in maintaining human well-being, far more research is needed. The field is wide-open.

[1057]
Complementary therapies for reducing body weight: a systematic review
Int J Obes Relat Metab Disord. 2005 May 31; [Epub ahead of print]  Related Articles, Links
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The prevalence of obesity is increasing at an alarming rate and a plethora of complementary therapies are on offer claiming effectiveness for reducing body weight. The aim of this systematic review is to critically assess the evidence from randomized controlled trials (RCTs) and systematic reviews of complementary therapies for reducing body weight. Literature searches were conducted on Medline, Embase, Amed, and the Cochrane Library until January 2004. Hand-searches of relevant medical journals and bibliographies of identified articles were conducted. There were no restrictions regarding the language of publication. Trial selection, quality assessment and data abstraction were performed systematically and independently by two authors. Data from RCTs and systematic reviews, which based their findings on the results of RCTs, were included. Six systematic reviews and 25 additional RCTs met our inclusion criteria and were reviewed. The evidence related to acupuncture, acupressure, dietary supplements, homeopathy and hypnotherapy. Except for hypnotherapy, Ephedra sinica and other ephedrine-containing dietary supplements the weight of the evidence is not convincing enough to suggest effectiveness. For these interventions, small effects compared with placebo were identified. In conclusion, our findings suggest that for most complementary therapies, the weight of the evidence for reducing body is not convincing. Hypnotherapy, E. sinica and other ephedrine-containing dietary supplements may lead to small reductions in body weight. However, the intake of E. sinica and ephedrine is associated with an increased risk of adverse events. Interventions suggesting positive effects in single RCTs require independent replication.International Journal of Obesity advance online publication, 31 May 2005; doi:10.1038/sj.ijo.0803008.

[1058]
[Stress, cancer and circadian rhythm of melatonin]
[Article in French]
Kwiatkowski F, Abrial C, Gachon F, Chevrier R, Cure H, Chollet P.
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Influence of stress on immunity and pathogenesis relates to corticotropin axis: hypothalamus-hypophysis-surrenals (HHS). Its over-stimulation due to traumas during early childhood or before birth seems to generate brain abnormalities such as reduction of hippocampus volume. More typical of adult age, hypothalamus-pineal gland axis (HP), responsible for melatonin production, may be impaired because of chronic stress, mainly through sleep disturbances or addictive behaviours. Old age has been reported to produce same impairments. Circadian cycle of melatonin is closely related to immune functions and its disturbance seems to induce, among populations undergoing frequent changes of life rhythm, a significant raise of cancer incidence: night shift workers, air pilots... Stress then seems enable to increase cancer risk through its negative impact on HHS and HP axis and therefore on immunity. Immunotherapy, which was an interesting defensive reflexes in maintaining human well-being, far more research is needed. The field is wide-open.

[1059]
[Medical hypnosis in cases of herpes labialis improves propensity for recurrence. A pilot study]
Hautarzt. 2005 Jun;56(6):562-8
[Article in German]
Pfitzer BE, Clark K, Revenstorf D.
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The present study examined the effectiveness of a hypnotherapeutic treatment program for patients suffering from recurrent orofacial herpes infections. Twenty-one patients were randomly allocated to either an experimental group (n=10) or a control condition (n=11). During five weekly individual therapy sessions the participants received symptom-
oriented treatment. In addition, they learnt how to improve their stress coping skills and their management of aversive emotions. The final assessment took place 6 months after treatment. Besides documentation of the frequency and intensity of symptoms, questionnaires were administered to assess stress coping mechanisms (SVF), skin disease-related subjective strain (MHF) and perceptions of control (KKG). A significant reduction of disease intensity could be confirmed. Individual scales of the SVF and MHF also revealed significant results. For an effective treatment of severe herpes infections a mere focus on physical changes appears to be insufficient. A common reflection of a person's sensuality and expectations of closeness and distance seem to influence treatment success remarkably.

[1060]
Potential future therapies for irritable bowel syndrome: will disease modifying therapy as opposed to symptomatic control become a reality?
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Irritable bowel syndrome can remit spontaneously, implying cure is possible. Predictors of good prognosis include a short history, acute onset (possibly postinfective origin), absence of psychological disorders, and resolution of chronic life stressors. Possible-disease modifying treatments with long-lasting effects include diet and anti-inflammatory and psychological treatments. Dietary modifications, which often involve excluding dairy and wheat products, are successful in some patients. Anti-inflammatory treatments have been subjected to one RCT in postinfective IBS without benefit. Probiotics may have benefit in altering bacterial flora and as anti-inflammatory agents, but further trials are needed before they can be recommended. Psychological treatments may produce long-lasting responses. Relaxation therapy appears to have a nonspecific benefit. Psychotherapy has been shown to have long-term benefit and is particularly acceptable to, and effective for, those with overt psychological distress. Hypnotherapy has been shown to be effective in randomized placebo controlled trials and has a sustained effect.

[1061]
[Recent development in research and management of cancer anorexia-cachexia syndrome]
[Article in Japanese]
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Cachexia is among the most debilitating and life-threatening aspects of cancer, and is more common in children and elderly patients. Associated with anorexia, fat and muscle tissue wasting, psychological distress, and a lower quality of life, cachexia arises from a complex interaction between the cancer and the host. This process results from a failure of the adaptive feeding response seen in simple starvation and includes cytokine production, release of lipid-mobilizing and proteolysis-inducing factors, and alterations in intermediary metabolism. Cytokines play a pivotal role in long-term inhibition of feeding by mimicking the hypothalamic effect of excessive negative feedback signaling from leptin, a hormone secreted by adipose tissue, which is an integral component of the homeostatic loop of body weight regulation. This could be done by persistent inhibition of feeding-stimulatory circuitry including neuropeptide Y. Cachexia should be suspected in patients with cancer if an involuntary weight loss of greater than five percent of premorbid weight occurs within a 3-6-month period. The two major options for pharmacological therapy have been either progesterational agents or corticosteroids. However, knowledge of the mechanisms of cancer anorexia-cachexia syndrome has led to, and continues to lead to, effective therapeutic interventions for several aspects of the syndrome. These include antiserotonergic drugs, gastroprekinetic agents, branched-chain amino acids, eicosapentanoinic acid, cannabinoids, melatonin, and thalidomide—all of which act on the feeding-regulatory circuitry to increase appetite and inhibit tumor-derived catabolic factors to antagonize tissue wasting and/or host cytokine release. The outcomes of drug studies in cancer cachexia should focus on the symptomatic and quality-of-life advantages rather than simply on nutritional end points, since the survival of cachexia cancer patients may be limited to weeks or months due to the incurable nature of the underlying malignancy.

Communication among physicians and other health care professionals provides the patient with a multidisciplinary approach to care. The patient record will be an excellent resource to document a plan of care and patient responses to treatment. Psychological distress and psychiatric disorders are common among cancer patients. These problems are also as common among the family members of people with cancer. The use of psychological and behavioral interventions in cancer is increasing, and recent studies have suggested that some of these techniques may affect quality of life and, perhaps, survival rates. Evaluations of relaxation, hypnosis, and short-term group psychotherapy have suggested some benefit with regard to anorexia and fatigue, although the population most likely to benefit from these interventions has not yet been determined. Because weight loss shortens the survival time of cancer patients and decreases performance status, effective therapy would extend patient survival and improve quality of life.

[1062]
Complementary and Alternative Medicine Approaches for Pediatric Pain: A Review of the State-of-the-science
Tsao JC, Zeltzer LK.

In recent years, the use of complementary and alternative medicine (CAM) in pediatric populations has increased considerably, especially for chronic conditions such as cancer, rheumatoid arthritis and cystic fibrosis in which pain may
be a significant problem. Despite the growing popularity of CAM approaches for pediatric pain, questions regarding the efficacy of these interventions remain. This review critically evaluates the existing empirical evidence for the efficacy of CAM interventions for pain symptoms in children. CAM modalities that possess a published literature, including controlled trials and/or multiple baseline studies, that focused on either chronic or acute, procedural pain were included in this review. The efficacy of the CAM interventions was evaluated according to the framework developed by the American Psychological Association (APA) Division 12 Task Force on Promotion and Dissemination of Psychological Procedures. According to these criteria, only one CAM approach reviewed herein (self-hypnosis/guided imagery/relaxation for recurrent pediatric headache) qualified as an empirically supported therapy (EST), although many may be considered possibly efficacious or promising treatments for pediatric pain. Several methodological limitations of the existing literature on CAM interventions for pain problems in children are highlighted and future avenues for research are outlined.

[1063] Attention to pain localization and unpleasantness discriminates the functions of the medial and lateral pain systems
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Abstract. Functional imaging studies have identified a matrix of structures in the brain that respond to noxious stimuli. Within this matrix, a division of function between sensory-discriminative and affective responses has so far been demonstrated by manipulating either pain intensity or unpleasantness under hypnosis in two different normal volunteer groups studied on separate occasions. Our study used positron emission tomography (PET) to demonstrate this division of function under more natural conditions in a healthy group of volunteers, using a CO(2) laser to provide nociceptive stimuli that selectively activate A-delta and C-fibres without contamination by touch sensations. We measured the differential cerebral responses to noxious and innocuous laser stimuli during conditions of selective attention to either the unpleasantness or location of the stimuli. Attention to location increased responses in the contralateral (right) primary somatosensory and inferior parietal cortices. This result implies that these components of the lateral pain system are concerned mainly with the localization of pain. In contrast, attention to unpleasantness increased responses in bilateral perigenual cingulate and orbitofrontal cortices, contralateral (right) amygdala, ipsilateral (left) hypothalamus, posterior insula, M1 and frontal pole. These areas comprise key components of the medial pain and neuroendocrine systems and the results suggest that they have a role in the affective response to pain. Our results indicate the importance of attentional effects on the pattern of nociceptive processing in the brain. They also provide the first clear demonstration, within a single experiment, of a major division of function within the neural pain matrix.

[1064] Hypnotherapy for functional gastrointestinal disorders
Drug Ther Bull. 2005 Jun;43(6):45-8
About 20% of people in the UK have functional gastrointestinal disorders such as irritable bowel syndrome and functional dyspepsia. These conditions account for about 4% of GP consultations and 50% of gastroenterologists’ workload. For some, the symptoms affect quality of life and ability to work. Drug treatment aimed at relieving symptoms is often ineffective. Other options include psychological treatments such as cognitive behavioural therapy, brief psychotherapy and gut-directed hypnotherapy. Here we discuss whether hypnotherapy has a role in the treatment of patients with irritable bowel syndrome or functional dyspepsia.

[1065] Nonpharmacologic treatment of migraine
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Nonpharmacologic treatment of migraine is often used by patients and can provide interesting options for physicians. Knowledge about the evidence and its absence is important. Avoidance of trigger factors can help, if individualized. Behavioral approaches, such as relaxation techniques, biofeedback, and cognitive-behavioral therapy, require far more specialist time or technical devices, but are supported by some evidence, which is mostly old. The same is true for hypnosis. A new approach in migraine prevention is aerobic exercise, which is associated with positive side effects. Whether it will take a strong role, similar to the treatment of depression, remains to be seen. There is no convincing evidence for the efficacy of spinal manipulation. Hyperbaric oxygen may be an effective, but rarely practical prophylactic measure. The evidence pertaining to the efficacy of acupuncture is controversial because of methodologic difficulties, but an ongoing large German study may provide valuable evidence in the near future. Nutritional supplements acting on mitochondrial metabolism, such as magnesium, riboflavin, and coenzyme Q10, were shown to be effective in small, randomized, controlled trials. More studies on the different therapeutic interventions are needed, using modern diagnostic standards and state-of-the-art trial methodology.

[1066] Hypnotic susceptibility, baseline attentional functioning, and the Stroop task
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According to the theoretical framework relating hypnosis to attention, baseline attentional functioning in highly hypnotizable individuals should be more efficient than in low hypnotizable individuals. However, previous studies did not find differences in Stroop-like tasks in which the measure indicative of the Stroop interference effect was based on response latencies. This study was designed to determine whether subjects with different levels of hypnotic susceptibility show differences in baseline attentional functioning. To assess this hypothesis, high, medium, and low hypnotizable subjects performed a Stroop task designed to evaluate accuracy performance, before being subjected to hypnotic induction. Results showed that the Stroop interference effect was smaller in high hypnotizable subjects than in low hypnotizable subjects, whereas it was not different between high, and medium hypnotizable subjects. This outcome supports the notion that baseline attentional functioning is related to hypnotic susceptibility.

[1067]
Does 'hypnosis' by any other name smell as sweet? The efficacy of 'hypnotic' inductions depends on the label 'hypnosis'
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Hypnosis is associated with profound changes in conscious experience and is increasingly used as a cognitive tool to explore neuropsychological processes. Studies of this sort typically employ suggestions following a hypnotic induction to produce changes in perceptual experience and motor control. It is not clear, however, to what extent the induction procedure serves to facilitate suggested phenomena. This study investigated the effect on suggestibility of (a) a hypnotic induction and (b) labelling that procedure 'hypnosis.' Suggestibility of participants was tested before and after an adapted hypnotic procedure, which was either labelled as 'hypnosis' or as 'relaxation.' The hypnotic procedure produced a modest increase in suggestibility when it was called 'relaxation,' but a very significant increase if it was labelled 'hypnosis.' The results are important for both clinical and experimental applications and indicate that labelling an induction procedure 'hypnosis' is an important determinant of subsequent responses to suggestion.

[1068]
Biological sensitisation and psychological amplification: Gateways to subjective health complaints and somatoform disorders
Psychoneuroendocrinology. 2005 Jun 14; [Epub ahead of print] Related Articles, Links
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Subjective health complaints without known physical pathology are common and might develop into somatoform disorders. Normalization of neuroticism and anxiety in patients with duodenal ulcer disease after a relapse-free state is acquired and maintained is an indication that biological factors influence psychological factors. Recent research has shown that psychological and behavioural changes, on the other hand, have the capacity to change the brain. Visceral hyperalgesia is an example of biological sensitisation, but the abnormal sensory perception can be normalised by hypnotherapy. The dual-etioloogy hypothesis of functional somatic syndromes implies that in some patients with somatoform disorders there is a predominant biological etiology, whereas in others there is a predominant psychological etiology. The theory is supported by recent research, and may result in better handling of patients. Cognitive factors like catastrophising amplifies subjective physical symptoms and emotions effect the perception of them. In preventive health care the following slogans are proposed as antidotes preventing subjective health complaints form developing into somatoform disorders: Do not listen to your body's signals! Do not trust your feelings! Do not trust your thoughts!

[1069]
Hypnosis decouples cognitive control from conflict monitoring processes of the frontal lobe
Neuroimage. 2005 Jun 16; [Epub ahead of print] Related Articles, Links
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Hypnosis can profoundly alter sensory awareness and cognitive processing. While the cognitive and behavioral phenomena associated with hypnosis have long been thought to relate to attentional processes, the neural mechanisms underlying susceptibility to hypnotic induction and the hypnotic condition are poorly understood. Here, we tested the proposal that highly hypnotizable individuals are particularly adept at focusing attention at baseline, but that their attentional control is compromised following hypnosis due to a decoupling between conflict monitoring and cognitive control processes of the frontal lobe. Employing event-related fMRI and EEG coherence measures, we compared conflict-related neural activity in the anterior cingulate cortex (ACC) and control-related activity in the lateral frontal cortex (LFC) during Stroop task performance between participants of low and high hypnotic susceptibility, at baseline and after hypnotic induction. The fMRI data revealed that conflict-related ACC activity interacted with hypnosis and hypnotic susceptibility, in that highly susceptible participants displayed increased conflict-related neural activity in the hypnosis condition compared to baseline, as well as with respect to subjects with low susceptibility. Cognitive-control-related LFC activity, on the other hand, did not differ between groups and conditions. These data were complemented by a decrease in functional connectivity (EEG gamma band coherence) between frontal midline and left lateral scalp sites in highly susceptible subjects after hypnosis. These results suggest that individual differences in hypnotic susceptibility are linked with the efficiency of the frontal attention system, and that the hypnotized condition is characterized by a functional
dissociation of conflict monitoring and cognitive control processes.

[1070]
Modulation of pain-induced endothelial dysfunction by hypnotisability
Pain. 2005 Jun 23; [Epub ahead of print]
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Mental stress induces endothelial dysfunction, that is a reduction of the post-occlusion brachial artery flow-mediated vasodilatation (FMD). This does not occur in subjects highly susceptible to hypnosis (Highs) in either the waking or hypnotic state. The aim of the present experiment was to assess whether endothelial dysfunction is also induced by acute nociceptive stimulation and whether high hypnotisability and/or the specific instruction of analgesia prevent its occurrence in awake highly hypnotizable individuals. Thus, nine Highs and nine subjects with low susceptibility to hypnosis (Lows) underwent an experimental session including the administration of pressor pain and of pressor pain associated with the instruction of analgesia. Heart rate, basal artery diameters and brachial artery flow-mediated vasodilation were measured during stimulation and rest conditions. Heart rate exhibited slight changes not modulated by hypnotisability. During painful stimulation both Highs and Lows showed a decrease of FMD, but it was significantly less pronounced in Highs. During the administration of painful stimulus together with the instruction of analgesia, only Highs reported analgesia and their FMD no longer decreased. This study provides the first evidence of pain-related endothelial dysfunction and extends previous findings concerning a sort of natural protection of Highs against the vascular effects of mental stress to acute pain.

[1071]
The cognitive interview: does it successfully avoid the dangers of forensic hypnosis?
Am J Psychol. 2005 Summer;118(2):213-34
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Seventy-two undergraduates viewed a videotape of a bank robbery that culminated in the shooting of a young boy. Several days later, participants were interviewed about their recollection of events in the film through baseline oral and written narrative accounts followed by random assignment to a hypnosis (HYP) condition, the cognitive interview (CI), or a motivated, repeated recall (MRR) control interview. Participants also completed a forced interrogatory recall test, which indexed potential report criterion differences between the interview conditions. In terms of information provided for the first time during treatment interviews, HYP led to greater productivity than the CI or the MRR interview, which did not differ significantly from each other. Evidence that these differences in recall resulted primarily from report criterion differences rather than differences in accessible memory was obtained from the forced interrogatory recall test. In this test, no differences were observed between the three interview conditions. Finally, the data revealed that participants' hypnotic ability was associated with the recall of erroneous and confabulatory material for those tested in the HYP and CI conditions but not those in the MRR condition. This suggests that some CI mnemonics may invoke hypnotic-like processes in hypnotizable people.

[1072]
Suicidality and interrogative suggestibility
Arch Suicide Res. 2005;9(4):353-9
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All people are subject to memory suggestibility, but suicidal individuals may be especially so. The link between suicidality and suggestibility is unclear given mixed findings and methodological weaknesses of past research. To test the link between suicidality and interrogative suggestibility, 149 undergraduates answered questions about suicidal thoughts and reasons for living, and participated in a direct suggestibility procedure. As expected, suggestibility correlated with suicidality but accounted for little overall variance (4%). Mental health professionals might be able to take advantage of client suggestibility by directly telling suicidal persons to refrain from suicidal thoughts or actions.

[1073]
Strategies for verifying false autobiographical memories
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This study examined the types of strategies people use to verify putative childhood memories and the degree to which their preferred strategies are restricted in typical memory implantation studies. We asked subjects to describe a situation in which they recalled a false childhood experience and a hypothetical situation in which they pretended to have developed a false memory after taking part in a memory implantation study. We also asked them how they did (or would) determine the source of the event. We found that subjects relied primarily on other people and cognitive strategies to verify their experiences. These results suggest that laboratory situations cultivate false memories in part because they prevent people from talking to others about the false event, which causes them to rely on less optimal strategies.
Induction of compulsive-like washing by blocking the feeling of knowing: an experimental test of the security-motivation hypothesis of obsessive-compulsive disorder
Behav Brain Funct. 2005 Jul 26;1:11
Woody EZ, Lewis V, Snider L, Grant H, Kamath M, Szechtman H
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BACKGROUND: H. Szechtman and E. Woody (2004) hypothesized that obsessive-compulsive disorder results from a deficit in the feeling of knowing that normally terminates thoughts or actions elicited by security motivation. To test the plausibility of this proposed mechanism, an experiment was conducted to produce an analog of washing in obsessive-compulsive disorder by eliciting a scenario of potential harm and using hypnosis to block changes in internally generated feelings that would normally occur during washing. RESULTS: Participants reacted with increased disgust, anxiety, and heart rate to their mental images of contamination and potential danger. As predicted, high but not low hypnotizable participants showed a significant prolongation of washing when change in feelings during washing was blocked hypnotically. CONCLUSION: Results show that blocking the affective signal that is normally generated during security-related behaviors, such as washing, leads to prolonged performance of these behaviors. This finding lends support to the plausibility of the proposed model of obsessive-compulsive disorder.

Hypnotic suggestion reduces conflict in the human brain
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Many studies have suggested that conflict monitoring involves the anterior cingulate cortex (ACC). We previously showed that a specific hypnotic suggestion reduces involuntary conflict and alters information processing in highly hypnotizable individuals. Hypothesizing that such conflict reduction would be associated with decreased ACC activation, we combined neuroimaging methods to provide high temporal and spatial resolution and studied highly and less-hypnotizable participants both with and without a suggestion to interpret visual words as nonsense strings. Functional MRI data revealed that under posthypnotic suggestion, both ACC and visual areas presented reduced activity in highly hypnotizable persons compared with either no-suggestion or less-hypnotizable controls. Scalp electrode recordings in highly hypnotizable subjects also showed reductions in posterior activation under suggestion, indicating visual system alterations. Our findings illuminate how suggestion affects cognitive control by modulating activity in specific brain areas, including early visual modules, and provide a more scientific account relating the neural effects of suggestion to placebo.

Experiencing hypnotizability scale motor items by an amputee: a brief report
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The following brief report describes the experiences of a hand and arm amputee following the administration of the Harvard Group Scale of Hypnotic Susceptibility, Form A (HGSHS:A) of Shor and Orne, 1962. The participant passed two of the three motor items involving his missing limb. This report discusses the results of a postsession interview regarding our participant's experiences during hypnosis and briefly discusses phantom limb sensations in general.

Teamwork approach to clinical hypnosis at a pediatric pulmonary center
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The aim of this report is to demonstrate the success of a teamwork approach for providing instruction in self-hypnosis at a Pediatric Pulmonary Center. In order to add to the hypnosis service provided by a pulmonologist at the Center, the Center social worker learned how to use clinical hypnosis. During a 3-year period, she instructed 72 patients (average age 11.6 years) in self-hypnosis. Eighty-two percent of the patients reported improvement or resolution of the primary symptoms, which included anxiety, asthma, chest pain, dyspnea, habit cough, hyperventilation, sighing, and vocal cord dysfunction. The social worker and pulmonologist consulted with each other on a regular basis regarding their hypnosis work, and achieved similar successful results following their hypnosis interventions. Thus, clinical hypnosis at a Pediatric Pulmonary Center can be provided by a team of varied professionals. As a team, these professionals can support each other in their on-going development of hypnosis skills.

Weitzenhofer A

The hypnosis world recently lost one of its giant figures, Andre Weitzenhoffer. Dr. Weitzenhoffer devoted almost his entire professional life to the study of hypnosis and hypnotic phenomena. While almost everyone in the field is familiar with his many professional contributions, not as many had the privilege of hearing the man speak candidly about his career and personal views. This is a transcript of an interview with Andre Weitzenhoffer conducted by Michael Yapko in 1988. In it he describes his personal history and how his interest in hypnosis began, how the Stanford Hypnotic Susceptibility Scales came about, why he feels the Scales are irrelevant in clinical practice, his views on Milton Erickson, and a number of other topics of general interest.

[1079]
The cognitive interview: does it successfully avoid the dangers of forensic hypnosis?
Am J Psychol. 2005 Summer;118(2):213-34
Whitehouse WG, Orne EC, Dinges DF, Bates BL, Nadon R, Orne MT
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Seventy-two undergraduates viewed a videotape of a bank robbery that culminated in the shooting of a young boy. Several days later, participants were interviewed about their recollection of events in the film through baseline oral and written narrative accounts followed by random assignment to a hypnosis (HYP) condition, the cognitive interview (CI), or a motivated, repeated recall (MRR) control interview. Participants also completed a forced interrogatory recall test, which indexed potential report criterion differences between the interview conditions. In terms of information provided for the first time during treatment interviews, HYP led to greater productivity than the CI or the MRR interview, which did not differ significantly from each other. Evidence that these differences in recall resulted primarily from report criterion differences rather than differences in accessible memory was obtained from the forced interrogatory recall test. In this test, no differences were observed between the three interview conditions. Finally, the data revealed that participants’ hypnotic ability was associated with the recall of erroneous and confabulatory material for those tested in the HYP and CI conditions but not those in the MRR condition. This suggests that some CI mnemonics may invoke hypnotic-like processes in hypnotizable people.

[1080]
[Nicotine addiction and current therapy of smoking cessation] [Article in Italian]
Clin Ter. 2005 Jul-Aug;156(4):159-71
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Nicotine is defined as substance which provokes addiction because it creates both physiological and biochemical modifications in the nervous system stimulating the activity of dopaminergic neurons releasing dopamine in the areas of the brain that control pleasure. In this paper, after a short overview of neurobiological and cellular mechanisms involved in the pathway of nicotine addiction, the main therapies, used in order to provide support to smokers who decide to reduce their cigarette consumption or to quit smoking, are examined. These therapies can be enclosed in the following categories: nicotine replacement therapy (NRT), non-nicotine pharmacological therapy (NNPT), psychological-behavioural therapies (PBT), alternative therapies (AT). In this work the advantages and disadvantages of various therapies are analysed, assessing the criteria found in literature. Results from randomised and controlled clinical studies which examine some of these therapies, alone or in association, also related to relapse time are reported. In conclusion, results of this analysis confirm that, as well as therapies and their treatment time, psychological support and personal motivation are indispensable for successful smoking cessation.

[1081]
Mexican norms for the Stanford Hypnotic Susceptibility Scale, Form C
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Normative data for the Mexican adaptation of the Stanford Hypnotic Susceptibility Scale, Form C (SHSS:C) are presented. Twenty-seven raters administered the scale to 513 Mexican volunteers. Score distribution, item analysis, and reliability of the SHSS:C are presented and compared to other international norming studies. The findings show that the Mexican adaptation of the SHSS:C has psychometric properties essentially comparable to those of the Dutch, German, Italian, and United States reference samples. However, the elevated sample mean suggests Mexicans may have an elevated ability to engage in hypnotic behavior, thus they would likely be especially good candidates for hypnotherapeutic interventions that would better the health options currently available.

[1082]
The Harvard Group Scale of Hypnotic Susceptibility: accuracy of self-report and the memory for items
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Whereas early studies have found moderately high agreement between self- and observer-rated scores on the Harvard Group Scale of Hypnotic Susceptibility, Form A (HGSHS:A), these studies shared a common confound in that participants were aware of being directly observed. In the present study, confederates made surreptitious observations of group participants’ hypnotic responding. Following the hypnotic procedure, participants indicated whether or not they remembered each item and provided self-reports of their hypnotic response. The study assesses the accuracy of participant self-report for hypnosis items when individuals are unaware of being observed. Thirty-two percent of participants failed to recognize at least one item from the hypnosis session, suggesting that the inability to remember items is a common phenomenon. When participants reported not remembering an item, the accuracy of their self-reported response was no better than chance.

[1083]
Treating psychological problems in medical settings: primary care as the de facto mental health system and the role of hypnosis
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Psychological comorbidity with medical illness is associated with poor health status, complicated medical management, and increased utilization and greater costs of medical services. Hypnosis practitioners in specialty psychological or psychiatric treatment settings infrequently treat such patients, since there is a greater likelihood of patients’ psychological problems being treated solely in primary medical care. Referring patients from primary care to the mental health system will most likely not result in patients initiating psychological or hypnotic treatment. At the same time, integrated provision of medical and psychological treatment in the medical office has demonstrated much higher rates of initiation of treatment and improved medical outcomes. Although hypnosis has been found to be an empirically effective treatment for many medical problems, when hypnosis practitioners do not practice in these medical sites then patients do not have access to effective hypnotic interventions for cotreatment of medical problems.

[1084]
Preferences for descriptors of hypnosis: a brief communication
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Alternative descriptors of the capacity to experience hypnosis, intended to describe the same phenomenon, appear in the current literature. Published members of the Society for Clinical and Experimental Hypnosis (SCEH) were surveyed to determine their preferences. The descriptors were empirically derived from recent International Journal of Clinical and Experimental Hypnosis articles and input from the executive committee of SCEH. Participants also indicated their primary theoretical conceptualization of hypnosis. Hypnotizability was chosen nearly 4 times more frequently than the next most favored choice (susceptibility) as a descriptor of hypnotic talent. Hypnosis as an "identifiable state" was chosen more than 4 times more frequently than the socio-cognitive version. This latter finding suggests that the notion of the continued debatability of hypnosis as primarily a state is now shared by only a few.

[1085]
The importance of being earnest when crafting definitions: science and scientism are not the same thing
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The APA Division 30 definition of hypnosis is laudable in some respects. For instance, the committee rightly defines the "induction" as nothing more or less than the first suggestion after the introduction. However, the definition stumbles over its nonposition on whether the word hypnosis must be uttered during the procedure. This equivocation invites research designs that preemptively define a hypnotic group and a control group in terms of whether or not the word hypnosis is used in the protocol. These designs represent a backslide into naive operationism: they reveal little new about human nature or hypnosis. The field deserves an optimally heuristic definition that preserves pluralism and is relatively resistant to the teflon shield of preemptive definition. Researchers and practitioners require a definition that recognizes the incompleteness of our concepts, generates a level epistemological playing field, and enables hypnosis theories to "reach."

[1086]
Forging ahead: the 2003 APA Division 30 definition of hypnosis
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The article describes the rationale for and the process of developing a new definition of hypnosis by the Society of Psychological Hypnosis, Division 30 of the American Psychological Association. Both theoretical and practical implications led to the production of the definition, which is targeted toward informing clinicians, researchers, and the lay...
Although attention is a central theme in psychological science, hypnosis researchers rarely incorporate attentional findings into their work. As with other biological systems, attention has a distinct anatomy that carries out basic psychological functions. Specific brain injuries, states, and drugs can all influence attentional networks. Investigation into these networks using modern neuroimaging techniques has revealed important mechanisms involved in attention. In this age of genomics, genetic approaches can supplement these neuroimaging techniques. As genotyping becomes an affordable and technologically viable complement to phenotyping, exploratory genetic assays offer insights into the genetic bases of both attention and hypnotizability. This paper discusses relevant aspects of attentional mechanisms and their underlying neuroanatomy as they relate to hypnosis. Underlining data from attentional networks, neuroimaging, and genetics, these findings should help to explain individual differences in hypnotizability and the neural systems subserving hypnosis.

The struggle to listen: continuing reflections, lingering paradoxes, and some thoughts on recovery of memory
J Am Psychoanal Assoc. 2005 Summer;53(3):789-810
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This paper offers a further expansion of the author's continuing endeavor to highlight and explore subtle distinctions and lingering paradoxes in how we listen, and to reconsider their profound implications for clinical work and discovery. Several perhaps commonplace clinical moments are used to sharpen illumination on psychic experience that might otherwise remain outside conscious awareness, whether in the domain of the repressed or in other mnemonic realms, such as "implicit" or "procedural" memory. It is suggested that added dimensions of these different levels of memory may, through our struggle to listen, be ultimately knowable.

Both the distinctiveness heuristic and discrepancy detection hypotheses were investigated by independently manipulating both schema consistency and incidental suggestion in an eyewitness memory paradigm. A sequence of slides was shown, followed by a postevent questionnaire that contained both schema-typical and schema-atypical information. Fifteen minutes later, a source-monitoring task was administered. In Experiment 1, the proportion of source misattribution errors was greater for schema-typical items than for schema-atypical items, and the proportion of errors on suggested items was greater than that on control items. Suggestion affected schema-typical and schema-atypical items equally, providing no support for the predictions of either hypothesis. In Experiment 2, the interval between the questionnaire and the source test was manipulated. The results of Experiment 1 were replicated under the short delay, whereas the proportion of errors increased under the long delay. An associative network model involving two types of episodic traces was used to account for the results.

The dynamics of the spatial synchronization of brain biopotentials in conditions of intense attention in the hypnotic state
Tambiev AE, Medvedev SD

Twelve mentally healthy women aged 21-38 years were studied in the state of consciousness and hypnosis. The main study method was electroencephalography with assessment of the spatial synchronization of brain biopotentials (SSBP). Suggestion of high-intensity attention delivered to subjects in the hypnotic state was found to lead to significant reorganization of SSBP, with increases in SSBP between both occipital areas, the right temporal area, and other parts of the brain. The dynamics of brain SSBP in intense attention were opposite in the hypnotic and conscious states, which appears to result from the temporary exclusion in the hypnotic state of the functions of the frontal areas of the cortex responsible for conscious control and regulation of ongoing activity.

Systematic review of hypnotherapy for treating symptoms in terminally ill adult cancer patients
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The aim of this review was to find the evidence for or against the use of hypnotherapy in the treatment of symptoms in terminally ill adult cancer patients. The title and abstract were evaluated following a search through Index Medicus/MEDLINE, EMBASE, CINHAHL, CancerLit, AHMED, Psychinfo, CISCOM, Cochrane and DARE. Search terms included hypnotherapy, cancer, terminal care and palliative care. Inclusion criteria included systematic reviews, randomized controlled trials, observational and prospective studies, retrospective surveys, case studies and reports. A total of 27 papers were evaluated. Two reviewers assessed the studies, one extracted the relevant data and 10% were evaluated independently by a third reviewer. The 27 papers comprised a randomized controlled trial, an observational study, a retrospective questionnaire and 24 case studies. Hypnotherapy was used to treat a variety of symptoms, including pain, anxiety and depression. The poor quality of the studies and heterogeneity of the study population limited further evaluation; further research is required to understand the role of hypnotherapy in managing symptoms.

[1092]
[Migraine in childhood] [Article in French]
Annequin D
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In childhood and adolescence, migraine is the main primary headache. This diagnosis is largely underestimated and misdiagnosed in the pediatric population. Because of the lack of specific biologic markers, specific investigation tools or brain imaging techniques, these clinical entities are too often considered to be a psychological illness. Migraine is a severe headache evolving by stereotyped attacks associated with marked digestive symptoms (nausea and vomiting); throbbing pain and sensitivity to sound or light are common symptoms; the attack is sometimes preceded by a visual or sensory aura. During attacks, pain intensity is severe; most of the children have to lie down. Abdominal pain is frequently associated, rest brings relief and sleep often ends the attack. The prevalence of migraine varies between 5 percent and 10 percent in childhood. In children, the duration of the headache is quite often shorter than in adults; it is more often frontal and bilateral (2/3 of cases) than one-sided. Migraine is a disabling illness: children with migraine miss more school days in a school year than their matched controls. Migraine episodes are frequently triggered by several factors: emotional stress (school pressure, vexation, excitement: upset), hypoglycemia, lack of sleep or excess (week end migraine), sensorial stimulation (loud noise, bright light, strong odor, heat or cold...), sympathetic stimulation (sports, physical exercise). Treatment must be given early at onset of attacks; oral ibuprofen (10 mg/kg) is recommended. If the oral route is not available because of nausea or vomiting, the rectal or nasal routes can be used. Triptan can be prescribed (body weight above 30 kg) when NSAID (prescribed at right dose and time) fail to abort the attack. Non-drug treatments (relaxation training, self hypnosis, biofeedback) have shown to have good efficacy as prophylactic measures. Daily prophylactic drug treatments are prescribed in second line after failure of non-drug treatment.

[1093]
Molecular and systemic mechanisms of general anaesthesia: the 'multi-site and multiple mechanisms' concept
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PURPOSE OF REVIEW: Amnesia, hypnosis and immobility are essential components of general anaesthesia. This review highlights recent advances in our understanding of how these components are achieved at a molecular level. RECENT FINDINGS: Commonly used volatile anaesthetic agents such as isoflurane or sevoflurane cause immobility by modulating multiple molecular targets predominantly in the spinal cord, including gamma-aminobutyric acidA receptors, glycine receptors, glutamate receptors and TREK-1 potassium channels. In contrast, intravenously applied drugs such as propofol or etomidate depress spinal motor reflexes almost exclusively via enhancing gamma-aminobutyric acidA receptor function. Studies on knock-in animals showed that etomidate and propofol act via gamma-aminobutyric acidA receptors containing beta3 subunits, whereas gamma-aminobutyric acidA receptors including alpha2 and gamma subunits mediate the myorelaxant properties of diazepam. These findings suggest that a large fraction of gamma-aminobutyric acidA receptors in the spinal cord assemble from alpha2, beta3 and most probably gamma2 subunits. The hypnotic actions of etomidate are mediated by beta3-containing gamma-aminobutyric acidA receptors expressed in the brain. In contrast, gamma-aminobutyric acidA receptors harbouring beta2 subunits produce sedation, but not hypnosis. Furthermore, there is growing evidence that extrasynaptic gamma-aminobutyric acidA receptors in the hippocampus containing alpha5 subunits contribute to amnesia. SUMMARY: Clinical anaesthesia is based on drug actions at multiple anatomical sites in the brain. The finding that amnesia, hypnosis and immobility involve distinct molecular targets opens new avenues for developing improved therapeutic strategies in anaesthesia.

[1094]
Functional dyspepsia pathogenesis and therapeutic options--implications for management
Dig Liver Dis. 2005 Aug;37(8):547-58
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Functional dyspepsia is far more common than dyspepsia due to organic disease, both in the community and general practice. Proposed aetiopathogenic factors include gastric acid, Helicobacter pylori infection, delayed emptying,
cross-cultural aspects of hypnosis could enhance understanding of phenomenological and perceptual aspects of

Explanations are offered within the framework of Woodard's theory of Perceptually Oriented Hypnosis. Research on literature is reviewed and summarized relevant to present cross-cultural, shamanic, and spiritual aspects of hypnosis. Woodard FJ. Psychol Rep. 2005 Aug;97(1):141-57

pain. Previous findings concerning a sort of natural protection of Highs against the vascular effects of mental stress to acute FMD no longer decreased. This study provides the first evidence of pain-related endothelial dysfunction and extends administration of painful stimulation together with the instruction of analgesia, only Highs reported analgesia and their stimulation both Highs and Lows showed a decrease of FMD, but it was significantly less pronounced in Highs. During the painful instruction of analgesia. Heart rate, basal artery diameters and brachial artery flow-mediated vasodilation were measured under an experimental session including the administration of pressor pain and of pressor pain associated with the nociceptive stimulation and whether high hypnotisability and/or the specific instruction of analgesia prevent its occurrence state. The aim of the present experiment was to assess whether endothelial dysfunction is also induced by acute vasodilation (FMD). This does not occur in subjects highly susceptible to hypnosis (Highs) in either the waking or hypnotic state. The mental stress induces endothelial dysfunction, that is a reduction of the post-occlusion brachial artery flow-mediated vasodilation (FMD). This does not occur in subjects highly susceptible to hypnosis (Highs) in either the waking or hypnotic state. The aim of the present experiment was to assess whether endothelial dysfunction is also induced by acute nociceptive stimulation and whether high hypnotisability and/or the specific instruction of analgesia prevent its occurrence in awake highly hypnotizable individuals. Thus, nine Highs and nine subjects with low susceptibility to hypnosis (Lows) underwent an experimental session including the administration of pressor pain and of pressor pain associated with the instruction of analgesia. Heart rate, basal artery diameters and brachial artery flow-mediated vasodilation were measured during stimulation and rest conditions. Heart rate exhibited slight changes not modulated by hypnotisability. During painful stimulation both Highs and Lows showed a decrease of FMD, but it was significantly less pronounced in Highs. During the administration of painful stimulation together with the instruction of analgesia, only Highs reported analgesia and their FMD no longer decreased. This study provides the first evidence of pain-related endothelial dysfunction and extends previous findings concerning a sort of natural protection of Highs against the vascular effects of mental stress to acute pain.

Do jurors "know" what isn't so about child witnesses? Are expert witnesses needed in child sexual abuse cases to educate jurors about children's memory, suggestibility, and reactions to abuse, or do jurors already know what such experts could tell them? To cast light on this question, we surveyed jurors and jury-eligible college students and compared their beliefs with what is known via scientific research regarding children's memory and ability to testify, reactions to interrogation, and reactions to sexual abuse. We also asked participants to infer results of four widely cited studies of children's suggestibility. Participants' beliefs were consistent with findings from research on some issues (e.g., that children can be led to claim that false events occurred) but diverged from the scientific consensus on other issues (e.g., whether children can remember painful events in infancy). Similarly, participants sometimes overestimated and sometimes underestimated the level of suggestibility observed in empirical studies. Individual differences in accuracy were related to participants' gender, education and ethnicity, and there was considerable disagreement among participants on many questions. Implications of findings for the admissibility of expert testimony in child abuse cases are discussed.

Modulation of pain-induced endothelial dysfunction by hypnotisability. Mental stress induces endothelial dysfunction, that is a reduction of the post-occlusion brachial artery flow-mediated vasodilation (FMD). This does not occur in subjects highly susceptible to hypnosis (Highs) in either the waking or hypnotic state. The aim of the present experiment was to assess whether endothelial dysfunction is also induced by acute nociceptive stimulation and whether high hypnotisability and/or the specific instruction of analgesia prevent its occurrence in awake highly hypnotizable individuals. Thus, nine Highs and nine subjects with low susceptibility to hypnosis (Lows) underwent an experimental session including the administration of pressor pain and of pressor pain associated with the instruction of analgesia. Heart rate, basal artery diameters and brachial artery flow-mediated vasodilation were measured during stimulation and rest conditions. Heart rate exhibited slight changes not modulated by hypnotisability. During painful stimulation both Highs and Lows showed a decrease of FMD, but it was significantly less pronounced in Highs. During the administration of painful stimulation together with the instruction of analgesia, only Highs reported analgesia and their FMD no longer decreased. This study provides the first evidence of pain-related endothelial dysfunction and extends previous findings concerning a sort of natural protection of Highs against the vascular effects of mental stress to acute pain.

Perceptually oriented hypnosis: cross-cultural perspectives

Literature is reviewed and summarized relevant to present cross-cultural, shamanic, and spiritual aspects of hypnosis. Explanations are offered within the framework of Woodard's theory of Perceptually Oriented Hypnosis. Research on cross-cultural aspects of hypnosis could enhance understanding of phenomenological and perceptual aspects of
hypnosis, increase knowledge of hypnotic phenomena, and expand understanding of perceptual awareness. A summary of the qualitative research methodologies to enhance understanding of multicultural hypnotic experiences is presented. This groundwork provides for further exploration of cross-cultural hypnosis. Surprisingly, some suggestions have remained underutilized or not published.

[1099]
A preliminary phenomenological study of being hypnotized and hypnotizing
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This paper presents phenomenological research conducted following Woodard's phenomenological and perceptual research methodology for understanding hypnotic experiencing. The research emphasizes examining the internal experiencings of individuals involved in hypnotic experiencing. Examples are presented of Individual Situated Structures and the General Structures from both a group of 8 participants who hypnotized their clients and another group of 17 individuals who volunteered to be hypnotized. The explicated themes identified in hypnotic experiencing (the hypnotic relationship, phenomenology of trance, use of imagination, problem with psychic energy, a gestalt of experiencing, and linear-nonlinear experiencing) are discussed. The author discusses limitations of this study and suggestions for further work.

[1100]
Hypnotic disgust makes moral judgments more severe
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Highly hypnotizable participants were given a posthypnotic suggestion to feel a flash of disgust whenever they read an arbitrary word. They were then asked to rate moral transgressions described in vignettes that either did or did not include the disgust-inducing word. Two studies show that moral judgments can be made more severe by the presence of a flash of disgust. These findings suggest that moral judgments may be grounded in affectively laden moral intuitions.

[1101]
False beliefs about fattening foods can have healthy consequences
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We suggested to 228 subjects in two experiments that, as children, they had had negative experiences with a fattening food. An additional 107 subjects received no such suggestion and served as controls. In Experiment 1, a minority of subjects came to believe that they had felt ill after eating strawberry ice cream as children, and these subjects were more likely to indicate not wanting to eat strawberry ice cream now. In contrast, we were unable to obtain these effects when the critical item was a more commonly eaten treat (chocolate chip cookie). In Experiment 2, we replicated and extended the strawberry ice cream results. Two different ways of processing the false suggestion succeeded in planting the false belief and producing avoidance of the food. These findings show that it is possible to convince people that, as children, they experienced a negative event involving a fattening food and that this false belief results in avoidance of that food in adulthood. More broadly, these results indicate that we can, through suggestion, manipulate nutritional selection and possibly even improve health.

[1102]
Understanding pain, part 2: pain management
Br J Nurs. 2005 Sep 22-Oct 12;14(17):904-9
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This article is the second in a two-part series which explores pain and its management from a physiological perspective. Nurses play an important role in assessing and managing pain. Effective pain management by nurses requires them to have an understanding of the biological basis of the pain interventions which may be used to control pain. This article emphasizes the importance of pain assessment as a precursor for effective pain management and explores the biological basis of pain interventions which contribute to pain control. The role of non-pharmacological approaches in alleviating pain and their actions which contribute to pain relief are explored. The three main types of pharmaceutical agents used, non-opioids, opioids and adjuvant drugs, are introduced and their mechanisms of actions discussed.

[1103]
Complementary therapies for reducing body weight: a systematic review
Int J Obes (Lond). 2005 Sep;29(9):1030-8
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The prevalence of obesity is increasing at an alarming rate and a plethora of complementary therapies are on offer claiming effectiveness for reducing body weight. The aim of this systematic review is to critically assess the evidence from randomized controlled trials (RCTs) and systematic reviews of complementary therapies for reducing body weight.

Literature searches were conducted on Medline, Embase, Amed, and the Cochrane Library until January 2004. Hand-searches of relevant medical journals and bibliographies of identified articles were conducted. There were no restrictions regarding the language of publication. Trial selection, quality assessment and data abstraction were performed systematically and independently by two authors. Data from RCTs and systematic reviews, which based their findings on the results of RCTs, were included. Six systematic reviews and 25 additional RCTs met our inclusion criteria and were reviewed. The evidence related to acupuncture, acupressure, dietary supplements, homeopathy and hypnotherapy. Except for hypnotherapy, Ephedra sinica and other ephedrine-containing dietary supplements the weight of the evidence is not convincing enough to suggest effectiveness. For these interventions, small effects compared with placebo were identified. In conclusion, our findings suggest that for most complementary therapies, the weight of the evidence for reducing body is not convincing. Hypnotherapy, E. sinica and other ephedrine-containing dietary supplements may lead to small reductions in body weight. However, the intake of E. sinica and ephedrine is associated with an increased risk of adverse events. Interventions suggesting positive effects in single RCTs require independent replication.

[1104] Hypnosis for pain management in the older adult
Pain Manag Nurs. 2005 Sep;6(3):105-11
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Pain is a physical, emotional and psychologic phenomenon that is often ignored in older adults causing depression and poor quality of life. Older adults report the use of complementary and alternative medicine in some form with 80% of these users reporting improvement in their health conditions. Although physical pain in the older adult is usually managed with pharmacologic interventions, methods that may reduce the use of prescription drugs may decrease adverse effects that can compromise the physiologic state of the older adult. Hypnosis has continued to gain acceptance within mainstream medicine as an appropriate treatment and can be integrated safely with conventional medicine as an effective treatment for a variety of conditions in the older adult. It is an intervention that can be used for relaxation and pain control, especially when conventional pharmacologic regimens have failed. The purpose of this article is to review the concepts related to pain in older adults; the use of complementary and alternative medicine in the older adult; hypnosis and the older adult (i.e., background, definition, benefits, research, mechanism of action, hypnotizability, and the process); and the implications of using hypnosis for pain management in the older adult.

[1105] Studentized maximum root procedures for coherent analyses of two-factor fixed-effects designs
Psychol Methods. 2005 Sep;10(3):352-66
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The authors provide generalizations of R. J. Boik's (1993) studentized maximum root (SMR) procedure that allow for simultaneous inference on families of product contrasts including simple effect contrasts and differences among simple effect contrasts in coherent analyses of data from 2-factor fixed-effects designs. Unlike the F-based simultaneous test procedures (STPs) proposed by M. A. Betz and K. R. Gabriel (1978) for coherent analyses allowing for inferences on all factorial contrasts, SMR STPs are designed for analyses where each contrast of interest is a product contrast, which is usually the case in analyses of data from factorial experiments. When both factors have more than 2 levels, SMR STPs always provide more power and precision than F STPs for inferences on product contrasts. Copyright 2005 APA, all rights reserved.

[1106] Imagined risk of suffocation as a trigger for hyperventilation
Psychosom Med. 2005 Sep-Oct;67(5):813-9
Van Dieist I, De Peuter S, Devrieze S, Wellens E, Van de Woestijne KP, Van den Bergh O
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OBJECTIVE: Although hyperventilation has been hypothesized to play a role in many pathologies, its critical triggers remain poorly understood. The present experiment aimed to test whether stronger hyperventilation responses occur in response to suggested risk of suffocation compared with other fearful situations in high- and low-trait anxious women. METHODS: Fractional end-tidal CO2-concentration (FetCO2), respiratory frequency, and inspiratory volume were measured noninvasively in high- (n = 24) and low- (n = 24) trait anxious women during imagery of 3 fear, 1 tension, 1 depressive, and 3 relaxation scripts. RESULTS: Decreases in FetCO2 occurred in all fear scripts. High-trait anxious women showed a stronger reduction in FetCO2 compared with low-trait anxious women during the fear script suggesting risk of suffocation but not during the other fear scripts. This effect was unrelated to any of the self-reported fear ratings. Self-reported fear of entrapment was associated with an overall lower FetCO2 but not with enhanced reactivity to imagined entrapment. CONCLUSION: High-trait anxiety is
associated with stronger respiratory responsivity to imagined risk of suffocation and may constitute a specific vulnerability factor for the development of panic disorder and claustrophobia.

INTRODUCTION: Autogenic training is a widespread technique used in psychotherapy. The British school of autogenic training cites a large list of diseases, health states, and life changes, in which autogenic training can be of help. We wanted to explore the application of autogenic training as a therapy for adjustment disorder in adolescents. The sample consisted of a homogeneous group of 31 individuals, with an average age of 17.3 +/- 0.2 years, who were diagnosed with adjustment disorder, F 43.2, in accordance with ICD 10 search criteria. OBJECTIVE: The aim of our work was to figure out the influence of autogenic training on adjustment disorder, through biophysical and biochemical indicators, and to research the efficacy of autogenic training as a therapy for adjustment disorder in adolescents. METHOD: We observed adjustment disorder indicators and their changes in three phases, using initial, final, and control values, which we measured immediately before the beginning, immediately after the completion, and six months after the completion, of the practical course in autogenic training. We measured systolic and diastolic arterial blood pressure, brachial pulse rates, cortisol levels in plasma, cholesterol levels in blood, as well as glucose concentrations. During that period, autogenic training was employed as the sole therapy. RESULTS: The study confirmed our preliminary assumptions. The measurements we performed showed that arterial blood pressure, pulse rates, cholesterol and cortisol concentrations, after the application of autogenic training among adolescents suffering from adjustment disorder, were lower than the initial values. They remained lower even six months after the completion of the practical course in autogenic training. CONCLUSION: We concluded that autogenic training significantly decreases the values of physiological indicators of adjustment disorder, diminishes the effects of stress in an individual, and eases the adaptation of adolescents to stress, helping with recovery.

Sanatorium rehabilitation of weak-sighted invalids shows that they need psychocorrection and psychotherapy. The corrective measures should be based on psychological examination results and subjective preferences of the weak-sighted invalids. Criteria of the design of corrective programs and their efficacy are described.

The effect of emotions on pain perception is generally recognized but the underlying mechanisms remain unclear. Here, emotions related to pain were induced in healthy volunteers using hypnosis, during 1-min immersions of the hand in painfully hot water. In Experiment 1, hypnotic suggestions were designed to induce various positive or negative emotions. Compared to a control condition with hypnotic-relaxation, negative emotions produced robust increases in pain. In Experiment 2, induction of pain-related anger and sadness were found to increase pain. Pain increases were associated with increases in self-rated desire for relief and decreases in expectation of relief, and with increases in arousal, negative affective valence and decreases in perceived control. In Experiment 3, hypnotic suggestions specifically designed to increase and decrease the desire for relief produced increases and decreases in pain, respectively. In all three experiments, emotion-induced changes in pain were most consistently found on ratings of pain unpleasantness compared to pain intensity. Changes in pain-evoked cardiac responses (R-R interval decrease), measured in experiments 2 and 3, were consistent with changes in pain unpleasantness. Correlation and multiple regression analyses suggest that negative emotions and desire for relief influence primarily pain affect and that pain-evoked autonomic responses are strongly associated with pain affect. These results confirm the hypothesized influence of the desire for relief on pain perception, and particularly on pain affect, and support the functional relation between pain affect and autonomic nociceptive responses. This study provides further experimental confirmation that pain-related emotions influence pain perception and pain-related physiological responses.

Review article: The history of hypnotherapy and its role in the irritable bowel syndrome
Aliment Pharmacol Ther. 2005 Dec;22(11-12):1061-7
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Hypnosis is a technique by which an individual can gain a degree of control over physiological as well as psychological function. This paper reviews the history of the phenomenon as well as the accumulating evidence that it is effective in relieving the symptoms of irritable bowel syndrome and improving the quality of life of sufferers. The physiological effects of hypnosis are also discussed coupled with an outline of how a hypnotherapy service might be provided.

[1111]
Hypnosis-associated blue-tinted vision: a case report
BMC Ophthal. 2005 Dec 1;5:28
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BACKGROUND: Self-hypnosis has been taught routinely at the SUNY Upstate Medical University for treatment of pulmonary symptoms thought to be amenable to psychological therapy. While using hypnosis for relaxation, four individuals, including a patient with cystic fibrosis, reported development of blue-tinted vision. Based on a search of the literature, we believe this is the first published report of hypnosis-associated blue-tinted vision. CASE PRESENTATION: The patient reported blue-tinted vision when he used hypnosis on an almost daily basis for seven years. The visual change typically occurred when he was relaxed. Moreover, a concurrent erection in the absence of sexual thoughts usually was present. The other three individuals reported blue-tinted vision after learning how to use hypnosis for relaxation as part of a group hypnosis instruction. CONCLUSION: The blue-tinted vision experienced by the individuals in this report may be the result of an hypnosis-induced primary change in cognitive processing. Additionally, as the relaxing effect of chronic pain may be associated with a reduction in blood pressure and increased blood flow, hypnosis-associated blue-tinted vision also may be related to retinal vasodilation.

[1112]
Treatment expectations for CAM interventions in pediatric chronic pain patients and their parents
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Patient expectations regarding complementary and alternative medicine (CAM) interventions have important implications for treatment adherence, attrition and clinical outcome. Little is known, however, about parent and child treatment expectations regarding CAM approaches for pediatric chronic pain problems. The present study examined ratings of the expected benefits of CAM (i.e. hypnosis, massage, acupuncture, yoga and relaxation) and conventional medicine (i.e. medications, surgery) interventions in 45 children (32 girls; mean age = 13.8 years +/- 2.5) and parents (39 mothers) presenting for treatment at a specialty clinic for chronic pediatric pain. Among children, medications and relaxation were expected to be significantly more helpful than the remaining approaches (P &lt; 0.01). However, children expected the three lowest rated interventions, acupuncture, surgery and hypnosis, to be of equal benefit. Results among parents were similar to those found in children but there were fewer significant differences between ratings of the various interventions. Only surgery was expected by parents to be significantly less helpful than the other approaches (P &lt; 0.01). When parent and child perceptions were compared, parents expected hypnosis, acupuncture and yoga, to be more beneficial than did children, whereas children expected surgery to be more helpful than did parents (P &lt; 0.01). Overall, children expected the benefits of CAM to be fairly low with parents' expectations only somewhat more positive. The current findings suggest that educational efforts directed at enhancing treatment expectations regarding CAM, particularly among children with chronic pain, are warranted.

[1113]
BIS monitor findings during self-hypnosis
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OBJECTIVE: We describe BIS values for a patient undergoing breast surgery under self-hypnosis in order to access the value of global surface EEG measures occurring during this process. METHODS: Following verbal consent, a BIS(TM) monitor (Aspect Medical, Newton MA) was placed and values measured while the patient performed self-hypnosis for a simple mastectomy and sentinel node biopsy. RESULTS: Thirty-nine minutes after incision the BIS value decreased transiently to 72 followed by several other transient decreases, the lowest of which was 59. Values remained at approximately 90 throughout most of the operative period. The BIS value returned to baseline after completion of the operation. CONCLUSIONS: Our findings support the hypothesis that hypnosis is a dynamic cerebral process incorporating many changes within brain activation centers and one distinct from dissociative patterns seen under anesthesia. Current algorithms employed by the BIS(TM) monitor add little to the management of patients utilizing hypnosis for analgesia.

[1114]
Pain and anxiety during interventional radiologic procedures: effect of patients' state anxiety at baseline and modulation by nonpharmacologic analgesia adjuncts
PURPOSE: To assess how patients' underlying anxiety affects their experience of distress, use of resources, and responsiveness toward nonpharmacologic analgesia adjunct therapies during invasive procedures. MATERIALS AND METHODS: Two hundred thirty-six patients undergoing vascular and renal interventions, who had been randomized to receive during standard care treatment, structured empathic attention, or self-hypnotic relaxation, were divided into two groups: those with low state anxiety scores on the State-Trait Anxiety Inventory (STAI, scores < 43; n = 116) and those with high state anxiety scores (&gt; or = 43; n = 120). All had access to patient-controlled analgesia with fentanyl and midazolam. Every 15 minutes during the procedure, patients rated their anxiety and pain on a scale of 0-10 (0, no pain/anxiety at all; 10, worst possible pain/anxiety). Effects were assessed by analysis of variance and repeated-measures analysis. RESULTS: Patients with high state anxiety levels required significantly greater procedure time and medication. Empathic attention as well as hypnosis treatment reduced procedure time and medication use for all patients. These nonpharmacologic analgesia adjunct treatments also provided significantly better pain control than standard care for patients with low anxiety levels. Anxiety decreased over the time of the procedure; patients with high state anxiety levels experienced the most significant decreases in anxiety with nonpharmacologic adjuncts whereas patients with low state anxiety levels coped relatively well under all conditions. CONCLUSION: Patients' state anxiety level is a predictor of trends in procedural pain and anxiety, need for medication, and procedure duration. Low and high state anxiety groups profit from the use of nonpharmacologic analgesia adjuncts but those with high state anxiety levels have the most to gain.
In this study, 5- and 6-year-olds were read a story and asked to recall its details. Two independent factors—prestory knowledge and poststory suggestions—were crossed to examine the effects on children's story recall. The results indicated that prestory social knowledge about the story protagonist as well as academic knowledge relating to the content of the story influenced the accuracy of children's recall immediately after the story presentation. Following the suggestive interview, children reported interviewer-provided social and academic misinformation to a greater extent when the misinformation was consistent with their prior knowledge. In contrast, children were more likely to refute misinformation that contradicted their academic knowledge. These findings are discussed in terms of the mechanisms underlying the knowledge-memory and knowledge-suggestibility linkages.

[1119] Changes in mismatch negativity across pre-hypnosis, hypnosis and post-hypnosis conditions distinguish high from low hypnotic susceptibility groups
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The role of alterations in mismatch negativity (MMN) in hypnosis was examined by recording MMN of the auditory ERP at frontal (F3, Fz, and F4) and mastoid (M1 and M2) placements. Frontal MMN is believed to reflect activity in right anterior cortical generators, whereas MMN at mastoid leads reflects generators located bilaterally in the temporal auditory cortex. MMN recordings were obtained in 11 low and 12 high hypnotically susceptible participants in three successive blocks; pre-hypnosis, hypnosis and post-hypnosis. Frontal (but not temporal) MMN showed a significant quadratic trend across testing conditions. It increased during hypnosis and then dropped post-hypnosis for both susceptibility groups. Linear trends for frontal and temporal MMN showed directly opposite patterns of change in the interaction between hypnotic susceptibility and testing blocks. Frontal MMN built up linearly over the test blocks in high relative to low susceptibility participants. Temporal MMN showed the reverse pattern and increased linearly across test conditions in those with low relative to high hypnotic susceptibility.

[1120] Psychosocial interventions for conversion disorder
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BACKGROUND: Conversion disorder is an alteration or loss of physical functioning suggestive of a physical disorder that is thought to be due to a psychological stressor or conflict. The fact that many theories about the cause of conversion disorder focus on psychological and social factors would suggest that a psychosocial intervention might be of most benefit. OBJECTIVES: To investigate the efficacy of psychosocial interventions on people diagnosed with conversion disorder compared with standard care, a biological intervention or another psychosocial intervention. SEARCH STRATEGY: We searched the Cochrane Depression, Anxiety and Neurosis Group Trials Register (May 2004), various databases on OVID (February 2004), handsearched reference lists and textbooks on conversion disorder and contacted relevant authors. SELECTION CRITERIA: We included all randomised controlled trials that compared psychosocial interventions for conversion disorder with standard care or other interventions (biological or psychosocial). DATA COLLECTION AND ANALYSIS: We reliably selected, quality assessed and extracted data from the studies. For dichotomous outcomes we calculated a relative risk with its associated 95% confidence interval and a number needed to treat. For continuous data we calculated a weighted mean difference. MAIN RESULTS: The search identified 260 references, 217 were clearly not relevant to this review and excluded on the basis of their titles and abstracts, 40 more were excluded after reading the full papers (the reasons are given in the excluded studies tables) and only three studies (total n =119) met the inclusion criteria. One study was concerned with paradoxical injunction therapy and the other two studied the value of hypnosis. The three studies had different interventions and control groups so the results could not be combined. All of the studies were of poor methodological quality and it is therefore difficult to place much value on the results of the studies. We were unable to include some data because of poor reporting. AUTHORS' CONCLUSIONS: Randomised studies are possible in this field. The use of psychosocial interventions for conversion disorder requires more research and it is not possible to draw any conclusions about their potential benefits or harms from the included studies.

[1121] Helping children with asthma by repairing maternal-infant bonding problems
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Studies about the psychology of childhood asthma have revealed that parenting difficulties are related to the development of asthma in some children. Disruptions in maternal-infant bonding are highly correlated with pediatric asthma and are...
presented as a cause for these parenting problems. Bonding problems are known to be caused most often by physical separation at birth or by some recent trauma in the mother's life. By using hypnosis to remove the pain of the separation or trauma in the mother, and by creating a new birth history in her imagination, some children's asthmatic symptoms have been shown to remit or greatly improve. The hypnotic method for this treatment is described.

[1122]
Treatment of binge eating with automatic word processing and self-hypnosis: a case report
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Binge eating frequently is related to emotional stress and mood problems. In this report, we describe a 16-year-old boy who utilized automatic word processing (AWP) and self-hypnosis techniques in treatment of his binge eating, and associated anxiety, insomnia, migraine headaches, nausea, and stomachaches. He was able to reduce his anxiety by gaining an understanding that it originated as a result of fear of failure. He developed a new cognitive strategy through AWP, after which his binge eating resolved and his other symptoms improved with the aid of self-hypnosis. Thus, AWP may have helped achieve resolution of his binge eating by uncovering the underlying psychological causes of his symptoms, and self-hypnosis may have given him a tool to implement a desired change in his behavior.

[1123]
Hypnotic treatment of PTSD in children who have complicated bereavement
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Although conceptualized as a normal reaction to loss and not classified as a mental disorder, grief can be considered a focus of treatment. When grief complicates and becomes pathological by virtue of its duration, intensity, and absence or by bizarre or somatic manifestation, a psychiatric diagnosis is in order. Childhood PTSD in Complicated Bereavement is a condition derived from the loss of a loved one when the nature of death is occasioned through traumatic means. The traumatic nature of the loss engenders trauma symptoms, which impinge on the child's normal grieving process and his/her ability to negotiate the normal grieving system. The 2 cases presented herein constitute single session treatment with clinical hypnosis of PTSD, a result of the traumatic loss of the paternal figures. The setting in which these cases took place was rural Guatemala. Treatment consisted of single session hypnosis with the Hypnotic Trauma Narrative, a tool designed to address the symptomatology of PTSD. Follow-up a week later and telephone follow-up 2 months later demonstrated the resolution of traumatic manifestations and the spontaneous beginning of the normal grief process.

[1124]
Prospects for exploring the molecular-genomic foundations of therapeutic hypnosis with DNA microarrays
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A new perspective on how therapeutic hypnosis and neuroscience may be integrated on the molecular-genomic level is offered as a guide for basic research and clinical applications. An update of Watson and Crick's original formulation of molecular biology is proposed to illustrate how psychosocial experiences modulate gene expression, protein synthesis, and brain plasticity during memory trace reactivation for the reorganization of neural networks that encode fear, stress, and traumatic symptoms. Examples of the scientific literature on DNA microarrays are used to explore how this new technology could integrate therapeutic hypnosis, neuroscience, and psychosocial genomics as a new foundation for mind-body medicine. Researchers and clinicians in therapeutic hypnosis need to partner with colleagues in neuroscience and molecular biology that utilize DNA microarray technology. It is recommended that hypnotic susceptibility scales of the future incorporate gene expression data to include the concept of "embodied imagination" and the "ideo-plastic faculty" on a molecular-genomic level as well as the psychological and behavioral level of ideomotor and ideosensory responses that are currently assessed.

[1125]
Pain reduction is related to hypnotizability but not to relaxation or to reduction in suffering: a preliminary investigation
Appel PR, Bleiberg J
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The present study examined the facilitation of pain reduction through the use of a pain reduction protocol. The protocol emphasized converting pain sensations into visual and auditory representations, which then were manipulated through therapeutic suggestion. Hypnosis was not mentioned in the intervention, minimizing creation of expectancy effects related to hypnosis. At the conclusion of the study, the Stanford Clinical Hypnotic Scale was administered. Measures of relaxation and reduction of suffering were not related to hypnotizability. However, pain reduction was significantly related to hypnotizability (r = .55, P <.001). High hypnotizables had a greater reduction in pain than low hypnotizables, even
though both had equivalent degrees of relaxation.

[1126]
Reaction to pain stimulus before and during hypnosis measured by pupillary reaction
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The aim of this study was to investigate the analgesic effects of hypnotic pain control on experimental pain by measuring pupil reactions as an objective psycho-physiologic parameter. Twenty-two healthy volunteers (11 female and 11 male) aged between 22 and 35 years participated in the study. Pupil diameter was measured as baseline measurement (i.e., static measurement) in the non-hypnotic and in the hypnotic state. Pupil diameter changes to a standardized pain stimulus were measured in the non-hypnotic and hypnotic state and compared. Additionally, a Fourier analysis of pupil oscillations reflecting central nervous activation during the static measurement (25.6 sec) was calculated. During the hypnotic state the pain related pupil dilation was significantly smaller than during the non-hypnotic state. Pupil oscillations were significantly reduced during hypnosis.

[1127]
Some polite applause for the 2003 APA Division 30 definition of hypnosis
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The authors argue that the new definition of hypnosis by Division 30 of the American Psychological Association contains questionable information about the role of imagination in hypnosis, about the use versus omission of the word hypnosis in inductions, and about the nature of individual differences and their relation to the standardized scales. In addition, the definition appears to conflate formal and exemplar-based types of definition, and it does not seem particularly well-tuned to the interests of lay persons. The authors advance some suggestions for future definitional efforts.

[1128]
Whither spontaneous hypnosis: A Critical issue for practitioners and researchers
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The critical aspects of recognizing that hypnotic responses are part of everyday life for those who are hypnotizable are considered. The failure of the American Psychological Association (APA) definition to include spontaneous hypnosis is discussed along with the resultant implications for misinforming clinicians, researchers and the public.

[1129]
The use of relaxation, hypnosis, and imagery in sport psychiatry
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Hypnosis is a procedure during which a mental health professional suggests that a patient experience changes in sensations, perceptions, thoughts, or behavior. The purpose of this article is to briefly describe the use of various methods of relaxation, hypnosis, and imagery techniques available to enhance athletic performance. The characteristics that these techniques have in common include relaxation, suggestibility, concentration, imaginative ability, reality testing, brain function, autonomic control, and placebo effect. Case studies are provided for illustration.

[1130]
Complementary psychocutaneous therapies in dermatology
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The skin and the nervous system develop side by side in the fetus and remain intimately interconnected and interactive throughout life. Because of the skin-nervous system interactions, there is a significant psychosomatic or behavioral component to many dermatologic conditions. This permits complementary nonpharmacologic psychotherapeutic interventions, such as acupuncture, aromatherapy, biofeedback, cognitive-behavioral therapy, hypnosis, placebo, and suggestion, to have positive impacts on many dermatologic diseases. Complementary pharmacologic psychotherapeutic interventions, such as herbs and supplements, also may help improve some dermatologic disorders.

[1131]
Salient findings: hypnosis in medical settings
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Five papers of special interest to medical researchers and clinicians have recently appeared in the general scientific and medical literatures. Three of these papers are original clinical research studies evaluating whether hypnosis can be useful in treating acute stress disorder, allergic rhinitis, and distress associated with an invasive medical procedure for children. The remaining two articles critically review the empirical literature on whether and how hypnosis might be useful in a number of medical specialties.

[1132] False reports of childhood events in appropriate interviews
Memory. 2005 Oct;13(7):700-10
Ost J, Foster S, Costall A, Bull R
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The present study employed the "parental misinformation" paradigm to examine whether individuals report false events from their childhood even when they are interviewed in an appropriate manner by a trained interviewer. Each participant was interviewed on three occasions. By the final interview, one participant produced a "full" report, and six participants produced "partial" reports, of childhood events that did not occur. Although participants reported perceiving greater pressure to report the false events than the real events, independent judges' ratings of social pressure in the interviews did not differ as a function of what type of event participants were being asked about. Participants also reported higher confidence in their parents', compared to their own, recall of events from their childhood. False reports were also positively correlated with scores on both the full and the revised versions of the Dissociative Experiences Scale, and negatively correlated with score on the Self-Monitoring scale. These results indicate that, despite being interviewed in an appropriate manner by a trained interviewer, some participants will falsely report events from their childhoods.

[1133] Field and observer viewpoint in remember-know memories of personal childhood events
Memory. 2005 Oct;13(7):673-81
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This experiment examined the viewpoint and other phenomenal characteristics of childhood memories based on both personal recollections and self-knowledge. Participants were asked to provide examples of remember, know, and uncertain memories, and to rate each memory on a number of dimensions. Remembered events were generally viewed from a field perspective, while known-about events were generally viewed from an observer perspective. In line with earlier research, remembered events received the highest ratings for sensory and contextual detail, emotional content, and memory accuracy, while known-about events were given the lowest ratings. The results are discussed with reference to their possible implications for memory recovery or enhancement techniques that ask people to adopt a different viewpoint. Consideration is given as to whether a switch to a field perspective might encourage the acceptance of suggested details or events.

[1134] Hypnosis decouples cognitive control from conflict monitoring processes of the frontal lobe
Neuroimage. 2005 Oct 1;27(4):969-78
Egner T, Jamieson G, Gruzelier J
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Hypnosis can profoundly alter sensory awareness and cognitive processing. While the cognitive and behavioral phenomena associated with hypnosis have long been thought to relate to attentional processes, the neural mechanisms underlying susceptibility to hypnotic induction and the hypnotic condition are poorly understood. Here, we tested the proposal that highly hypnotizable individuals are particularly adept at focusing attention at baseline, but that their attentional control is compromised following hypnosis due to a decoupling between conflict monitoring and cognitive control processes of the frontal lobe. Employing event-related fMRI and EEG coherence measures, we compared conflict-related neural activity in the anterior cingulate cortex (ACC) and control-related activity in the lateral frontal cortex (LFC) during Stroop task performance between participants of low and high hypnotic susceptibility, at baseline and after hypnotic induction. The fMRI data revealed that conflict-related ACC activity interacted with hypnosis and hypnotic susceptibility, in that highly susceptible participants displayed increased conflict-related neural activity in the hypnosis condition compared to baseline, as well as with respect to subjects with low susceptibility. Cognitive-control-related LFC activity, on the other hand, did not differ between groups and conditions. These data were complemented by a decrease in functional connectivity (EEG gamma band coherence) between frontal midline and left lateral scalp sites in highly susceptible subjects after hypnosis. These results suggest that individual differences in hypnotic susceptibility are linked with the efficiency of the frontal attention system, and that the hypnotized condition is characterized by a functional dissociation of conflict monitoring and cognitive control processes.
Effects of tailored and manualized hypnotic inductions for complicated irritable bowel syndrome patients
Int J Clin Exp Hypn. 2006 Jan;54(1):100-12
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This modest clinical pilot study was intended to provide preliminary data on the effects of hypnotic inductions tailored to an irritable bowel syndrome patient at each session compared to Palsson's manualized protocol. Patients (N = 8) who had not previously responded to any form of treatment were assigned randomly to either a tailored or manualized induction condition. Other than pretesting for hypnotizability, the procedure followed for the manualized group (n = 4) was exactly as prescribed by O. Palsson (1998). The identical procedure was used for the other 4 patients except that the inductions were individualized. All 8 patients showed favorable responses to treatment immediately posttreatment and at 10-month follow-up. Only the tailored group showed no incapacitating pain at posttreatment but greater emotional stress than the manualized group. The tailored group continued to improve and showed better results than the manualized group at 10 months, and the posttreatment emotional distress was significantly attenuated.

Hypnosis home treatment for irritable bowel syndrome: a pilot study
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Hypnosis treatment often improves irritable bowel syndrome (IBS), but the costs and reliance on specialized therapists limit its availability. A 3-month home-treatment version of a scripted hypnosis protocol previously shown to improve all central IBS symptoms was completed by 19 IBS patients. Outcomes were compared to those of 57 matched IBS patients from a separate study receiving only standard medical care. Ten of the hypnosis subjects (53%) responded to treatment by 3-month follow-up (response defined as more than 50% reduction in IBS severity) vs. 15 (26%) of controls. Hypnosis subjects improved more in quality of life scores compared to controls. Anxiety predicted poor treatment response. Hypnosis responders remained improved at 6-month follow-up. Although response rate was lower than previously observed in therapist-delivered treatment, hypnosis home treatment may double the proportion of IBS patients improving significantly across 6 months.

Hypnosis for irritable bowel syndrome: the quest for the mechanism of action
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Irritable bowel syndrome (IBS) is a very common condition in the Western part of the world, and it accounts for a large proportion of the workload of a gastroenterologist. Unfortunately, the pathogenesis and pathophysiology of the syndrome are incompletely understood, and the treatment options are limited. However, hypnotherapy is one treatment option that has proven to be very useful in IBS. The mechanisms of action explaining why hypnosis is effective for IBS are not altogether known, but recent studies have shed some light on this issue. These studies, and what can be learned from them about how hypnosis impacts IBS, are reviewed in this article. Hypnosis may affect IBS partly through changes in colorectal sensitivity and improvement in psychological factors. The effects on GI motility and the autonomic nervous system are less clear and need further evaluation.

Standardized hypnosis treatment for irritable bowel syndrome: the North Carolina protocol
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The North Carolina protocol is a seven-session hypnosis-treatment approach for irritable bowel syndrome that is unique in that the entire course of treatment is designed for verbatim delivery. The protocol has been tested in two published research studies and found to benefit more than 80% of patients. This article describes the development, content, and testing of the protocol, and how it is used in clinical practice.

Gut-directed hypnotherapy: the Manchester approach for treatment of irritable bowel syndrome
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This article describes the particular approach of using hypnosis as an adjunct to treating irritable bowel syndrome, developed within the Department of Medicine at the University Hospital of South Manchester, UK, since the 1980s.
Patients receive up to 12 sessions over a 3-month period, and the majority of patients achieve marked improvement in symptoms and quality of life, an effect that is usually sustained. The therapy has a "gut-directed" framework that aims to teach patients the necessary hypnotic skills to control gut function and reduce symptoms, such as hand warmth on the abdomen and imagery. Other interventions based on particular lifestyle and psychological factors commonly found to influence symptoms are also included as appropriate for the individual patient.

[1140] Effective management of irritable bowel syndrome—the Manchester Model
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Over the years, researchers have shown that hypnotherapy can be exceptionally helpful in the management of refractory irritable bowel syndrome. However, it is a labor-intensive modality with a finite success rate and is not suitable for everyone. It is therefore best incorporated into a program of graduated care that has a contingency plan for dealing with individuals who do not respond to this particular form of treatment. This paper describes how hypnotherapy has been successfully integrated into the functional gastroenterology service in Manchester.

[1141] Hypnosis for irritable bowel syndrome: the empirical evidence of therapeutic effects
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Irritable bowel syndrome (IBS) is a complex and prevalent functional gastrointestinal disorder that is treated with limited effectiveness by standard medical care. Hypnosis treatment is, along with cognitive-behavioral therapy, the psychological therapy best researched as an intervention for IBS. Eleven studies, including 5 controlled studies, have assessed the therapeutic effects of hypnosis for IBS. Although this literature has significant limitations, such as small sample sizes and lack of parallel comparisons with other treatments, this body of research consistently shows hypnosis to have a substantial therapeutic impact on IBS, even for patients unresponsive to standard medical interventions. The median response rate to hypnosis treatment is 87%, bowel symptoms can generally be expected to improve by about half, psychological symptoms and life functioning improve after treatment, and therapeutic gains are well maintained for most patients for years after the end of treatment.

[1142] Treatment motives as predictors of acquisition and transfer of relaxation methods to everyday life
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This article presents results from four studies of the significance of type and number of initial treatment motives for acquisition and transfer to everyday life of progressive relaxation (PR) and autogenic training (AT). On the basis of theories of treatment motivation and compliance, we hypothesize that motives for participation are determinants of learning and transfer. Results are reported from (1) two studies with 113 participants in introductory courses on AT and 94 participants in introductory courses on PR and (2) two replication studies with 94 (AT) and 101 participants (PR). Participants indicated their motives for participation. Short-term indicators of treatment success include number of dropouts and subjective evaluations of relaxation exercises; long-term outcomes include transfer of relaxation exercises to everyday life and evaluations of exercise evaluations at follow-up 3 to 6 months after the end of course. Results suggest that for both AT and PR, dropout and subjective relaxation exercise evaluations can be predicted from participation motives. Long-term outcomes can be predicted only for AT. However, for both PR and AT it is shown that for up to four motives, the number of initial course motives is correlated with short-term and long-term predictors of course outcome. We conclude that motivation for participation is highly relevant to client-course matching and adaptive indication of relaxation therapies. Results lead to a threshold hypothesis about the relationship between the number of participation motives and short-term as well as long-term learning and transfer outcome.

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BACKGROUND/OBJECTIVE: To determine the degree and duration of pain relief provided by specific pain treatments used by individuals with spinal cord injury (SCI) who have chronic pain. DESIGN: Postal survey. SETTING: Community. PARTICIPANTS: Participants were 117 individuals who had traumatic SCI, were 18 years of age or older, and reported a chronic pain problem. MAIN OUTCOME MEASURES: Questions assessing current or past use of 26 different pain treatments, the amount of relief each treatment provided, and the length of time that any pain relief usually lasts. RESULTS: The medications tried most often were nonsteroidal anti-inflammatory drugs (tried by 71%) and
acetaminophen (tried by 70%); these medications were still being used by more than one half of the patients who had tried them. Opioids produced the greatest degree of pain relief on average (mean, 6.27 +/- 3.05 [SD] on a 0-10 scale, with 0 = no relief and 10 = complete relief) but were unlikely to be continued by those who tried them. Although 38% of respondents with pain had tried gabapentin, only 17% were still using it, and average pain relief was only moderate (mean, 3.32 +/- 3.03 on the 0-10 relief scale). Seventy-three percent of the respondents had tried at least 1 of 7 alternative pain treatments, and the most frequently tried were massage, marijuana, and acupuncture. The most relief was provided by massage (mean, 6.05 +/- 2.47) on the 0-10 relief scale) and marijuana (mean, 6.62 +/- 2.54 on the 0-10 relief scale). The relief from the various treatments, including most medications, tended to last only minutes or hours; however, pain relief from alternative treatments such as massage, acupuncture, and hypnosis was reported to last for days in 25% to 33% of those who tried these treatments. CONCLUSIONS: Many patients are not finding adequate pain relief from commonly prescribed medications. Alternative therapies should be considered as additional treatment options in this population.

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Pregnancy presents many problems without working through additional problems in coping with an ostomy. Yet many women with an ostomy do get pregnant and do deliver healthy babies. Evidence-based nursing is of the utmost importance, as there is little published information on this topic. Because of the scarcity of pregnant subjects within the ostomy category, most studies, by necessity, select a purposive subject base. Therefore, other information sources regarding nursing management of the pregnant woman with an ostomy take on considerably more importance. This article explores other forms of evidence that can be used in managing the care of pregnant ostomy patients and specifically how nurses can integrate various sources of information in designing an evidence-based nursing care plan. Nonpharmacologic forms of relaxation therapy, easily used by nurses, such as mindfulness-based stress reduction, guided imagery, and hypnosis, are also identified as some ways nurses can relieve anxiety and experiential stress associated with pregnancy in women who have an ostomy.

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The paper promotes the view that the alert brain alternates between operating in an action mode, based on frontal lobe function, and a receptive mode, involving cholinergic system activity. Their alternation forms a conversation with the environment. It is hypothesized that competition between the modes centers on control over excitability of neurons in the CA1 field of the hippocampus. Increased excitability enhances the flow of hippocampal output through the subiculum resulting in support for frontal lobe function and the action mode. Decrease excitability, on the other hand, reduces this output and that support, leading to a disconnection between frontal lobes and hippocampus. At the same time, correlated cholinergic activity enhances receptive mode processes, indicated by the occurrence of the hippocampal theta rhythm. It is suggested that the hypothesis provides a conceptual framework for considering various phenomena including REM sleep, schizophrenia, and hypnosis. In REM sleep the receptive mode remains dominant as cholinergic activity supports the hippocampal integration of experience into a composite view of reality. In schizophrenia, the action and receptive modes are not properly coordinated because of a dysfunction in anterior hippocampal output. And hypnosis might be seen as a process in which conditions and suggestions are able to induce in some people a prolonged occurrence of the receptive mode allowing a normal view of reality to be altered.

[1146] Suggestibility and state anxiety: how the two concepts relate in a source identification paradigm Memory. 2006 Jan;14(1):37-45
Ridley AM, Clifford BR
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Source identification tests provide a stringent method for testing the suggestibility of memory because they reduce response bias and experimental demand characteristics. Using the techniques and materials of Maria Zaragoza and her colleagues, we investigated how state anxiety affects the ability of undergraduates to identify correctly the source of misleading post-event information. The results showed that individuals high in state anxiety were less likely to make source misattributions of misleading information, indicating lower levels of suggestibility. This effect was strengthened when forgotten or non-recognized misleading items (for which a source identification task is not possible) were excluded from the analysis. Confidence in the correct attribution of misleading post-event information to its source was significantly less than confidence in source misattributions. Participants who were high in state anxiety tended to be less confident than those lower in state anxiety when they correctly identified the source of both misleading post-event information and non-misled items. The implications of these findings are discussed, drawing on the literature on anxiety and cognition as well as suggestibility.
Objective EEG correlates of deprivation in hypnosis-modulated catalepsy

[Article in Russian]
Zh Nevrol Psikhiatr Im S S Korsakov. 2006;106(3):39-47
Sakellion DN, Sultankhodzhaeva ND, Mukhamedzhanov NZ, Karimberdiev DR, Kadirov BR

EEG was registered in healthy volunteers before and after their entry into modeling (hypnotic) catalepsy. The brain activity recorded under standard electrode placement (the 10-20 international classification) was processed using a special computer program. The data obtained were digitally represented as sets of standard parameters of EEG patterns in 0.5-32 Hz diapason (alpha-, beta1-, beta2-, theta-, delta-rythms). These parameters were compared under different functional tests particularly connected with the control of sensomotor brain activity. Calculated coefficients of interhemisphere asymmetry allow one to evaluate dynamics of neuropsychological processes of deprivating adaptation related to low-frequency bands. EEG-parameters precisely evaluating the level of hypnotic catalepsy have been established.

An analysis of subjective perception of hypnotic state

[Article in Russian]
Zh Nevrol Psikhiatr Im S S Korsakov. 2006;106(1):27-33
Umanskii SV, Utkin VA

The results of the study of hypnotic states on the basis of subjective reflections of their perceptions by patients are presented. The factor map of the features of hypnotic states formation is obtained and some variants of the course of hypnotic states are determined in light of domination of the certain factors.

Systematic review: the effectiveness of hypnotherapy in the management of irritable bowel syndrome.

Aliment Pharmacol Ther. 2006 Sep 1;24(5):769-80
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AIM: To systematically review the literature evaluating hypnotherapy in the management of irritable bowel syndrome (IBS). METHODS: Electronic databases were searched (Cochrane Library, Medline, CINAHL, AMED, Embase, PsycINFO, CISCOM, TRIP and the Social Science Citation index), bibliographic references scanned and main authors contacted. No restrictions were placed on language or publication year. Eligible studies involved adults with IBS using single-component hypnotherapy. All studies, except single case or expert opinion, were sought and all patient-related outcomes eligible. RESULTS: Out of 299 unique references identified, 20 studies (18 trials of which four were randomized, two controlled and 12 uncontrolled) and two case series were eligible. These tended to demonstrate hypnotherapy as being effective in the management of IBS. Numbers of patients included were small. Only one trial scored more than four out of eight on internal validity. CONCLUSION: The published evidence suggests that hypnotherapy is effective in the management of IBS. Over half of the trials (10 of 18) indicated a significant benefit. A randomized placebo-controlled trial of high internal validity is necessary to establish the effectiveness of hypnotherapy in the management of IBS. Until such a trial is undertaken, this form of treatment should be restricted to specialist centres caring for the more severe forms of the disorder.

Biofeedback and other therapies for the treatment of urinary incontinence in the elderly.

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Alternative therapies hold potential promise for the treatment of urinary incontinence in the elderly. Assessment and comparisons of the efficacies of such therapies have been hindered by a lack of standardized definitions of urinary incontinence in the study populations, lack of standardization of treatment protocols, inadequate sample sizes, and lack of blinding and appropriate controls. Biofeedback has been the most extensively studied therapy and may provide appropriate adjunctive or primary therapy for select individuals. Other potential therapies, such as acupuncture, hypnosis, and herbal therapies, have not been sufficiently examined to make definitive recommendations.

Hypnotherapy and cognitive behaviour therapy of acute stress disorder: a 3-year follow-up.

Behav Res Ther. 2006 Sep;44(9):1331-5. Epub 2005 Dec 20
Bryant RA, Moulds ML, Nixon RD, Mastrodomenico J, Felmingham K, Hopwood S.
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The long-term benefits of cognitive behaviour therapy (CBT) for trauma survivors with acute stress disorder were investigated by assessing patients 3 years after treatment. Civilian trauma survivors (n=87) were randomly allocated to six sessions of CBT, CBT combined with hypnosis, or supportive counselling (SC). 69 completed treatment, and 53 were assessed 2 years post-treatment for post-traumatic stress disorder (PTSD) with the Clinician-Administered PTSD Scale. In terms of treatment completers, 2 CBT patients (10%), 4 CBT/hypnosis patients (22%), and 10 SC patients (63%) met PTSD criteria at 2-years follow-up. Intent-to-treat analyses indicated that 12 CBT patients (36%), 14 CBT/hypnosis patients (46%), and 16 SC patients (67%) met PTSD criteria at 2-year follow-up. Patients who received CBT and CBT/hypnosis reported less re-experiencing and less avoidance symptoms than patients who received SC. These findings point to the long-term benefits of early provision of CBT in the initial month after trauma.

[1152]
Surgeons and shamans: the placebo value of ritual.
Clin Orthop Relat Res. 2006 Sep;450:249-54
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Surgeons have conducted placebo-controlled double-blind investigations to determine the value of surgical procedures by comparing the results of real operations with sham operations. The sham operation served as a placebo control, permitting analysis of the alleged benefit of the real operation by eliminating the effect caused by the rest of the surgical experience. A modern operation starts with a series of events resembling ritualistic practices used by shamans. Shamans are traditional healers in cultures that believe communication with the gods and spirits influences health and well being. Shamanistic healing measures include: journeying to a healing place, fasting, wearing ritual garb, ingesting psychotrophic substances, anointment with purifying liquid, an encounter with a masked healer, and inhaling stupefactive vapors. These steps are followed by a central ritual activity that may include extracorporeal, surface, and penetrative components. Postoperative ritual activities reinforce the suggestive value of the healing. These experiences increase a patient's suggestibility, thereby enhancing the likelihood of a favorable outcome. Any research on the effectiveness of surgical procedures, especially those designed to relieve pain, must consider the strongly suggestive effect of the elaborate perioperative ritual.

[1153]
The timing of brain events: reply to the "Special Section" in this journal of September 2004, edited by Susan Pockett.
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In this "Reply" paper, the arguments and experimental findings by Pockett, Pollen, and Haggard et al. are analyzed. It had been shown () that a 0.5s duration of repetitive activations of sensory cortex is required to produce a threshold of sensation. The view that this is due to a facilitatory buildup in excitation is finally eliciting neuronal firing is shown to be incompatible with several lines of evidence. Objections to the phenomenon of subjective referral backwards in time (for the delayed sensation) are also untenable. Report that a self-initiated act can, under hypnotic suggestion, appear to the subject to be "involuntary." The act under hypnosis is better viewed as one initiated unconsciously, not as an act of conscious will.

[1154]
Treatment options for chronic abdominal pain in children and adolescents.
Curr Treat Options Gastroenterol. 2006 Sep;9(5):409-15
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Chronic abdominal pain is a common feature of most functional gastrointestinal disorders in children, including functional abdominal pain (FAP) and irritable bowel syndrome (IBS). FAP can impair a child's life and often leads to significant school absences. Although the underlying mechanism is likely multifactorial, early pain experiences during a vulnerable period in the developing nervous system can cause long-term changes in the brain-gut axis and ultimately may result in altered pain pathways and visceral hyperalgesia. Care providers often feel uncomfortable managing patients with chronic abdominal pain, as the pathophysiology is poorly understood, and limited data exist regarding safety and efficacy of therapeutic options in children. The primary goal of therapy in FAP is to alleviate pain symptoms and to help the child return to normal daily activities. Treatment should be individualized and chosen based on the severity of symptoms, the existence of comorbid psychological disorders, and the impact the disorder has on the child's school attendance and normal functioning. Various psychological interventions, such as cognitive-behavioral therapy, hypnosis, and guided imagery, have been successfully used in children with chronic abdominal pain. Pharmacologic therapies such as H(2) blockers, proton-pump inhibitors, tricyclic antidepressants, and various serotonin drugs have been used, but good controlled trials are lacking. More studies are clearly needed to investigate the benefits and safety of pharmacologic therapy in children. Newer pharmacologic agents that target specific receptors involved in nociception, stress, and neurogenic inflammation currently are being developed. Future targets for visceral hyperalgesia should not only be aimed at alleviating symptoms but also should include prevention, particularly in cases with a suspected sensitizing event such as neonatal pain and postinfectious IBS.
Double-blind test of the effects of distant intention on water crystal formation.
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The hypothesis that water "treated" with intention can affect ice crystals formed from that water was pilot tested under double-blind conditions. A group of approximately 2,000 people in Tokyo focused positive intentions toward water samples located inside an electromagnetically shielded room in California. That group was unaware of similar water samples set aside in a different location as controls. Ice crystals formed from both sets of water samples were blindly identified and photographed by an analyst, and the resulting images were blindly assessed for aesthetic appeal by 100 independent judges. Results indicated that crystals from the treated water were given higher scores for aesthetic appeal than those from the control water (P = .001, one-tailed), lending support to the hypothesis.

An extended nondrug MDMA-like experience evoked through posthypnotic suggestion.
J Psychoactive Drugs. 2006 Sep;38(3):273-83
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This research explored whether hypnotic suggestion could produce a subjective mindbody condition similar to that produced by the psychoactive drug methylenedioxy methamphetamine (MDMA, Ecstasy). Twelve participants received posthypnotic instructions to re-experience an MDMA-like state posthypnotically, similar to one in their prior experience, for one hour. Three separate self report measures and qualitative self reports showed that the posthypnotic condition effectively mimicked an MDMA-like experience, lasting an hour at a stable level. Participant ratings in real time and in retrospect ranged from 36% to 100% similarity to a drug-induced experience. The qualitative reports and rating scales enabled a phenomenological description of the subjective experience. Scores on the Tellegen Absorption Scale correlated significantly with the strength of the posthypnotic condition (Spearman rho 0.87, p = .0003). The participants successfully carried out various intentional activities during this time (e.g., self reflection, talking with partners about relationships, artwork, walking in nature). Applications for this technique as an adjunct to therapy and health treatments are discussed.

Imaging of hypnosis with functional magnetic resonance.[Article in Polish]
Psychiatr Pol. 2006 Sep-Oct;40(5):969-83
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AIM: The aim of the study was imaging of the central nervous system activity with the fMRI method during hypnosis as well as confirmation of the observations linking subjective effects of suggested analgesia with the functional changes on the neurophysiological level. METHOD: At first volunteers (7 female, 7 male) were examined with fMRI in the resting state and then four times during application of painful stimuli such as pricking of the right hand. Four experimental conditions were associated with this stimulation: only nociceptive stimulation, after analgesic suggestion, after hypnotic induction and after consecutive analgesic suggestion in hypnosis. In the fifth condition, concentration of attention was an experimental condition, while the control condition was distraction of attention (e.g. free associations). The contrast differences between measurements in the consecutive phases of the experiment were analysed. RESULTS: Decreases of activity of regions known for contributing to pain reception were found, probably as an effect of analgesic suggestion. This effect was seen especially in the area of L-thalamus. Suggestion (more precisely—the reception of its content) was related mainly to the R-ACG area activity growth. Hypnotic induction was correlated with increasing activity of the L-orbitofrontal gyrus. Concentration of attention was linked with activity increase within inferior parietal lobule, occipital middle/superior gyrri; in the left hemisphere in the orbital frontal gyri and insula/frontal operculum. CONCLUSION: Both hypnosis and reception of analgesic suggestion are linked with increasing activity in particular brain areas, whereas the effect of analgesic suggestion demonstrates itself in the fMRI mainly by diminishing the reaction on painful stimuli.

BMC Pediatr. 2006 Aug 16;6:23
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BACKGROUND: The purposes of this study are to document psychosocial stressors and medical conditions associated with development of insomnia in school-age children and to report use of hypnosis for this condition. METHODS: A retrospective chart review was performed for 84 children and adolescents with insomnia, excluding those with central or obstructive sleep apnea. All patients were offered and accepted instruction in self-hypnosis for treatment of insomnia, and for other symptoms if it was felt that these were amenable to therapy with hypnosis. Seventy-five patients returned for follow-up after the first hypnosis session. Their mean age was 12 years (range, 7-17). When insomnia did not resolve
after the first instruction session, patients were offered the opportunity to use hypnosis to gain insight into the cause. RESULTS: Younger children were more likely to report that the insomnia was related to fears. Two or fewer hypnosis sessions were provided to 68% of the patients. Of the 70 patients reporting a delay in sleep onset of more than 30 minutes, 90% reported a reduction in sleep onset time following hypnosis. Of the 21 patients reporting nighttime awakenings more than once a week, 52% reported resolution of the awakenings and 36% reported improvement. Somatic complaints amenable to hypnosis were reported by 41%, including chest pain, dyspnea, functional abdominal pain, habit cough, headaches, and vocal cord dysfunction. Among these patients, 87% reported improvement or resolution of the somatic complaints following hypnosis. CONCLUSION: Use of hypnosis appears to facilitate efficient therapy for insomnia in school-age children.

[1159]
Effect of hypnotic suggestion on fibromyalgic pain: Comparison between hypnosis and relaxation.
Eur J Pain. 2006 Aug 2; [Epub ahead of print]
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The main aims of this experimental study are: (1) to compare the relative effects of analgesia suggestions and relaxation suggestions on clinical pain, and (2) to compare the relative effect of relaxation suggestions when they are presented as "hypnosis" and as "relaxation training". Forty-five patients with fibromyalgia were randomly assigned to one of the following experimental conditions: (a) hypnosis with relaxation suggestions; (b) hypnosis with analgesia suggestions; (c) relaxation. Before and after the experimental session, the pain intensity was measured using a visual analogue scale (VAS) and the sensory and affective dimensions were measured with the McGill Pain Questionnaire. The results showed: (1) that hypnosis followed by analgesia suggestions has a greater effect on the intensity of pain and on the sensory dimension of pain than hypnosis followed by relaxation suggestions; (2) that the effect of hypnosis followed by relaxation suggestions is not greater than relaxation. We discuss the implications of the study on our understanding of the importance of suggestions used in hypnosis and of the differences and similarities between hypnotic relaxation and relaxation training.

[1160]
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In our institution we have used antenatal training in self-hypnosis for over three years as a tool to provide relaxation, anxiolysis and analgesia for women in labour. To assess the effects of hypnotherapy, we prospectively collected data related to the use of hypnosis in preparation for childbirth, and compared the birth outcomes of women experiencing antenatal hypnosis with parity and gestational age matched controls. METHODS: Prospective data about women taught self-hypnosis in preparation for childbirth were collected between August 2002 and August 2004. Birth outcome data of women using hypnosis were compared with routinely collected retrospective data from parity and gestational age matched women delivering after 37 weeks gestation during 2003. RESULTS: Seventy-seven antenatal women consecutively taught self-hypnosis in preparation for childbirth were compared with 3,249 parity and gestational age matched controls. Of the women taught antenatal self-hypnosis, nulliparous parturients used fewer epidurals: 36% (18/50) compared with 53% (765/1436) of controls (RR 0.68 [95%CI 0.47-0.98]); and required less augmentation: 18% (9/50) vs 36% (523/1436) (RR 0.48 [95%CI 0.27-0.90]). CONCLUSIONS: Our clinical findings are consistent with recent meta-analyses showing beneficial outcomes associated with the use of hypnosis in childbirth. Adequately powered, randomized trials are required to further elucidate the effects of hypnosis preparation for childbirth.

[1161]
Hypnotherapeutic management of alopecia areata.
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BACKGROUND: Only limited data exist on the role of psychotherapy in alopecia areata (AA). OBJECTIVE: We sought to document the influence of hypnotherapy on psychologic well-being and clinical outcome in AA. METHODS: Hypnosis was used in 28 patients with extensive AA who were refractory to previous conventional treatments. It was added as a complementary treatment or used as the only treatment. RESULTS: In all, 21 patients, 9 with alopecia totalis or alopecia universalis and 12 with extensive AA, were analyzed during a 5-year period. After treatment, all patients had a significantly lower score for anxiety and depression. Scalp hair growth of 75% to 100% was seen in 12 patients after 3 to 8 sessions of hypnotherapy. Total growth occurred in 9 of these 12 patients, including 4 patients with alopecia universalis and 2 with ophiasis. In 5 patients, a significant relapse occurred. LIMITATIONS: This is a preliminary study with a limited number of patients. A larger randomized study is necessary. CONCLUSION: Hypnotherapy may enhance the mental well-being of patients with AA and it may improve clinical outcome.

[1162]
Expect the unexpected: ability, attitude, and responsiveness to hypnosis.
Participants' expectancies and hypnotic performance throughout the course of a standardized, individually administered hypnotic protocol were analyzed with a structural equation model that integrated underlying ability, expectancy, and hypnotic response. The model examined expectancies and ability as simultaneous predictors of hypnotic responses as well as hypnotic responses as an influence on subsequent expectancies. Results of the proposed model, which fit very well, supported each of the 4 major hypothesized effects: Expectancies showed significant stability across the course of the hypnosis protocol; expectancies influenced subsequent hypnotic responses, controlling for latent ability; hypnotic responses, in turn, affected subsequent expectancies; and a latent trait underlay hypnotic responses, controlling for expectancies. Although expectancies had a significant effect on hypnotic responsiveness, there was an abundance of variance in hypnotic performance unexplained by the direct or indirect influence of expectation and compatible with the presence of an underlying cognitive ability.

[1163]
Dissociative alterations in body image among individuals reporting out-of-body experiences: a conceptual replication.
Percept Mot Skills. 2006 Aug;103(1):76-80
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A conceptual replication of the link between self-reported dissociative alterations in body-image under experimental conditions and the reporting of prior out-of-body experiences in a recent data set was undertaken. Also examined was whether this relationship would hold for experiences reported during the experimental context and whether it is independent of self-reported New Age belief. Data from mostly undergraduates (N= 40; M age = 33.5, SD = 12.5; 27 women) in a mirror-gazing study were retrospectively analyzed. The 9 individuals who reported prior out-of-body experiences, relative to those 31 who did not, exhibited significantly greater self-reported dissociative alterations in body-image during the mirror-gazing task, even when the influence of scores on New Age belief was controlled for statistically. The same differential relationship was not found between 6 individuals who did and 34 who did not report out-of-body experiences during the task.

[1164]
Hypnotic suggestion modulates cognitive conflict: the case of the flanker compatibility effect.
Psychol Sci. 2006 Aug;17(8):721-7
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The present work was aimed at investigating whether the flanker compatibility effect can be eliminated by means of a posthypnotic suggestion influencing attentional focusing. In Experiment 1, participants who scored high and low on hypnotic susceptibility performed the flanker compatibility task when naturally awake and when under a posthypnotic suggestion aimed at increasing the target's discriminability from the flankers. Results showed that the posthypnotic suggestion effectively eliminated the flanker compatibility effect in highly susceptible participants, whereas low-susceptibility participants did not show any reduction in the effect. In Experiment 2, highly susceptible participants performed the task after receiving a suggestion but without the induction of hypnosis. Results showed that the suggestion alone was not sufficient to reduce the flanker compatibility effect. These results support the view that in highly susceptible participants, hypnotic suggestion can influence the ability to focus on relevant information.

[1165]
Dissociative alterations in body image among individuals reporting out-of-body experiences: a conceptual replication.
Percept Mot Skills. 2006 Aug;103(1):76-80
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The functional gastrointestinal disorders (FGID) are the most frequent clinical conditions seen in practice. The FGID are associated with significant work absenteeism, impaired quality of life and increased medical costs. Most patients also suffer from psychosocial problems. Therefore it is important to define the patient's complaints in terms of a biopsychosocial disorder rather than just a medical illness. Physicians must acknowledge the relevance of the psychosocial aspects to prepare the patient for a referral to a specialist (in psychosomatic medicine or a psychotherapist) and to get the patient interested in the psychological factors involved as well as further explore their cause. Most of the research on psychotherapy in FGID to date has focused on the irritable bowel syndrome, and different methods of treatments have been studied (e.g., cognitive-behavioral therapy, dynamic psychotherapy, hypnotherapy, and relaxation). Randomised controlled studies have shown that psychotherapy is superior to conventional medical therapy. Hypnotherapy seems to be very successful. Predictors of a positive response to psychological treatment generally are: (1) awareness that stress exacerbates their bowel symptoms, (2) mild anxiety or depression, (3) the predominant bowel symptom is abdominal pain or diarrhea and not constipation, (4) the abdominal pain waxes and wanes in response to eating, defecation, or stress rather than being constant pain, and (5) the symptoms are of relatively short duration.
Psychotherapy is initially relatively expensive because it requires multiple, long sessions. However, its benefits persist or even increase over time, and in the long run, there may be a reduction in clinic visits and health care costs which offsets the initial cost of psychological treatment.

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In addition to exacerbating morbidity in male coronary artery bypass surgery (CABS) patients, their plight can also impose considerable strain on their female spouses’ mood states, resulting in compromised quality of life. The current study was aimed at determining the impact of pre postoperative hypnotherapeutic ego strengthening (HES) on anxiety and depression in female spouses. It was conducted simultaneously with a recently published study of their CABS husbands’ response to HES. Spouses whose husbands had been randomly assigned to an experimental group, were designated the experimental spouse group (n = 25) and spouses whose husbands constituted the control group, likewise comprised the control spouse group (n = 25). Assessment occurred preoperatively, on the day of discharge and at six week follow-up. Spouses in the experimental group (n = 25) were introduced to hypnotherapeutic ego strengthening (HES), pre and postoperatively. In the postoperative assessment experimental female spouses showed significantly reduced morbidity levels, which were maintained at follow-up. In contrast, females in the control group (n = 25) showed no change. The results supported the value of brief hypnotherapy as a means of psychologically empowering spouses whose husbands’ were undergoing CABS.

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Modern medical care and economic impositions tend to dehumanize the medical patient. This paper describes a targeted use of the hypnotic modality for relationship building, symptom management, and restoring a sense of self to the patient. To humanize medical care one patient at a time, examples are given for the use of the Hypnotic Induction Profile, the Eye Roll sign and AOD (Apollonian-Odyssean-Dionysian) Mind-Style Questionnaire as a basis for choosing biopsychosocial treatment strategies. This trio of assessments can be used together, in approximately 10 to 15 minutes, or separately, if treatment decisions need to be made in a few minutes or less. The hypothesis presented is that matching treatment strategies, with or without formal hypnosis, to hypnotic capacity and mind style can increase respectful care and efficacy of treatment outcome. Clinical examples will illustrate this approach to enhance recovery, morale, and maximize patients’ ability to become active partners on their own behalf.

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Few studies have presented the use of hypnosis in the treatment of school refusal. These studies haven't approached the problem of self-hypnosis during the stressful morning hours. This paper introduces a therapeutic approach, which utilizes known hypnotic techniques, but rehearses them via the telephone, while the patient is at his/her house or on the way to school and the therapist is at the office. Twelve school-refusal adolescents were treated with different hypnotherapy techniques. Equipped with cellular phones and with the therapist's availability, these adolescents could benefit from hypnosis as an alternative coping strategy when the anxiety occurred. Results showed that 8 of the participants maintained full-time attendance, 3 showed partial improvement and 1 failed to improve his attendance. This study illustrates the benefits of self-hypnosis in the treatment of school refusal, while also enabling the patient to maintain the connection with the therapist so that the anxiety may be confronted when it arises.

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When a hypnotist appears on screen, expect evil. If his induction features 'magnetic' hand passes, he's probably about to compel someone to commit a crime. If he hypnotizes with an intense stare, his intent is likelier seduction--in fact many screen inductions are identical to the eye contact ethologists have labeled "the copulatory gaze." This paper explores to role of hypnosis in more than 230 films in which it has been depicted and categorizes the--mostly negative--stereotypes about it. A handful of exceptions in which hypnosis is positive and/or realistic are examined. The discussion compares this to the role of psychotherapy and dreams in cinema. It discusses why hypnosis is so maligned and whether there is
In 1844, an obscure and little-remembered American theorist, A. Yorke (no further identification is available), published a theory of mesmerism based on absorption, i.e., mental concentration. Unlike Mesmer's conceptualization of animal magnetism as a biological fluid, however, Yorke's theory emphasized the psychological importance of the mutual interaction between mesmerist and subject. This paper discusses the latter's theory of absorption as an important development in neo-mesmerism, the circumstances that led him to his conclusions, and his role in advancing our knowledge of the historical origins of modern hypnosis.

When given suggestive information, some people can be led to believe that they had experiences that they did not actually have. For example, they may come to believe falsely that they got sick eating particular foods as children, and as a result of that belief they may avoid the foods. But how do we know that someone has developed a false belief or memory in this research? The criteria we choose when classifying whether someone has fallen for the suggestion (called a "believer") or did not (called a "non-believer"). Changing criteria obviously affects the percentage of people who are called susceptible and could conceivably affect the conclusions reached about that group. Comparisons between false memories and true memories could differ, too, depending on how memories are defined.

Building upon methods and research utilized with normative populations, we examine extant assumptions regarding the effects of child maltreatment on memory. The effects of stress on basic memory processes is examined, and potential neurobiological changes relevant to memory development are examined. The impact of maltreatment-related sequelae (including dissociation and depression) on basic memory processes as well as false memories and suggestibility are also outlined. Although there is a clear need for additional research, the investigations that do exist reveal that maltreated children's basic memory processes are not reliably different from that of other, nonmaltreated children.

Pemphigus vulgaris is an autoimmune disease with a well-established immunological basis. Treatment is based on high dose and maintenance systemic corticosteroids. We report on a patient with a recurrence of full-blown pemphigus vulgaris after a trial of alternative hypnosis therapy to replace the corticosteroids.

In 2002, the first author and colleagues reported data indicating that both hypnosis and misleading questions decreased the accuracy of memory reports and decreased "don't know" response rates, that the effects of misleading questions were significantly greater than those of hypnosis, and that the two effects were additive. Using a sample of 194 undergraduate students, the present study replicated the findings that misleading questions reduce accuracy and "don't know" responding but failed to replicate the negative effect of hypnosis on memory reports. Signal detection analysis indicated that misleading questioning produced decreased sensitivity accompanied by higher response bias, though affecting sensitivity more than producing a criterion shift.
"How deeply hypnotized did I get?" Predicting self-reported hypnotic depth from a phenomenological assessment instrument.

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Procedures for estimating hypnotic depth have been used for more than 70 years. This study predicted self-reported hypnotic depth from the phenomenological and behavioral variables of the Phenomenology of Consciousness Inventory-Hypnotic Assessment Procedure (PCI-HAP). Participants were divided into 2 groups: 1 was used to generate regression equations, and the other group was used for cross-validation. Both imagery vividness during hypnosis (imagoic suggestibility) and the PCI pHGS measure of hypnotic depth (hypnoidal state) accounted for most of the variance in self-reported hypnotic depth. The above results, further supported by correlational and 3-D visual analyses, are consistent with other researchers' observations that ratings of hypnotic depth are a function of: (a) alterations in subjective experience, and (b) the perception of responsiveness to suggestions. The findings are also congruent with J. Holroyd's hypothesis that suggestibility and altered-state effects interact to produce hypnotic effects.

Hypnotically induced emotional numbing: the roles of hypnosis and hypnotizability.

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This study investigated the roles of hypnotizability and hypnosis in suggested emotional numbing. Thirty-two high hypnotizable and 32 low hypnotizable participants were administered either a hypnotic or wake induction and were then presented with emotionally distressing and neutral images during a suggestion for emotional numbing or a control condition. Emotional response was indexed through self-report and EMG corrugator-muscle activity. High hypnotizable participants, in both the hypnosis and wake conditions, reported more diminished emotional responses on self-report and EMG corrugator-muscle activity than low hypnotizable participants during the emotional-numbing suggestion. These findings suggest that elevated hypnotic susceptibility, rather than hypnosis, is an important mediator of emotional numbing. The importance of individual differences in emotional numbing is discussed.

Rapid induction of hypnosis by finger elongation: a brief communication.

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This clinical pilot study on finger elongation for induction of hypnosis attempts to determine whether the observed response is a hypnotic phenomenon or a simple physiologic reaction. Sixteen volunteers participated in the 5-phase study, which measured relative and absolute changes in the length of each finger prior to and after each phase. A distinctive elongation was statistically significant for the hypnosis condition. In addition, findings suggest changes in the metacarpus. Further investigation is indicated to shed light on this apparent phenomenon.

Salient findings: identifying the building blocks of hypnotizability, and the neural underpinnings of subjective pain.

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Two papers of special interest to the hypnosis community have appeared in the general scientific literatures. One of these papers examines the building blocks of hypnotic response. Using expanded hypnotic protocols and sophisticated multivariate statistical analyses, the authors found evidence for 4 components of hypnotizability: direct motor, motor challenge, perceptual-cognitive, and posthypnotic amnesia. The second paper examines brain correlates of the subjective reality of physically and hypnotically induced pain by tracking regional brain activation across conditions using fMRI. During suggestion-induced pain, the extent to which subjects judged the pain to be real correlated with activity in the rostral and perigenual anterior cingulate cortex and in the medial prefrontal cortex.

Intensive hypnotherapy for smoking cessation: a prospective study.

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This study reports on a prospective pilot trial of intensive hypnotherapy for smoking cessation. The hypnotherapy involved multiple individual sessions (8 visits) over approximately 2 months, individualization of hypnotic suggestions, and a supportive therapeutic relationship. Twenty subjects were randomly assigned to either an intensive hypnotherapy condition or to a wait-list control condition. The target quitting date was 1 week after beginning treatment. Patients were...
evaluated for smoking cessation at the end of treatment and at Weeks 12 and 26. Self-reported abstinence was confirmed by a carbon-monoxide concentration in expired air of 8 ppm or less. The rates of point prevalence smoking cessation, as confirmed by carbon-monoxide measurements for the intensive hypnotherapy group, was 40% at the end of treatment; 60% at 12 weeks, and 40% at 26 weeks (p < .05).

[1180]
Hypnotic conflict: a brief report.
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Two studies investigated management of conflict in hypnosis by subtly increasing the brightness of a visual stimulus during a suggestion for hypnotic blindness to the stimulus. In Study 1, 23 high hypnotizable participants were administered a hypnotic suggestion for blindness to a projected light. For half the participants, the brightness of the light was intensified during the suggestion. Behavioral ratings and online analog-dial measurement indicated that participants reported decreased hypnotic blindness during the increased conflict condition. In Study 2, 20 participants were administered the nonexperimental procedure to investigate the impact of demand characteristics in this paradigm. Parallel findings in Studies 1 and 2 indicated that demand characteristics may explain the response to hypnotic conflict. Limitations in applying the nonexperimental procedure to this paradigm and the need for further investigation are discussed.

[1181]
Cultural views and attitudes about hypnosis: a survey of college students across four countries.
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The present investigation surveyed attitudes and beliefs about hypnosis across 4 samples of students attending college at the University of New South Wales, Australia; Dortman University, Germany; The Ohio State University, United States; and Shaheed Beheshti University of Medical Sciences, Iran. A total of 280 undergraduate students (70 from each country sampled), ranging in age from 18 to 25 years, completed 3 different questionnaires assessing their opinions and beliefs about hypnosis. Although responses to some items varied by country, there was remarkable similarity across many items suggesting that certain views and attitudes about hypnosis are not culture specific.

[1182]
Where does hypnotherapy stand in the management of irritable bowel syndrome? A systematic review.
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BACKGROUND: Irritable bowel syndrome (IBS) is a gastrointestinal disorder characterized by chronic abdominal pain and altered bowel habits in the absence of any organic cause. Despite its prevalence, there remains a significant lack of efficient medical treatment for IBS to date. However, according to some previous research studies, hypnosis has been shown to be effective in the treatment of IBS. Aim: To determine the definite efficacy of hypnosis in the treatment of irritable bowel syndrome. METHODS: A systematic review of the literature on hypnosis in the treatment of IBS from 1970 to 2005 was performed using MEDLINE. Full studies published in English were identified and selected for inclusion. We excluded case studies and those studies in which IBS symptoms were not in the list of outcome measures. All studies were reviewed on the basis of the Rome Working Team recommendations for design of IBS trials. RESULTS: From a total of 22 studies, seven were excluded. The results of the reviewed studies showed improved status of all major symptoms of IBS, extracolonic symptoms, quality of life, anxiety, and depression. Furthermore these improvements lasted 2-5 years. CONCLUSIONS: Although there are some methodologic inadequacies, all studies show that hypnotherapy is highly effective for patients with refractory IBS, but definite efficacy of hypnosis in the treatment of IBS remains unclear due to lack of controlled trials supporting this finding.

[1183]
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It was hypothesized that dental anxiety, which leads to neurophysiologic alterations in heart rate, respiratory rate and blood pressure prior, during and subsequent to dental treatment, can be influenced by medical hypnosis. We report the positive impact from non-invasive hypo-sedation during dental implant surgery on a 54-year-old female patient who experienced neurophysiologic reactions as a result of the psychosomatic process of dental anxiety (dental anxiety scale value = 13). The neurophysiologic changes during dental surgery performed with and without hypnosis were compared after the patient underwent the same surgical treatment protocol. This case report was part of a study designed to
evaluate hypnosis as a non-invasive therapy for dental-anxious patients over six sessions using subjective experience and objective parameters, which included electroencephalogram, electrocardiogram, heart rate, blood pressure, oxygen saturation of the blood, respiration rate, salivary cortisol concentration and body temperature.

[1184]
Autogenic training for tension type headaches: a systematic review of controlled trials.
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OBJECTIVE: To determine from the published evidence whether autogenic training as sole therapy is effective for prevention of tension-type headaches in adults. METHOD: Systematic review of controlled trials. Literature searches were performed in January 2005 in six major databases, specifically Medline, EMBASE, AMED, CENTRAL, PsychInfo and CINAHL and information was extracted and evaluated in a pre-defined manner. RESULTS: Seven controlled clinical trials were included in the review. The methodological quality of these studies was low. Patient samples were generally representative of the more severely affected cases. None of the studies show autogenic training to be convincingly superior to other interventions care. Some trials suggested that the effect of autogenic training is no different from hypnosis and inferior to biofeedback. CONCLUSION: There is no consistent evidence to suggest that autogenic training is superior to other interventions for prevention of tension headaches, or different from other forms of relaxation. Further studies should investigate the use of standard autogenic training in patients with moderate headache.

[1185]
Hypnosis in dentistry.
Dent Update. 2006 Jun;33(5):312-4
Roberts K.

In this article, the nature of hypnosis will be discussed, together with its therapeutic/facilitator role in the control of the potential problems that occur in everyday dental practice. It is the vital relationship between a patient and therapist which produces the desired results of hypnotherapy. CLINICAL RELEVANCE: A holistic approach, in patient care, emphasizes the treatment of an individual who has a dental problem.

[1186]
Death by hypnosis: an 1894 Hungarian case and its European reverberations.
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The story of a fatal hypnotic seance in a castle in provincial Hungary in 1894 was sensationalised by the media and propelled across national and social boundaries within a few days. It stirred public feelings and compelled prestigious medical mandarins, legal professionals and social commentators of the day to express wide-ranging views concerning hypnotic practice. The case intensified social and professional anxieties surrounding hypnosis in late 19th century culture and illustrates the complex relationship between medical hypnotic research, lay hypnosis and widely reported and sensationalised forensic cases.

[1187]
Self-reported smoking cessation interventions were not associated with quitting in older women.
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OBJECTIVE: To determine the extent to which smoking cessation interventions are used in the community and their relative success in older women. STUDY DESIGN AND SETTING: Prospective cohort study located in 23 general practices in England, Scotland, and Wales and including 3,622 women aged 60 to 79 years at recruitment from the British Women's Heart and Health Study. RESULTS: Of the 370 smokers at baseline, 77 (21%) had stopped smoking at 3 years, reducing the prevalence of smoking from 10.2% to 8.8%. Women who were light smokers (&lt;10 per day) at baseline were more likely to have quit than heavier smokers. The most common interventions reported by women who smoked at baseline were advice from a general practitioner (GP), family or friend's advice, and use of nicotine replacement, but 42% of the women reported having no intervention to help them to stop smoking. None of the individual interventions were associated with increased odds of quitting smoking over the follow-up period. Women reported finding a GP's advice, referral to a clinic, and nicotine replacement more useful than complementary treatments (acupuncture and hypnotherapy) or advice from family and friends. CONCLUSION: Smoking cessation rates in this study were in line with national targets and surveys. Self-reports of ever receiving interventions were not associated with quitting smoking among these older women. Different and innovative approaches to smoking cessation may need to be developed, and evaluated in future randomized clinical trials, for individuals who have smoked for a long period of time and for whom other smoking cessation interventions have not proved successful.
AIMS AND OBJECTIVES: This study quantified health-related quality of life in a group of irritable bowel syndrome patients and measures changes following a treatment programme of nurse-led gut-directed hypnotherapy. BACKGROUND: It is well recognized that health-related quality of life can be severely impaired in patients suffering from the irritable bowel syndrome. Current conventional treatment for irritable bowel syndrome is often unsatisfactory. In contrast it has been shown that gut-directed hypnotherapy is an effective treatment of irritable bowel syndrome with up to three-quarters of patients reporting symptomatic improvement. DESIGN/METHOD: Seventy-five patients (55 females/20 males, median age 37.1 years, age range 18-64) comprised the study group. Physical symptoms of irritable bowel syndrome were recorded using seven-day diary cards. On presentation the predominant symptoms were abdominal pain (61%), altered bowel habit (32.5%), and abdominal distension/bloating (6.5%) in the patient group. An irritable bowel syndrome quality of life questionnaire was used to define health-related quality of life. Psychological well-being was measured using the Hospital Anxiety and Depression Scale. Data analysis was carried out using MINITAB, Release 12 for Windows. RESULTS: Physical symptoms statistically improved after hypnotherapy. There were also significant statistical improvements (P < 0.001) in six of the eight health-related quality of life domains measured (emotional, mental health, sleep, physical function, energy and social role). These improvements were most marked in female patients who reported abdominal pain as their predominant physical symptom. Anxiety and depression improved following treatment. CONCLUSION: Gut-directed hypnotherapy has a very positive impact on health-related quality of life with improvements in psychological well-being and physical symptoms. It appears most effective in patients with abdominal pain and distension. Relevance to clinical practice. This study demonstrates that by integrating complementary therapies into conventional care that gastrointestinal nurses have a potential role in the management of irritable bowel syndrome.

Previous research suggests that mirror-gazing is efficacious for the facilitation of anomalous experiences. The present experiment tested the hypothesis that the incidence of such experiences is a function of the demand characteristics of the procedure. Participants were randomly allocated to one of two conditions and completed a battery of trait and state measures. Individuals who were given suggestions for anomalous experiences, relative to those who were not, reported a greater number of visual, and a suggestively greater number of vocal, hallucinations. The experience of a descriptively dissociative phenomenological state was the strongest predictor of the reporting of anomalous experiences, but only correlated with the experience of anomalous perceptions in the suggestion condition. Experients of visual apparitions were found to significantly differ from nonexperients in their preference for a visual cognitive style independently of condition.

In the aftermath of the human genome project, genotyping is fast becoming an affordable and technologically viable complement to phenotyping. Whereas attempts to characterize hypnotic responsiveness have been largely phenomenological, data emanating from exploratory genetic data may offer supplementary insights into the genetic bases of hypnotizability. We outline our genetic and neuroimaging findings and discuss potential implications to top-down control systems. These results may explain individual differences in hypnotizability and propose new ideas for studying the influence of suggestion on neural systems.

The neural mechanisms underlying hypnosis and especially the modulation of pain perception by hypnosis remain obscure. Using PET we first described the distribution of regional cerebral blood flow during the hypnotic state. Hypnosis relied on revivification of pleasant autobiographical memories and was compared to imaging autobiographical material in "normal alertness". The hypnotic state was related to the activation of a widespread set of cortical areas involving occipital, parietal, precentral, premotor, and ventrolateral prefrontal and anterior cingulate cortices. This pattern of
activation shares some similarities with mental imagery, from which it mainly differs by the relative deactivation of precuneous. Second, we looked at the anti-nociceptive effects of hypnosis. Compared to the resting state, hypnosis reduced pain perception by approximately 50%. The hypnosis-induced reduction of affective and sensory responses to noxious thermal stimulation were modulated by the activity in the midcingulate cortex (area 24a). Finally, we assessed changes in cerebral functional connectivity related to hypnosis. Compared to normal alertness (i.e., rest and mental imagery), the hypnotic state, significantly enhanced the functional modulation between midcingulate cortex and a large neural network involved in sensory, affective, cognitive and behavioral aspects of nociception. These findings show that not only pharmacological but also psychological strategies for pain control can modulate the cerebral network involved in noxious perception.

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This study examined the fundamental question, whether verbal memory processing in hypnosis and in the waking state is mediated by a common neural system or by distinct cortical areas. Seven right-handed volunteers (25.4 years, sd 3.1) with high-hypnotic susceptibility scores were PET-scanned while encoding/retrieving word associations either in hypnosis or in the waking state. Word-pairs were visually presented and highly imaginable, but not semantically related (e.g. monkey-street). The presentation of pseudo-words served as a reference condition. An emission scan was recorded after each intravenous administration of O-15 water. Encoding under hypnosis was associated with more pronounced bilateral activations in the occipital cortex and the prefrontal areas as compared to learning in the waking state. During memory retrieval of word-pairs which had been previously learned under hypnosis, activations were found in the occipital lobe and the cerebellum. Under both experimental conditions precuneus and prefrontal cortex showed a consistent bilateral activation which was most distinct when the learning had taken place under hypnosis. In order to further analyze the effect of hypnosis on imagery-mediated learning, we administered sets of high-imagery word-pairs and sets of abstract words. In the first experimental condition word-pair associations were presented visually. In the second condition it was found that highly hypnotisable persons recalled significantly more high-imagery words under hypnosis as compared to low-hypnotisables both in the visual and auditory modality. Furthermore, high-imagery words were also better recalled by the highly hypnotisable subjects during the non-hypnotic condition. The memory effect was consistently present under both, immediate and delayed recall conditions. Taken together, the findings advance our understanding of the neural representation that underlies hypnosis and the neuropsychological correlates of hypnotic susceptibility.

[1193] Hypnosis and pain management.
Nurs J India. 2006 Jun;97(6):129-31
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Nurses have used complementary therapies for many years to relieve anxiety, promote comfort, and reduce or alleviate pain. Physical therapies are most commonly used in our scenario but behavioral approach had been less customary, since familiarity of health personnel is very less (36%) with these techniques (Zaza et al, 1999). Hypnosis is empirically proved best therapy for pain management. Hypnosis is a process involving a hypnotist and a subject who agrees to be hypnotized. Being hypnotized is usually characterized by intense concentration, extreme relaxation and high suggestibility. This paper initially address hypnosis from an historical perspective to give the reader a decent background in which to view current trends in research in the field. Then will explain how hypnosis work followed by the empirical evidences and problems encountered in use of hypnosis when used for pain management.

[1194] Response to Beshai's "Quantitative and qualitative research in hypnosis: comment on Woodard".
Psychol Rep. 2006 Jun;98(3):908-10
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This paper clears up some misunderstandings of Woodard's Phenomenological and Perceptual Research Methodology presented by Beshai in a recent critique. Beshai's critique helps demonstrate and validate a number of themes in Woodard's Perceptually Oriented Hypnosis. First, for each of us, our historical learnings provide the basis for scientific progress but at the same time may impede new views and even a more comprehensive understanding of hypnosis. Second, hypnosis is fundamentally a process of differentiating personal meanings that can be vastly different for various individuals. Third, Beshai uses a quantitatively based approach to understanding phenomenon different from Woodard's qualitative research process. Last, holistic understanding of hypnosis is impeded when aspects of the phenomenal field are taken quantitatively out of context.

[1195] Hypnosis reduces preoperative anxiety in adult patients.
Anesth Analg. 2006 May;102(5):1394-6
In this study we examined the effect of hypnosis on preoperative anxiety. Subjects were randomized into 3 groups, a hypnosis group (n = 26) who received suggestions of well-being; an attention-control group (n = 26) who received attentive listening and support without any specific hypnotic suggestions and a "standard of care" control group (n = 24). Anxiety was measured pre- and postintervention as well as on entrance to the operating rooms. We found that patients in the hypnosis group were significantly less anxious postintervention as compared with patients in the attention-control group and the control group (31 +/- 8 versus 37 +/- 9 versus 41 +/- 11, analysis of variance, P = 0.008). Moreover, on entrance to the operating rooms, the hypnosis group reported a significant decrease of 56% in their anxiety level whereas the attention-control group reported an increase of 10% in anxiety and the control group reported an increase of 47% in their anxiety (P = 0.001). In conclusion, we found that hypnosis significantly alleviates preoperative anxiety. Future studies are indicated to examine the effects of preoperative hypnosis on postoperative outcomes.

OBJECTIVE: To investigate whether hypnosis during ET contributes to successful IVF/ET outcome. DESIGN: Case-control clinical study. SETTING: Academic Fertility and IVF Unit, Soroka Medical Center, Beer-Sheva, Israel. PATIENT(S): Infertile couples undergoing IVF. INTERVENTION(S): Ninety-eight IVF/ET cycles with hypnosis during the ET procedure were matched with 96 regular IVF/ET cycles. MAIN OUTCOME MEASURES: Comparison of clinical pregnancy and implantation rates between the two groups. RESULT(S): We obtained 52 clinical pregnancies out of 98 cycles (53.1%) with an implantation rate of 28% among hypnosis IVF/ET cycles, and 29 out of 96 (30.2%) clinical pregnancies and an implantation rate of 14.4% in the control cycles. Our overall IVF program pregnancy rate for the same period was 32.1%. Logistic regression analysis was performed emphasizing the positive contribution of hypnosis to the IVF/ET conception rates. CONCLUSION(S): This study suggests that the use of hypnosis during ET may significantly improve the IVF/ET cycle outcome in terms of increased implantation and clinical pregnancy rates. Furthermore, it seems that the patients' attitude to the treatment was more favorable.

OBJECTIVE: We investigated the effect of autogenic training (AT) on cardiac autonomic nervous activity in fire services workers with the use of the questionnaire of the Japanese-language version of Impact of Event Scale-Revised (IES-R-J) and indexes of heart rate variability. METHODS: We studied 22 male fire services workers who were divided into posttraumatic stress disorder (PTSD)-related stress group (n=10) and control group (n=12). They underwent AT twice or three times a week for 2 months. RESULTS: Posttraumatic stress disorder-related stress group showed a significantly higher cardiac sympathetic nervous activity and a significantly lower cardiac parasympathetic nervous activity than control group at baseline. Autogenic training significantly decreased cardiac sympathetic nervous activity and significantly increased cardiac parasympathetic nervous activity in both groups. These changes were accompanied by a significant
decrease in the total points of IES-R-J. CONCLUSION: Autogenic training is effective for ameliorating the disturbance of cardiac autonomic nervous activity and psychological issues secondary to PTSD.

[1199]
Social suggestibility to central and peripheral misinformation.
Memory. 2006 May;14(4):486-501
Dalton AL, Daneman M.
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This study used a laboratory-based paradigm to investigate social influences on participants’ susceptibility to misleading suggestions. Participants viewed a video clip of an action sequence with one or more peers, and then were required to discuss the event with the co-witness or with the group of co-witnesses. During the discussion a confederate, posing as a peer, presented misinformation about central and peripheral features of the co-witnessed event. Results indicated that participants were more susceptible to misleading suggestions during one-on-one discussions than during group discussions. In addition, participants were susceptible to misleading suggestions about central features of the witnessed event, although to a lesser extent than they were susceptible to misleading suggestions about peripheral features.

[1200]
Psychologic interventions for chronic pain.
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As a biopsychosocial understanding of chronic pain has become more sophisticated during recent decades, a variety of psychologically based treatment approaches have been developed and empirically validated for helping people better manage their pain. These approaches to pain management have much to offer persons with chronic pain in terms of enhancing quality of life and pain-related coping, as well as reducing disability and pain-related interference with functioning. Although some treatments, like hypnotic analgesia, may require referral to a specialized provider, several of the principles of other psychologically based treatment approaches for pain management (eg, operant behavioral therapy, cognitive-behavioral therapy, motivational interviewing) can easily be integrated into work with persons with pain in a rehabilitation setting. Rehabilitation providers who are interested in incorporating these treatment strategies into their clinical work who do not have prior exposure to these approaches are encouraged to review the suggested references and to seek out related training opportunities.

[1201]
Prokinetic effect of gut-oriented hypnosis on gastric emptying.
Aliment Pharmacol Ther. 2006 Apr 15;23(8):1241-9
Chiarioni G, Vantini I, De Iorio F, Benini L.
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BACKGROUND: No data are available on the effect of hypnosis on gastric emptying. AIM: To determine the effect of a hypnotic session on gastric emptying and dyspeptic symptoms. METHODS: We studied emptying by ultrasonography and epigastric sensations in 11 healthy subjects and in 15 patients affected by functional dyspepsia under three conditions according to a fixed schedule: (a) basal, (b) after cisapride and (c) during a 90 min hypnotic trance. Eight healthy subjects repeated an emptying study listening to relaxing music. Statistical analysis was performed using the Friedman test or RM-ANOVA. RESULTS: In dyspeptics, the postprandial increase in the antral area was significantly smaller during the hypnotic trance than under the basal and the cisapride conditions. For the patients gastric emptying was significantly shortened by cisapride, and even more by hypnosis (basal 274 +/- 16.8 min; cisapride 227 +/- 13.2; hypnosis 150 +/- 9.7) whereas for healthy subjects it was shortened only by hypnosis. The repeated study in healthy subjects listening to relaxing music showed no significant difference compared with the basal. Epigastric sensations were improved in dyspeptics by hypnosis, but not by cisapride. CONCLUSIONS: Gut-oriented hypnosis is effective in shortening gastric emptying both in dyspeptic and in healthy subjects.

[1202]
Alert hypnosis: a review and case report.
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This review summarizes the use of hypnotic inductions while the subject is physically active, open-eyed and focused on the external environment. Research cited from several sources documents that traditional and alert inductions produce similar hypnotic susceptibility scores, but after an alert induction, subjects may report feeling more alert and in control. A case is reported of a client who was able to use such an induction to stay in alert hypnosis for an extended time, and reduce the long-standing anxiety effects of past failure. Finally, a systematic way is discussed to generate inductions that may expand the use of hypnosis to new applications.
Hypnotically enhanced dreaming to achieve symptom reduction: a case study of 11 children and adolescents.
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Theories about dreams have shaped our thinking about mind-body unity and the influence of thought on the body. In this article, the authors review the sparse literature regarding the use of hypnosis with children's dreams and nightmares, summarize how hypnotically induced dreams have been used to resolve psychological symptoms, and note five themes in the literature worthy of further investigation. Building on the value of both dreams and hypnosis for working through conflicts, the authors united mind-body medicine and hypnotically induced dreaming in a pediatric pulmonary practice. A case series is presented of 11 patients who were offered an opportunity to review their reported nightmares through hypnosis in order to uncover their potential meaning. The recurrent nightmares among these patients decreased greatly in frequency or resolved following the hypnosis enhanced dream review. Thus, we demonstrate that hypnotically induced dream review may be useful in a pediatric population.

The neuroscience of observing consciousness & mirror neurons in therapeutic hypnosis.
Am J Clin Hypn. 2006 Apr;48(4):263-78
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Neuroscience documents the activity of “mirror neurons” in the human brain as a mechanism whereby we experience empathy and recognize the intentions of others by observing their behavior and automatically matching their brain activity. This neural basis of empathy finds support in research on dysfunctions in the mirror systems of humans with autism and fMRI research on normal subjects designed to assess intentionality, emotions, and complex cognition. Such empathy research now appears to be consistent with the historical and research literature on hypnotic induction, rapport, and many of the classical phenomena of suggestion. A preliminary outline of how mirror neurons may function as a rapport zone mediating between observing consciousness, the gene expression/protein synthesis cycle, and brain plasticity in therapeutic hypnosis and psychosomatic medicine is proposed. Brain plasticity is generalized in the theory, research, and practice of utilizing mirror neurons as an explanatory framework in developing and training new skill sets for facilitating an activity-dependent approach to creative problem solving, mind-body healing, and rehabilitation with therapeutic hypnosis.

Age regression: tailored versus scripted inductions.
Am J Clin Hypn. 2006 Apr;48(4):251-61
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The effects of tailored versus scripted hypnotic inductions were tested with the intention of shedding light on age regression phenomena. From an initial pool of 31 volunteers, 10 males and 10 females who scored 3 or better on the Stanford Hypnotic Clinical Scale, participated in this study. Participants were assigned to either scripted or tailored hypnotic induction conditions for regression to age 5. The age specific developmental task was to indicate for each of 10 abstract figure pairs, which of each pair “was upside down”. Both groups showed significant focal point dependency. However, the tailored induction group showed significantly greater focal point dependency characteristic of 5-year-old children, in contrast to the scripted induction group. It appears that tailored hypnotic inductions may provide a better avenue for the ego to regulate its own degree of regression. The better match to personality style takes advantage of the naturally occurring ego-syntonic capacities of the participant, thereby facilitating greater hypnotic responsiveness.

Benjamin Franklin and the neurosciences.
Funct Neurol. 2006 Apr-Jun;21(2):67-75
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Benjamin Franklin (1706-1790), who is better known in other fields, especially colonial politics and international diplomacy, was an early, major contributor to the neurosciences from the New World. Among his accomplishments are: experiments on medical electricity as a possible cure for the palsies and hysteria; the first descriptions of how electricity affecting the brain can cause a specific type of amnesia; supporting the idea that cranial shocks might provide a cure for melancholia; showing that the cures performed by the Mesmerists to remove obstructions, including nerve blockages, rest on gullibility and suggestion, and recognizing the dangers, including those to the nerves, posed by exposure to lead. Franklin’s neuroscience was firmly based on experiments, careful observations, and hard data and finding clinical relevance for new discoveries was always on his mind.

A meta-analysis of gender, smoking cessation, and hypnosis: a brief communication.
Int J Clin Exp Hypn. 2006 Apr;54(2):224-33
Green JP, Jay Lynn S, Montgomery GH.
Results of a meta-analysis showed that males were more likely to report smoking abstinence than female participants following hypnosis-based treatments for smoking. Across 12 studies that used hypnosis in the treatment of smoking and reported outcome statistics by gender, the authors found that the odds of achieving smoking abstinence were 1.37 times greater for male than female participants. The results are consistent with the nonhypnosis literature suggesting that females have a more difficult time achieving smoking abstinence compared to males.

[Suggestions of altered balance: Possible equivalence of imagery and perception.
Carli G, Rendo C, Sebastiani L, Santarcangelo EL.
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Hypnotic suggestions describing an altered perception induce congruent changes in the subject's experience and behavior. However, it is not known whether an implicit suggestion, only indirectly referring to an altered perception, induces a behavioral response corresponding to that of the real situation. In this study, an implicit suggestion of backward falling (IMP) was given to high hypnotizable participants not exposed (W-Highs) and exposed (H-Highs) to a hypnotic induction and a group of low hypnotizable individuals (W-Lows). Their posture was evaluated through an elite system. The results after the IMP were compared with those after an explicit suggestion of backward falling (EXP). In both W-Highs and H-Highs, the IMP elicited the backward body sway expected in the corresponding real situation, whereas no response was found in W-Lows. The results are discussed in terms of a possible equivalence of imagery and perception or of a lack of the motor inhibition normally associated with motor imagery.

Int J Clin Exp Hypn. 2006 Apr;54(2):186-205
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The present study closely examines subject response to the arm-rigidity item of the HGSHS:A. Subject behavior, subject self-report, and surface EMG of the biceps and triceps muscles were monitored. Two distinct ways of passing the item were observed and verified by EMG recordings: some subjects (tremblers) exerted muscular effort to bend the arm and kept it rigidly straight. Others (nontremblers) passively kept the arm straight without exerting muscular effort to bend, even though they reported exerting effort to bend their arm. These two behaviorally and physiologically different methods of passing the item support the idea of individual differences in hypnotic responding and suggest that subjects may be using different mental processes to pass the item.

[The special effects of hypnosis and hypnotherapy: A contribution to an ecological model of therapeutic change.
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There is ample evidence that hypnosis enhances the effectiveness of psychotherapy and produces some astounding effects of its own. In this paper, the effective components and principles of hypnosis and hypnotherapy are analyzed. The "special" hypnotic and hypnotherapeutic effects are linked to the fact that the ecological requirements of therapeutic change are taken into account implicitly and/or explicitly when working with hypnotic trances in a therapeutic setting. The hypnotic situation is described--theoretically and in case examples--as a therapeutic modality that gratifies and aligns the basic emotional needs to feel autonomous, related, competent, and oriented. It is shown how the hypnotic relationship can help promote a sound ecological balance between these needs--a balance that is deemed to be a necessary prerequisite for salutogenesis. Practical implications for planning hypnotherapeutic interventions are discussed.

[Mindfulness, acceptance, and hypnosis: Cognitive and clinical perspectives.
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The authors propose that hypnosis and mindfulness-based approaches can be used in tandem to create adaptive response sets and to deautomatize maladaptive response sets. They summarize recent research on the effectiveness of mindfulness-based approaches in clinical and nonclinical contexts and propose that the cognitive underpinnings of mindfulness approaches can be conceptualized in terms of the metacognitive basis of mindful attention, Toneatto's elucidation of the Buddhist perspective on cognition, and Kirsch and Lynn's response-set theory. They also suggest that mindfulness can serve as a template for generating an array of suggestions that provides cognitive strategies to contend with problems in living and to ameliorate stress and negative affect more generally. Many of the ideas the authors
advance are speculative and are intended to spur additional research and clinical work.

[1212]
Hypnosis delivered through immersive virtual reality for burn pain: A clinical case series.
Int J Clin Exp Hypn. 2006 Apr;54(2):130-42
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This study is the first to use virtual-reality technology on a series of clinical patients to make hypnotic analgesia less effortful for patients and to increase the efficiency of hypnosis by eliminating the need for the presence of a trained clinician. This technologically based hypnotic induction was used to deliver hypnotic analgesia to burn-injury patients undergoing painful wound-care procedures. Pre- and postprocedure measures were collected on 13 patients with burn injuries across 3 days. In an uncontrolled series of cases, there was a decrease in reported pain and anxiety, and the need for opioid medication was cut in half. The results support additional research on the utility and efficacy of hypnotic analgesia provided by virtual reality hypnosis.

[1213]
Six players on the inner stage: Using ego state therapy with the medically ill.
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The symptoms of medical illness often speak through eloquent, embedded metaphors that express deeper unconscious conflicts and meanings. Therapeutic attunement to the multilayered issues associated with a patient's illness can be instrumental in the uncovering and working through conflicts that may impede both physical and emotional healing. Among hypnotically facilitated psychotherapeutic approaches that can be helpful, ego state techniques offer rapid access to these illness-associated issues. This article discusses six different ego states that are key players in the illness drama for many patients. Five of these are indwelling components of the patient's psyche, whereas the sixth player belongs to the therapist's resonant self. All of them are relevant when the practitioner seeks to facilitate deeper healing in patients with mind/body conditions.

[1214]
Mediation and moderation of psychological pain treatments: response expectancies and hypnotic suggestibility.
J Consult Clin Psychol. 2006 Apr;74(2):253-62
Milling LS, Reardon JM, Carosella GM.
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The mediator role of response expectancies and the moderator role of hypnotic suggestibility were evaluated in the analogue treatment of pain. Approximately 1,000 participants were assessed for hypnotic suggestibility. Later, as part of a seemingly unrelated experiment, 188 of these individuals were randomly assigned to distraction, cognitive-behavioral package, hypnotic cognitive-behavioral package, hypnotic analgesia suggestion, placebo control, or no-treatment control conditions. Response expectancies partially mediated the effects of treatment on pain. Hypnotic suggestibility moderated treatment and was associated with the relief produced only by the hypnotic interventions. The results suggest that response expectancies are an important mechanism of hypnotic and cognitive-behavioral pain treatments and that hypnotic suggestibility is a trait variable that predicts hypnotic responding across situations, including hypnosis-based pain interventions. Copyright 2006 APA.

[1215]
Hypnotic trait and specific phobia: EEG and autonomic output during phobic stimulation.
Gemignani A, Sebastiani L, Simoni A, Santarcangelo EL, Gherarducci B.
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In a previous study we showed that healthy highly hypnotizable subjects, during the suggestion of a moderately unpleasant situation administered in awake conditions, exhibited a sympathetic response greatly attenuated with respect to non-hypnotizable individuals. This was interpreted as a natural protection of hypnotizable subjects against the cardiovascular effects of cognitive stress. Aim of the present study was to investigate whether the hypnotic trait is able to modulate the autonomic and cerebral activities also in specific phobic awake hypnotizable (Highs) and non-hypnotizable (Lows) subjects. Electroencephalogram, electrooculogram, electromiogram of corrugator muscle, electrocardiogram, respirogram and tonic electrodermal activity were recorded during a guided mental imagery of an animal phobic object. Phobic stimulation induced in both groups the rise of heart and respiratory frequency and the lowering of skin resistance. These changes are less pronounced in Highs than in Lows and are sustained by a different modulation of the sympathetic-vagal balance. During phobic stimulation both groups exhibited a similar significant increase of EEG gamma relative power. At variance, significant stimulation-related decrements of alpha1, theta1 and theta2 activities were found only in Highs that exhibited similar changes during the control and phobic stimulation. Results suggest that hypnotizability is able to modulate cerebral and autonomic responses also in specific phobic subjects. However, the presence of a specific phobia attenuates the effectiveness of hypnotizability as a protective factor against possible stress-related cardiac illness.
The NHS must be smoke free by the end of 2006 (Department of Health, 2004). The necessary elements to introducing a smoke-free policy, which is workable and equitable, are the management of the policy and offering support to smokers. Smoking and second-hand smoking are responsible for many illnesses, premature deaths and reduced productivity. Employers have a responsibility to ensure the health of their employees by protecting them from exposure to cigarette smoke in the workplace. Although smoking restrictions in the workplace are popular, it is important to ensure good communication with everyone who will be affected, since there are many fears associated with the introduction of the policy. Help must be offered to people who wish to quit through behavioural and pharmacological interventions and support must also be given to the smoker who must abstain from smoking on the premises during work or hospital stay.

Hypnosis Antenatal Training for Childbirth (HATCH): a randomised controlled trial [NCT00282204]
BMC Pregnancy Childbirth. 2006 Mar 5;6:5
Cyna AM, Andrew M, Robinson JS, Crowther CA, Baghurst P, Turnbull D, Wicks G, Whittle C.
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BACKGROUND: Although medical interventions play an important role in preserving lives and maternal comfort they have become increasingly routine in normal childbirth. This may increase the risk of associated complications and a less satisfactory birth experience. Antenatal hypnosis is associated with a reduced need for pharmacological interventions during childbirth. This trial seeks to determine the efficacy or otherwise of antenatal group hypnosis preparation for childbirth in late pregnancy. METHODS/DESIGN: A single centre, randomised controlled trial using a 3 arm parallel group design in the largest tertiary maternity unit in South Australia. Group 1 participants receive antenatal hypnosis training in preparation for childbirth administered by a qualified hypnotherapist with the use of an audio compact disc on hypnosis for re-enforcement; Group 2 consists of antenatal hypnosis training in preparation for childbirth using an audio compact disc on hypnosis administered by a nurse with no training in hypnotherapy; Group 3 participants continue with their usual preparation for childbirth with no additional intervention. Women &gt; 34 and &lt; 39 weeks gestation, planning a vaginal birth, not in active labour, with a singleton, viable fetus of vertex presentation, are eligible to participate. Allocation concealment is achieved using telephone randomisation. Participants assigned to hypnosis groups commence hypnosis training as near as possible to 37 weeks gestation. Treatment allocations are concealed from treating obstetricians, anaesthetists, midwives and those personnel collecting and analysing data. Our sample size of 135 women/group gives the study 80% power to detect a clinically relevant fall of 20% in the number of women requiring pharmacological analgesia - the primary endpoint. We estimate that approximately 5-10% of women will deliver prior to receiving their allocated intervention. We plan to recruit 150 women/group and perform sequential interim analyses when 150 and 300 participants have been recruited. All participant data will be analysed, by a researcher blinded to treatment allocation, according to the "Intention to treat" principle with comprehensive pre-planned cost- benefit and subgroup analyses. DISCUSSION: If effective, hypnosis would be a simple, inexpensive way to improve the childbirth experience, reduce complications associated with pharmacological interventions, yield cost savings in maternity care, and this trial will provide evidence to guide clinical practice.

Thirty years ago, the integration of complementary medicine into cancer care almost was dismissed as quackery. Today, a whole range of complementary and alternative medicine (CAM) techniques have been integrated into the management of cancer, which are often of benefit to patients, when conventional treatment is deemed to have failed or caused intolerable side effects. Health care workers need to inquire about the use of CAM in their patients routinely in a sensitive and nonjudgmental way, and may need to advise patients to stop certain therapies. Yet in advanced cancer, a sensible balance needs to be struck between fear about adverse effects and interactions and the importance of making the remaining weeks/days/months as comfortable and enjoyable as possible.

Hypnosis and modern frontal-lobe concepts--a sketch for a review and an invitation to one particularly promising field.
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The present paper intends to briefly review the most important concepts of the modern neuropsychology of the frontal lobes, and to relate these findings to the phenomenology usually encountered in hypnosis research and practice. The frontal lobes have been studied very intensively during the last several years and some of the results, including the
syndromes described in frontal-lobe lesions and psychiatric patients, demonstrate striking similarity with hypnotic phenomena. Based on these similarities, an alternative neuropsychophysiological definition of hypnosis/suggestion is proposed, viewing hypnosis/suggestion as the process of external manipulation with frontal-lobe functions with consequent effects upon the entire brain potential of the subject.

[1220]
Autogenic training to reduce anxiety in nursing students: randomized controlled trial.
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AIM: This paper reports a study to determine the effectiveness of autogenic training in reducing anxiety in nursing students. BACKGROUND: Nursing is stressful, and nursing students also have the additional pressures and uncertainties shared with all academic students. Autogenic training is a relaxation technique consisting of six mental exercises and is aimed at relieving tension, anger and stress. Meta-analysis has found large effect sizes for autogenic trainings intervention comparisons, medium effect sizes against control groups, and no effects when compared with other psychological therapies. A controlled trial with 50 nursing students found that the number of certified days off sick was reduced by autogenic training compared with no treatment, and a second trial with only 18 students reported greater improvement in Trait Anxiety, but not State Anxiety, compared with untreated controls. METHODS: A randomized controlled trial with three parallel arms was completed in 1998 with 93 nursing students aged 19-49 years. The setting was a university college in the United Kingdom. The treatment group received eight weekly sessions of autogenic training, the attention control group received eight weekly sessions of laughter therapy, and the time control group received no intervention. The outcome measures were the State-Trait Anxiety Inventory, the Maslach Burnout Inventory, blood pressure and pulse rate completed at baseline, 2 months (end of treatment), and 5, 8, and 11 months from randomization. RESULTS: There was a statistically significantly greater reduction of State (P<0.001) and Trait (P<0.001) Anxiety in the autogenic training group than in both other groups immediately after treatment. There were no differences between the groups for the Maslach Burnout Inventory. The autogenic training group also showed statistically significantly greater reduction immediately after treatment in systolic (P<0.01) and diastolic (P<0.05) blood pressure, and pulse rate (P<0.002), than the other two groups. CONCLUSION. Autogenic training has at least a short-term effect in alleviating stress in nursing students.

[1221]
Hypnosis: removing the labour from birth.
Pract Midwife. 2006 Mar;9(3):26-7, 29
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Hypnosis has been used in obstetrics for more than a century. However, with increasing numbers of women looking for alternative coping strategies for use during labour, the birth of a new discipline, HypnoBirthing, is gaining in popularity. HypnoBirthing is a hypnotherapy programme specifically designed for birth, employing the principles and techniques of hypnosis and self-relaxation. This article explains the philosophy and principles of HypnoBirthing, the evidence base and its physiological impact on labouring women, brought to life by real accounts.

[1222]
Dispute over the multiple personality disorder: theoretical or practical dilemma?[Article in Polish]
Stankiewicz S, Golczynska M.

Dissociative identity disorder (DID) could also be referred to as multiple personality disorder (MPD). Due to rare occurrence and difficulty in its' identification it is infrequently diagnosed in Poland. The indicated disorder has been portrayed by the authors throughout the historical context, referring to initial 18th century's references concerning dissociation. A typical dissociatively disordered person has been characterized along with his individual personality categories such as: original personality, altered personality, host and personality fragment. Moreover various diagnosis criterions of DID have been introduced. DID has also been differentiated with other disorders: PTSD (post-traumatic stress disorder) and BPD (borderline personality disorder). A hypothesis has been set up, stating that DID is directly correlated with the trauma experienced during childhood, while PTSD is linked with traumatic lived-through events in the later period of ones' life. The most contemporary and frequently used research tools for DID have been indicated: dissociative experience scale (DES) and somatoform dissociation questionnaire (SDQ-20). Based upon the known literature, the authors have presented treatment methods such as hypnotherapy and recorded therapy sessions. It is the view of the authors that the switching in dissociative identity disorder is of adaptive character (it occurs depending upon adaptive needs).

[1223]
Systematic review: Complementary and alternative medicine in the irritable bowel syndrome
Aliment Pharmacol Ther. 2006 Feb 15;23(4):465-71
Hussain Z, Quigley EM.
BACKGROUND: Complementary and alternative medical therapies and practices are widely employed in the treatment of the irritable bowel syndrome. AIM: To review the usage of complementary and alternative medicine in the irritable bowel syndrome, and to assess critically the basis and evidence for its use. METHODS: A systematic review of complementary and alternative medical therapies and practices in the irritable bowel syndrome was performed based on literature obtained through a Medline search. RESULTS: A wide variety of complementary and alternative medical practices and therapies are commonly employed by irritable bowel syndrome patients both in conjunction with and in lieu of conventional therapies. As many of these therapies have not been subjected to controlled clinical trials, some, at least, of their efficacy may reflect the high-placebo response rate that is characteristic of irritable bowel syndrome. Of those that have been subjected to clinical trials most have involved small poor quality studies. There is, however, evidence to support efficacy for hypnotherapy, some forms of herbal therapy and certain probiotics in irritable bowel syndrome. CONCLUSIONS: Doctors caring for irritable bowel syndrome patients need to recognize the near ubiquity of complementary and alternative medical use among this population and the basis for its use. All complementary and alternative medicine is not the same and some, such as hypnotherapy, forms of herbal therapy, specific diets and probiotics, may well have efficacy in irritable bowel syndrome. Above all, we need more science and more controlled studies; the absence of truly randomized placebo-controlled trials for many of these therapies has limited meaningful progress in this area.

[1224]
Am Psychol. 2006 Feb-Mar;61(2):175
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Presents an obituary for Theodore Xenophon Barber (1927-2005), one of the most prolific and influential researchers in the field of hypnosis. At the time of his death he was an active scholar in his private research enterprise, the Interdisciplinary Science Research Institute. A brief biography of Barber is followed by an overview of his published work, his theories and other influential accomplishments. Although hypnosis was the main focus of Barber's research, his interests and research encompassed other topics, including the phenomenon of investigator bias, psychical phenomena, and even comparative psychology. ((c) 2006 APA, all rights reserved).

[1225]
Gut-directed hypnotherapy for irritable bowel syndrome: piloting a primary care-based randomised controlled trial
Br J Gen Pract. 2006 Feb;56(523):115-21
Roberts L, Wilson S, Singh S, Roalfe A, Greenfield S
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BACKGROUND: In western populations irritable bowel syndrome (IBS) affects between 10% and 30% of the population and has a significant effect on quality of life. It generates a substantial workload in both primary and secondary care and has significant cost implications. Gut-directed hypnotherapy has been demonstrated to alleviate symptoms and improve quality of life but has not been assessed outside of secondary and tertiary referral centres. AIM: To assess the effectiveness of gut-directed hypnotherapy as a complementary therapy in the management of IBS. DESIGN OF STUDY: Randomised controlled trial. SETTING: Primary care patients aged 18-65 years inclusive, with a diagnosis of IBS of greater than 6 weeks' duration and having failed conventional management, located in South Staffordshire and North Birmingham, UK. METHOD: Intervention patients received five sessions of hypnotherapy in addition to their usual management. Control patients received usual management alone. Data regarding symptoms and quality of life were collected at baseline and again 3, 6, and 12 months post-randomisation. RESULTS: Both groups demonstrated a significant improvement in all symptom dimensions and quality of life over 12 months. At 3 months the intervention group had significantly greater improvements in pain, diarrhoea and overall symptom scores (P<0.05). No significant differences between groups in quality of life were identified. No differences were maintained over time. Intervention patients, however, were significantly less likely to require medication, and the majority described an improvement in their condition. CONCLUSIONS: Gut-directed hypnotherapy benefits patients via symptom reduction and reduced medication usage, although the lack of significant difference between groups beyond 3 months prohibits its general introduction without additional evidence. A large trial incorporating robust economic analysis is, therefore, urgently recommended.

[1226]
Somatization, somatosensory amplification, attribution styles and illness behaviour: a review
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Somatic symptoms have been conceptualized in many different ways in literature. Current classifications mainly focus on the numbers of symptoms, with relative neglect of the underlying psychopathology. Researchers have emphasized the importance of a number of experiential, perceptual and cognitive-behavioural aspects of somatization. This review focuses on existing literature on the role of somatosensory amplification, attribution styles, and illness behaviour in
somatization. Evidence suggests that somatosensory amplification is neither sensitive nor specific to somatizing states, and that other factors like anxiety, depression, neuroticism, alexithymia may also have an influence. Attribution research supports the existence of multiple causal attributions, which are related to the numbers of somatic symptoms. While somatizing patients have more organic attributions, depressed patients have more psychological attributions. A global somatic attribution style is associated with the number of obscure somatic symptoms, while a psychological attribution style is associated with both—psychological and somatic—symptoms of depression and anxiety. There are conflicting findings with respect to the role of normalizing attributions in reducing physician recognition of anxiety and depression. Specific symptom attributions appear to explain physician recognition of psychological distress, but global attribution styles do not appear to explain any further variance in physician recognition beyond that explained by specific causal attributions. Illness behaviour has been studied in two distinct ways in literature. Research focusing on attendance rates as a form of illness behaviour suggests that somatization is associated with high levels of health care utilization. There is also some evidence that health care utilization, amplification and attributions styles may be interrelated among somatizing patients. More structured ways to assess illness behaviour have found high levels of abnormal illness behaviour in this population. Overall, research appears to suggest a complex (and as yet unclear) relationship between somatic symptoms and underlying cognitions/illness behaviours. While it is clear that somatization is closely related to a number of perceptual and cognitive-behavioural factors, the precise nature of these relationships are yet to be elucidated.

[1227]
Hypnotic treatment of chronic pain.
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This article reviews controlled trials of hypnotic treatment for chronic pain in terms of: (1) analyses comparing the effects of hypnotic treatment to six types of control conditions; (2) component analyses; and (3) predictor analyses. The findings indicate that hypnotic analgesia produces significantly greater decreases in pain relative to no-treatment and to some non-hypnotic interventions such as medication management, physical therapy, and education/advice. However, the effects of self-hypnosis training on chronic pain tend to be similar, on average, to progressive muscle relaxation and autogenic training, both of which often include hypnotic-like suggestions. None of the published studies have compared hypnosis to an equally credible placebo or minimally effective pain treatment, therefore conclusions cannot yet be made about whether hypnotic analgesia treatment is specifically effective over and above its effects on patient expectancy. Component analyses indicate that labeling versus not labeling hypnosis treatment as hypnosis, or including versus not including hand-warming suggestions, have relatively little short-term impact on outcome, although the hypnosis label may have a long-term benefit. Predictor analyses suggest that global hypnotic responsivity and ability to experience vivid images are associated with treatment outcome in hypnosis, progressive relaxation, and autogenic training treatments. The paper concludes with a discussion of the implications of the findings for future hypnosis research and for the clinical applications of hypnotic analgesia.

[1228]
Hypnosis for pain management
J Psychosoc Nurs Ment Health Serv. 2006 Feb;44(2):22-30
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Nurses are in a key position to learn and use hypnosis with patients to reduce pain and enhance self-esteem. However, most nurses lack knowledge about the clinical effectiveness of hypnosis and may seek continuing education to become skilled in its use. Painful procedures, treatments, or diseases remain a major nursing challenge, and nurses need complementary ways to relieve pain from surgery, tumors, injuries, and chemotherapy. This article examines the evidence base related to hypnosis for pain management, as well as how to assess and educate patients about hypnosis.

[1229]
Psychological interventions for needle-related procedural pain and distress in children and adolescents.
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BACKGROUND: Needle-related procedures are a common source of pain and distress for children. Several psychological (cognitive-behavioral) interventions to help manage or reduce pain and distress are available; however, a previous comprehensive systematic review of the efficacy of these interventions has not been conducted. OBJECTIVES: To assess the efficacy of cognitive-behavioral psychological interventions for needle-related procedural pain and distress in children and adolescents. SEARCH STRATEGY: We searched the Cochrane Central Register of Controlled Trials (CENTRAL) on The Cochrane Library (Issue 4, 2005), MEDLINE (1966 to 2005), PsycINFO (1887 to 2005), EMBASE (1974 to 2005), the Cumulative Index to Nursing and Allied Health Literature (1982 to 2005), Web of Science (1980 to 2005), and Dissertation-Abstracts International (1980 to 2005). We also searched citation lists and contacted researchers via various electronic list-servers and via email requests. SELECTION CRITERIA: Participants included children and
adolescents aged two to 19 years undergoing needle-related procedures. Only randomized controlled trials (RCTs) with at least five participants in each study arm comparing a psychological intervention group with a control or comparison group were eligible for inclusion. DATA COLLECTION AND ANALYSIS: Two review authors independently extracted data and assessed trial quality. Included studies were coded for quality using the Oxford Quality Scale devised by Jadad and colleagues. Standardized mean differences with 95% confidence intervals were computed for all analyses using RevMan 4.0 software. MAIN RESULTS: Twenty eight trials with 1951 participants were included. Together, these studies included 1039 participants in treatment conditions and 951 in control conditions. The most commonly studied needle-procedures were immunizations and injections. The largest effect sizes for treatment improvement over control conditions exist for distraction (on self-reported pain, SMD -0.24 (95% CI -0.45 to -0.04), combined cognitive-behavioral interventions--reduced other-reported distress (SMD -0.88, 95% CI -1.65 to -0.12; and behavioral measures of distress (SMD -0.67, 95% CI -0.95 to -0.38) with hypnosis being the most promising--self-reported pain (SMD -1.47, 95% CI -2.67 to -0.27), with promising but limited evidence for the efficacy of numerous other psychological interventions, such as information/preparation, nurse coaching plus distraction, parent positioning plus distraction, and distraction plus suggestion. AUTHORS' CONCLUSIONS: Overall, there is preliminary evidence that a variety of cognitive-behavioral interventions can be used with children and adolescents to successfully manage or reduce pain and distress associated with needle-related procedures. However, many of the included studies received lower quality scores because they failed to describe the randomization procedure and participant withdrawals or drop-outs from the study. Further RCTs need to be conducted, particularly for the many interventions for which we could not locate any trials.

[1230]
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BACKGROUND: Many women would like to avoid pharmacological or invasive methods of pain management in labour and this may contribute towards the popularity of complementary methods of pain management. This review examined currently available evidence supporting the use of alternative and complementary therapies for pain management in labour. OBJECTIVES: To examine the effects of complementary and alternative therapies for pain management in labour on maternal and perinatal morbidity. SEARCH STRATEGY: We searched the Cochrane Pregnancy and Childbirth Group's Trials Register (February 2006), the Cochrane Central Register of Controlled Trials (The Cochrane Library 2006, Issue 1), MEDLINE (1966 to February 2006), EMBASE (1980 to February 2006) and CINAHL (1980 to February 2006). SELECTION CRITERIA: The inclusion criteria included published and unpublished randomised controlled trials comparing complementary and alternative therapies (but not biofeedback) with placebo, no treatment or pharmacological forms of pain management in labour. All women whether primiparous or multiparous, and in spontaneous or induced labour, in the first and second stage of labour were included. DATA COLLECTION AND ANALYSIS: Meta-analysis was performed using relative risks for dichotomous outcomes and mean differences for continuous outcomes. The outcome measures were maternal satisfaction, use of pharmacological pain relief and maternal and neonatal adverse outcomes. MAIN RESULTS: Fourteen trials were included in the review with data reporting on 1537 women using different modalities of pain management: 1448 women were included in the meta-analysis. Three trials involved acupuncture (n = 496), one audio-anaesthesia (n = 24), two trials acupressure (n = 172), one aromatherapy (n = 22), five trials hypnosis (n = 729), one trial of massage (n = 60), and relaxation (n = 34). The trials of acupuncture showed a decreased need for pain relief (relative risk (RR) 0.70, 95% confidence interval (CI) 0.49 to 1.00, two trials 288 women). Women taught self-hypnosis had decreased requirements for pharmacological anaesthesia (RR 0.53, 95% CI 0.36 to 0.79, five trials 749 women) including epidural anaesthesia (RR 0.30, 95% CI 0.22 to 0.40) and were more satisfied with their pain management in labour compared with controls (RR 2.33, 95% CI 1.15 to 4.71, one trial). No differences were seen for women receiving aromatherapy, or audio anaesthesia. AUTHORS' CONCLUSIONS: Acupuncture and hypnosis may be beneficial for the management of pain during labour; however, the number of women studied has been small. Few other complementary therapies have been subjected to proper scientific study.

[1231]
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This case report discusses a patient who experienced frequent nightmares and chronic low-level anxiety during his 3 1/2 year imprisonment. He developed post traumatic stress disorder (PTSD), in part because he adamantly insisted that he had been wrongfully incarcerated. The literature supports the use of hypnotic imagery rehearsal for treating nightmares that stem from PTSD. Due to the patient's distrust of others and trauma history, it was uncertain whether hypnotic intervention would be effective. It is of note, there is no indication in the literature that hypnosis has been used with people on parole, let alone individuals who believe they were wrongly accused of committing a crime.

[1232]
Hypnosis: medicine's dirty word.
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This paper attempts to understand the relationship between the clinical efficacy of hypnosis and its negative perception among many medical educators, practitioners and the general public. By exploring the history of hypnosis, an attempt was made to point out several events that may have led to both the past and current misperception of hypnosis which the author believes have caused hypnosis to become "medicine's dirty word".

[1233]
The effect of hypnotic training programs on the academic performance of students.
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The main objective of the present study was to empirically verify the effect of hypnotic training programs on the academic performance of students. A pre and posttest design was used. Two experimental and two control groups (total sample N=119) of volunteer second year psychology students at the University of Stellenbosch in South Africa comprised the sample. One of the experimental groups was exposed to active alert hypnosis and the other to relaxation hypnosis. One control group was exposed to progressive relaxation, while the other did not receive any intervention. The participants’ April grades were used as a pretest, while their June grades served as a posttest. The two hypnotic training programs had a significant effect on the academic achievement of the participants, which was not found in the control groups. Regarding the efficacy of the two programs, however, no significant difference was found.

[1234]
[Awareness: a problem in paediatric anaesthesia?]
[Article in German]
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Intraoperative awareness has been reported to occur in 0.8-5.0% of paediatric patients undergoing anaesthesia and, therefore, seems to be more common than in adults (incidence 0.1-0.2%). In adult patients, the consequences of intraoperative awareness are well known and can be severe, in children, however, they have not yet been adequately studied. The causes for intraoperative awareness can be divided into three broad categories: First, no or only a light anaesthetic is given on purpose, second, an insufficient dose of an anaesthetic is given inadvertently, third, there is equipment malfunction or the anaesthesiologist makes an error. Unfortunately, especially in young children, painful interventions are still performed without adequate analgesia, e.g. awake intubation or fracture manipulation under midazolam sedation alone. The key issue is, however, that pharmacokinetics and pharmacodynamics change enormously from the 500 g preterm baby to the adolescent patient. Adequate dosing is much more difficult in paediatric patients compared to standard adult surgical patients. Solid knowledge of the pharmacokinetic and pharmacodynamic characteristics of commonly used drugs in different paediatric age groups, as well as aiming for perfection in daily care will help to reduce the incidence of awareness. Methods for monitoring the depth of hypnosis, e.g. the bispectral index, will be used increasingly, at least in children above 1 year of age. In addition to clinical parameters, they will hopefully help to further reduce the incidence of intraoperative awareness.

[1235]
Thinking, feeling and moving: drama and movement therapy as an adjunct to a multidisciplinary rehabilitation approach for chronic pain in two adolescent girls.
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Chronic Pain without an identifiable organic basis represents a substantial element of referrals to both medical and mental health professionals. Chronic pain can compromise independence, school attendance, physical and social activities. The tendency to label 'nonorganic' pain as having a psychological origin is usually strongly resisted by parents and young people with treatment creating a significant challenge for health care professionals. Collaborative, multidisciplinary treatment programmes encourage families to find ways of getting on with their lives by taking a proactive approach to challenging pain. The family is invited to join with the team in the task of challenging the pain through the use of physiotherapy to increase strength, stamina and suppleness alongside a range of individual and group activities that can include relaxation training, hypnotherapy, systemic and cognitive-behavioural approaches. This article describes how drama and movement therapy was introduced as an additional component of the treatment programme of two adolescents who had been long-term inpatients on a medical adolescent ward. The experiences of adding a
complementary therapy to the programme are described to illustrate a creative way of contributing to established treatment programmes through the use of sound, movement and gesture in order to provide a space to explore new ways of being and expanding abilities.

[1236]
Treatment of non-cardiac chest pain: a controlled trial of hypnotherapy.
Jones H, Cooper P, Miller V, Brooks N, Whorwell PJ.
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BACKGROUND: Non-cardiac chest pain (NCCP) is an extremely debilitating condition of uncertain origin which is difficult to treat and consequently has a high psychological morbidity. Hypnotherapy has been shown to be effective in related conditions such as irritable bowel syndrome where its beneficial effects are long lasting. AIMS: This study aimed to assess the efficacy of hypnotherapy in a selected group of patients with angina-like chest pain in whom coronary angiography was normal and oesophageal reflux was not contributory. PATIENTS AND METHODS: Twenty eight patients fulfilling the entry criteria were randomised to receive, after a four week baseline period, either 12 sessions of hypnotherapy or supportive therapy plus placebo medication over a 17 week period. The primary outcome measure was global assessment of chest pain improvement. Secondary variables were a change in scores for quality of life, pain severity, pain frequency, anxiety, and depression, as well as any alteration in the use of medication. RESULTS: Twelve of 15 (80%) hypnotherapy patients compared with three of 13 (23%) controls experienced a global improvement in pain (p = 0.008) which was associated with a significantly greater reduction in pain intensity (p = 0.046) although not frequency. Hypnotherapy also resulted in a significantly greater improvement in overall well being in addition to a reduction in medication usage. There were no differences favouring hypnotherapy with respect to anxiety or depression scores. CONCLUSION: Hypnotherapy appears to have use in this highly selected group of NCCP patients and warrants further assessment in the broader context of this disorder.

[1237][Inpatient infusion treatment for acute tinnitus with and without adjuvant psychotherapeutic intervention. A comparison of psychological effectiveness]
[Article in German]
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Two groups of tinnitus patients (n=93) were recruited, one of which was treated with standard infusion therapy and further acute medical intervention, while the other obtained an additional psychotherapeutic intervention. Questionnaires and interviews were taken at beginning of the treatment, and 9 days and 3 years after treatment. The accompanying psychotherapeutic intervention consisted primarily of client-centered counseling, guided relaxation techniques from clinical hypnosis, and some standard and tinnitus-related methods for a better coping with stress. After 9 days, both treatment groups showed significant improvement in several psychological characteristics. However, there was no evidence for the superiority of the combined treatment with psychological intervention. Psychotherapeutic treatment accompanying the acute medical treatment probably shows better effectiveness in an ambulant setting with both patients and medical healthcare professionals rating it as 'very helpful'. This pilot study has contributed initial results for the integrated treatment of the acute tinnitus and has helped in the development of further therapeutic strategies as well as an evidence based concept for further evaluation. This study received one of the two scientific first prizes of the "German Tinnitus League".

[1238]
Enhancing thought suppression with hypnosis.
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Much research indicates that attempts to suppress thoughts lead to increased accessibility of those thoughts, especially when additional cognitive load is present. On the premise that hypnosis may permit more effective management of cognitive load, it was hypothesized that hypnosis may enhance more effective thought suppression. The present research examined whether the obstacle of cognitive load could be bypassed using hypnosis to facilitate successful thought suppression. Thirty-nine high and 40 low hypnotizable participants were hypnotized and received either a suppression instruction or no instruction for a memory of an embarrassing experience and subsequently completed a sentence-unscrambling task that indexed accessibility of embarrassing thoughts. Whereas lows instructed to suppress displayed a delayed increase in suppressed thoughts, highs did not. These findings support the proposition that hypnosis facilitates thought suppression.

[1239]
Reassessment of hypnotic symptom removal by Freud and Bernheim.
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As demonstrations of clinical efficacy, cases reported by Freud and Bernheim reveal an intrinsic advantage of hypnotic symptom removal over therapies requiring extended periods to achieve significant outcomes. They also lend support to Weitzenhoffer's survey of therapeutic results achieved during the classical (pre-1900) period.

[1240]
Neurophysiologic and long-term effects of clinical hypnosis in oral and maxillofacial treatment—a comparative interdisciplinary clinical study.
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This prospective comparative clinical study evaluated the effectiveness of clinical hypnosis and its long-term effect in oral and maxillofacial treatment. A total of 45 highly anxious and nonanxious subjects were evaluated by subjective experience and objective parameters. Parameters were EEG, ECG, heart rate, blood pressure, blood oxygen saturation, respiration rate, salivary cortisol concentration, and body temperature. During and subsequent to the operative treatment, hypnosis led to a significant reduction of systolic blood pressure, and respiration rate and to significant changes in the EEG. The subjective values of the parameters evaluated existing anxiety mechanisms and patterns and possible strategies to control them, whereas the objective parameters proved the effectiveness of hypnosis and its long-term effect.

[1241]
Examining sympathetic nerve activity with microneurography during hypnosis: untangling the effects of central command.
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Using microelectrode recordings of postganglionic sympathetic action potentials, the authors studied the effects of hypnotic suggestion on sympathetic outflow targeted to skin during static handgrip exercise. All subjects performed sustained handgrip at 33% maximal voluntary contraction (MVC) for 2 minutes during 3 consecutive trials. Two subjects randomly assigned to a hypnosis condition received suggestions that the 2nd trial was more difficult and the last trial was less difficult than the first trial. Two subjects randomly assigned to the control condition received no hypnosis or suggestions about task difficulty. In the nonhypnosis condition, skin sympathetic nerve activity (SNA) increased by 6% from baseline during the 2nd trial and 13% from baseline during the 3rd trial. In the hypnosis condition, skin SNA increased by 25% during the 2nd trial (suggestion of increased difficulty) and returned to baseline during the 3rd condition (suggestion of decreased difficulty). Therefore, the impact of central command on skin SNA is suggested by these results.

[1242]
Satisfaction with, and the beneficial side effects of, hypnotic analgesia.
Jensen MP, McArthur KD, Barber J, Hanley MA, Engel JM, Romano JM, Cardenas DD, Kraft GH, Hoffman AJ, Patterson DR.
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Case study research suggests that hypnosis treatment may provide benefits that are not necessarily the target of specific suggestions. To better understand satisfaction with and the beneficial "side effects" of hypnosis treatment, questions inquiring about treatment satisfaction and treatment benefits were administered to a group of 30 patients with chronic pain who had participated in a case series of hypnotic analgesia treatment. The results confirmed the authors' clinical experience and showed that most participants reported satisfaction with hypnosis treatment even when the targeted symptom (in this case, pain intensity) did not decrease substantially. Study participants also reported a variety of both symptom-related and nonsymptom-related benefits from hypnosis treatment, including decreased pain, increased perceived control over pain, increased sense of relaxation and well-being, and decreased perceived stress, although no single benefit was noted by a majority of participants.

[1243]
Hypnosis to manage anxiety and pain associated with colonoscopy for colorectal cancer screening: Case studies and possible benefits.
This study explored using hypnosis for pain and anxiety management in 6 colonoscopy patients (5 men, 1 woman), who received a hypnotic induction and instruction in self-hypnosis on the day of their colonoscopy. Patients’ levels of anxiety were obtained before and after the hypnotic induction using Visual Analogue Scales (VAS). Following colonoscopy, VASs were used to assess anxiety and pain during colonoscopy, perceived effectiveness of hypnosis, and patient satisfaction with medical care. Hypnotizability was assessed at a separate appointment. The authors also obtained data (time for procedure, number of vasovagal events, and recovery time) for 10 consecutive patients who received standard care. Results suggest that hypnosis appears to be a feasible method to manage anxiety and pain associated with colonoscopy, reduces the need for sedation, and may have other benefits such as reduced vasovagal events and recovery time.


It is commonly believed that direct suggestibility, referring to overt influence, and indirect suggestibility, in which the intention to influence is hidden, correlate poorly. This study demonstrates that they are substantially related, provided that they tap similar areas of influence. Test results from 103 students, 55 women and 48 men, were entered into regression analyses. Indirect suggestibility, as measured by the Sensory Suggestibility Scale for Groups, and compliance, measured by the Gudjonsson Compliance Scale, were predictors of direct suggestibility, assessed with the Barber Suggestibility Scale. Spectral analyses showed that indirect suggestibility is more related to difficult tasks on the BSS, but compliance is more related to easy tasks on this scale.


In an investigation of the role of cognitive effort in hypnotic responding, high and low hypnotizable participants produced emotionally neutral imagery in response to effortful versus effortless hypnotic suggestions. Heart-rate increase served as an objective index of cognitive effort, and subjective ratings of imagery vividness, absorption, effort, and control were collected. Compared to lows, high hypnotizable participants experienced their imagery as more vivid and absorbing, yet their heart rates indicated no higher level of cognitive effort than lows. Compared to effortless wording, effortful wording of suggestions increased cognitive effort in lows, as indexed by heart-rate increase, but had no effect on the effort expended by highs. Ratings of subjective control were strongly correlated with subjective effort for lows but unrelated for highs. These results support the dissociated-control theory of hypnosis rather than the dissociated-experience or social-cognitive theories.


During hypnosis it is easy to induce hallucinations having, for the hypnotized subject, the characteristics and the concreteness of reality. This study was performed to put in evidence the physical effects of hypnotic suggestion of warm tub bathing. 18 volunteers screened for high hypnotizability were studied. They underwent suggestion of forearm in warm water (30 min), suggestion of body in warm water (30 min), and hypnosis without any thermal suggestion (30 min), while blood pressure, heart rate, body temperature, forearm flow and resistance, stroke volume, cardiac index and total peripheral resistance were monitored. During suggestion of forearm in warm water, local vasodilation was recorded, with decrease of forearm resistance (-18%, P<0.01) and increase of forearm blood flow (+43%, P<0.01) like in real local passive warming. During suggestion of whole-body in a warm water tub, there was a systemic vasodilation with decrease of total peripheral resistance (-29%, P<0.01) and increase of cardiac index (+54%, P<0.01), like in real total-body passive warming. Body temperature, arterial blood pressure and heart rate were unchanged. During simple hypnosis (sham procedure) no haemodynamic variations were observed. These results are in keeping with the possibility to induce through hypnotic suggestion of heat a physical pattern that is typical of hyperthermia, even without increase in body temperature.
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Clinical hypnosis is an established part of the comprehensive treatment of numerous problems in ambulatory pediatrics. Two cases illustrate its utility with pediatric inpatients. These cases demonstrate clinical hypnosis as a teachable, practical, and nonpharmacologic intervention that warrants further investigation in the inpatient setting.

Grosklags K.

Clinical hypnosis is a technique for helping patients achieve an altered state of consciousness and is similar to guided imagery and other relaxation and focusing techniques. Clinicians can use it to help patients face powerful emotions such as those evoked during grief. This article describes the way clinical hypnosis can be used to help bereaved patients understand and gain control over their feelings.

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Suggestion for hypnotic analgesia aimed at a specific body area is termed "focused hypnotic analgesia". It is not clear, however, whether this analgesia is limited to a specific body location or spread all over the body. Focused hypnotic analgesia was studied, in response to ascending electrical stimuli, when analgesia and stimulation were applied to the same area (local), and when analgesia was applied to one location and stimulation was delivered to a different area (remote). The face or leg served alternately as the local or remote areas, and the effect was tested in 12 high-hypnotizable (HH) and 13 low-hypnotizable (LH) subjects. Hypnotic analgesia in the local site produced a significant pain reduction compared to the remote site in HH subjects (P<0.0001) but not in LH subjects (P=0.68). As stimuli increased in intensity the reduction in pain as a result of hypnosis was larger both in HH and LH subjects (P<0.0001). Nevertheless, significant analgesia occurred in the 3 highest intensities in the local and remote location of HH subjects, but only in 2 highest intensities in the local and 1 in the remote of LH subjects. We conclude that in HH subjects focused hypnotic analgesia is mostly confined to the area aimed at, but some spread of analgesia to remote areas cannot be dismissed altogether. Alternatively, this "spread" of analgesia could be due to a placebo effect in the remote area. Focused hypnotic analgesia requires increased attention to the body area aimed at, unlike analgesia achieved by distraction of attention.

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Between 60 and 90% of patients consult their family doctor for stress-associated complaints. Not infrequently, a considerable number of these patients already have elevated blood pressure. The positive effect on high blood pressure of relaxation techniques has been confirmed in various studies. Accordingly, stress management should now have a permanent place in effective antihypertensive treatment. Appropriate relaxation techniques include, for example, autogenic training, progressive muscle relaxation, visualization and breathing exercises, chi gong and yoga. These practices are incorporated in various lifestyle programs. They act in different ways, and can be offered to the patient in accordance with his/her individual wishes.

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The individual and combined effects of posthypnotic suggestion (PHS) and virtual reality distraction (VRD) on
experimentally induced thermal pain were examined using a 2 x 2, between-groups design. After receiving baseline thermal pain, each participant received hypnosis or no hypnosis, followed by VRD or no VRD during another pain stimulus. Consistent with the hypothesis that hypnosis and VRD work via different mechanisms, results show that posthypnotic analgesia was moderated by hypnotizability but VRD analgesia was not. The impact of PHSs for analgesia was specific to high hypnotizables, whereas VRD was effective independent of hypnotizability. Results also show a nonsignificant but predicted pattern for high hypnotizables: Audio hypnosis combined with VRD reduced worst pain 22% more and pain unpleasantness 25% more than did VRD alone. Theoretical and clinical implications are discussed. (c) 2006 APA, all rights reserved.

[1252]
National patterns and correlates of complementary and alternative medicine use in adults with diabetes.
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OBJECTIVE: The aim of this study was to determine national patterns and correlates of complementary and alternative medicine (CAM) use among adults with diabetes. METHODS: The authors compared CAM use in 2474 adults with and 28,625 adults without diabetes who participated in the most comprehensive national survey on CAM use (2002 National Health Interview Survey). Eight CAM use categories were created, including dietary, herbal, chiropractic, yoga, relaxation, vitamin, prayer, and other (acupuncture, Ayurveda, biofeedback, chelation, energy healing or Reiki therapy, hypnosis, massage, naturopathy, and homeopathy). An overall CAM use category also was created that excluded vitamins and prayer. Patterns of use were compared with chi-square and independent correlates of CAM use with multiple logistic regression controlling for relevant covariates. STATA was used for analysis to account for the complex survey design.

RESULTS: Prevalence of overall use of CAM did not differ significantly by diabetes status (47.6 versus 47.9%, p = 0.81). Diabetes was not an independent predictor of overall use of CAM (OR 0.93, 95% confidence interval [CI] 0.83, 1.05). However, persons with diabetes were more likely to use prayer (OR 1.19, 95% CI 1.05, 1.36), but less likely to use herbs (OR 0.86, 95% CI 0.75, 0.99), yoga (OR 0.56, 95% CI 0.43, 0.72), or vitamins (OR 0.82, 95% CI 0.72, 0.93) than people without diabetes after controlling for relevant covariates. Independent correlates of overall use of CAM differed by age, income, employment, comorbidity, and health status between people with and without diabetes. CONCLUSIONS: This study found that there has been a dramatic increase in overall use of CAM in adults with diabetes; diabetes was not an independent predictor of overall use of CAM; and people with diabetes were more likely to use prayer, but less likely to use herbs, yoga, or vitamins compared to persons without diabetes.

[1253]
Complementary and alternative medicine approaches to pain management.
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This article argues for and illustrates incorporating complementary and alternative medicine (CAM) interventions into pain treatment plans. Two CAM treatments, cranial electrotherapy stimulation (CES) and self-hypnosis training, are offered in a multidisciplinary pain treatment program. Because these interventions focus on pain relief, they may be of particular interest to patients who have chronic pain who begin treatment with a primary interest in pain reduction. Two cases that illustrate the clinical application of CES and self-hypnosis are presented. When effective, these interventions can help patients have greater confidence in treatments offered by psychologists for pain management and may help make them more open to participating in other psychological interventions that have established efficacy for pain management (e.g., cognitive-behavioral therapy). Because of their brevity, these treatments also can be offered alone to patients who may not have the resources or time to participate in more time-intensive treatment.

[1254]
Proactive and retroactive effects of negative suggestion.
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The negative effects of false information presented either prior to (proactive interference; PI) or following (retroactive interference; RI) true information was examined with word definitions (Experiment 1) and trivia facts (Experiment 2). Participants were explicitly aware of which information was true and false when shown, and true-false discrimination was evaluated via multiple-choice tests. Negative suggestion, defined as poorer performance on interference items than noninterference (control) items, consistently occurred when the wrong information followed the correct information (RI) but not when it preceded the correct information (PI). These effects did not change as a function of retention interval (immediate, 1 week, or 3 weeks) or number of incorrect alternatives (1 or 3). Implications of this outcome for experiencing incorrect information in both academic and nonacademic situations are considered. Copyright 2006 APA, all rights reserved.
Exploratory factor analysis and psychometric properties of the valencia scale on attitudes and beliefs toward hypnosis. Therapist version. This investigation examines the psychometric properties and factor structure of the Valencia Scale on Attitudes and Beliefs toward Hypnosis-Therapist version. Data from 775 professional psychologists belonging to the Spanish Association of Psychologists were used for the exploratory factor analysis (EFA). Retest included data from 426 participants who answered to the test. The EFA revealed eight factors (Fear, Memory, Help, Control, Collaboration, Interest, Magic and Marginal). Each factor showed good internal consistency and reliability, similar to the client version of this scale. ANOVA indicate that some variables (having scientific knowledge, having received practical information on hypnosis, to use hypnosis, and to show interest in receiving more theoretical and practical information on hypnosis), tend to reduce inadequate beliefs and negative attitudes toward hypnosis. Our results provide the basis for carrying out confirmatory factor analysis and studies of convergent validity on the scale, and of the sensitivity of the scale to change.


Functional dyspepsia (FD) is a heterogeneous, highly prevalent symptom complex in the community and general practice. FD is defined as the presence of symptoms considered as originated in the gastroduodenal region, in the absence of any organic, systemic, or metabolic disease that is likely to explain the symptoms. Pathogenetic features include disturbed gastric accommodation and emptying, duodenal dysmotility, heightened sensitivity, notably psychosocial disturbances and an association with a postinfective state. Increasing efforts are made to determine the etiopathogenesis of the disease, including new molecular and genetic aspects. However, the exact etiopathologic mechanism that causes the symptoms in an individual patient remains to be identified. The new Rome III criteria redefine and sub-characterize FD disease, including new molecular and genetic aspects. However, the exact etiopathologic mechanism that causes the symptoms in an individual patient remains to be identified.
to date, all of these therapies have yielded only marginal results. After excluding organic diseases, it is essential that the patient be assured about the benign nature and prognosis of the disease, and this can be sometimes the most helpful inversion for the patient and his/her physician.

[1258]
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BACKGROUND: Depersonalization (DP) is characterized by persistent or recurrent episodes of detachment from one's self with reduced pain perception being a common feature. Alterations in the body schema similar to the cortico-limbic disconnection syndrome of pain asymbolia are suggested to be responsible for DP. In this study we used hypnosis to induce DP in healthy subjects and to examine neural patterns of pain perception in the state of DP by means of functional magnetic resonance imaging (fMRI).

METHODS: Pain perception was investigated in 7 healthy subjects with high susceptibility to hypnosis in three different mental states: waking state (N-W), hypnotic relaxation (H-R) and hypnotic DP (H-DP). Pain was induced with electrical stimulation to the median nerve at the right wrist. fMRI measurements were performed during all states. RESULTS: Noxious stimuli led to an activation of the well described pain network including somatosensory and insular regions and the cerebellum. Activation was markedly reduced in the contralateral somatosensory cortex, parietal cortex (Brodmann area 40, BA40), prefrontal cortex (BA9), putamen and the ipsilateral amygdala during H-DP. Subjects also reported a significant decrease in pain intensity from N-W to H-DP. CONCLUSION: Pain response during H-DP was reduced in sensory and affective pain-related areas, reflecting the diminished intensity of the perceived pain. Moreover, a network of cortical and subcortical areas that have been implicated in the perception of the own body was less responsive during DP, which might point to a specific neural mechanism underlying the 'out-of-body' experience. Although the small number of subjects does not allow a generalization of our findings, H-DP seems to be a promising tool for the investigation of psychological and biological mechanisms of self-inflicted injuries as well as the mind-body interplay within the realm of psychosomatic disorders. Copyright 2007 S. Karger AG, Basel.

[1259]
[Psychotherapy and pain]
[Article in German]
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In "Integrated psychotherapy" we indicate necessity of combining psychotherapy with all other psychotherapeutic and medical methods (drugs, physiotherapy, etc.) in order to obtain best result. We distinguish between "professional" and "basic" psychotherapy. The latter also has effect on mood and by it on health for patients. Furthermore it is an important facilitating means for a special psychotherapy. We emphasize to teach this in systematic professional education as well for doctors as for all social professions.

[1260]
[Effect of "animal hypnosis" on the rhythmic defensive dominanta]
Zh Vyssh Nerv Deiat Im I P Pavlova. 2007 Jan-Feb;57(1):43-51.
[Article in Russian]
Galashina AG, Kulikov MA, Bogdanov AV.

A defensive dominanta (stationary excitation focus) in the sensorimotor cortex of rabbits was formed by rhythmical electrodermal paw stimulation with the frequency of 0.5 Hz. After cessation of the stimulation, the state of hidden excitation was tested with acoustic stimuli, in response to which nonrhythmic activity of leg muscles increased or the leg rhythmically startled with the frequency close to that of the electrodermal stimulation. After conducting a routine hypnotizing procedure, the incidence of the rhythmic responses to testing stimulation increased, while the incidence of nonrhythmic responses decreased.

[1261]
Adjunctive self-hypnotic relaxation for outpatient medical procedures: a prospective randomized trial with women undergoing large core breast biopsy.
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Medical procedures in outpatient settings have limited options of managing pain and anxiety pharmacologically. We
therefore assessed whether this can be achieved by adjunct self-hypnotic relaxation in a common and particularly anxiety provoking procedure. Two hundred and thirty-six women referred for large core needle breast biopsy to an urban tertiary university-affiliated medical center were prospectively randomized to receive standard care (n=76), structured empathic attention (n=82), or self-hypnotic relaxation (n=78) during their procedures. Patients’ self-ratings at 1 min-intervals of pain and anxiety on 0-10 verbal analog scales with 0=no pain/anxiety at all, 10=worst pain/anxiety possible, were compared in an ordinal logistic regression model. Women's anxiety increased significantly in the standard group (logit slope=0.18, p<0.001), did not change in the empathy group (slope=-0.04, p=0.45), and decreased significantly in the hypnosis group (slope=-0.27, p<0.001). Pain increased significantly in all three groups (logit slopes: standard care=0.53, empathy=0.37, hypnosis=0.34; all p<0.001) though less steeply with hypnosis and empathy than standard care (p=0.024 and p=0.018, respectively). Room time and cost were not significantly different in an univariate ANOVA despite hypnosis and empathy requiring an additional professional: 46 min/161 dollars for standard care, 43 min/163 dollars for empathy, and 39 min/152 dollars for hypnosis. We conclude that, while both structured empathy and hypnosis decrease procedural pain and anxiety, hypnosis provides more powerful anxiety relief without undue cost and thus appears attractive for outpatient pain management.

[1262]
Relaxation strategies and enhancement of hypnotic susceptibility: EEG neurofeedback, progressive muscle relaxation and self-hypnosis.
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Hypnosis has been shown to be efficacious in a range of clinical conditions, including the management of chronic pain. However, not all individuals are able to enter a hypnotic state, thereby limiting the clinical utility of this technique. We sought to determine whether hypnotic susceptibility could be increased using three methods thought to facilitate relaxation, with particular interest in an EEG neurofeedback protocol which elevated the theta to alpha ratio. This was compared with progressive muscle relaxation and self-hypnosis. Ten subjects with moderate levels of susceptibility (2-7/12) were randomly assigned to each condition and assessed for hypnotic susceptibility prior to and upon completion of 10 sessions of training. Hypnotic susceptibility increased post-training in all groups, providing further evidence that operant control over the theta/alpha ratio is possible, but contrary to our predictions, elevation of the theta/alpha ratio proved no more successful than the other interventions. Nonetheless, all three techniques successfully enhanced hypnotic susceptibility in over half of the participants (17/30), a similar incidence to that reported using other methods. As previously reported, the majority who were not susceptible to modification were at the lower levels of susceptibility, and the greater increases tended to occur in the more susceptible subjects. However, here enhancement was disclosed in some at low levels, and capability was found of reaching high levels, both features not typically reported. Further research is warranted.

[1263]
Placebo analgesia: friend or foe?
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The magnitude of placebo analgesia is influenced by environmental and perceptual factors. Environmental factors include past exposure to effective analgesic agents and verbal suggestions and cues that foster a perception of being given an effective treatment. Environmental factors, in turn, influence the proximate psychologic mediators of placebo analgesia, which include decreased desire for and increased expectations of pain relief. Strategies to maximize placebo analgesic effects in clinical practice could focus on using verbal suggestions and external cues to increase expectations of pain relief and/or decrease the perceived need for pain reduction. Placebo analgesic effects could be minimized in clinical trials by avoiding these same suggestions and cues.

[1264]
Efficacy of complementary and alternative medicine therapies in relieving cancer pain: a systematic review.
J Clin Oncol. 2006 Dec 1;24(34):5457-64.
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PURPOSE: Despite widespread popular use of complementary and alternative medicine (CAM) therapies, a rigorous evidence base about their efficacy for cancer-related pain is lacking. This is a systematic review of randomized controlled trials (RCTs) evaluating CAM therapies for cancer-related pain. METHODS: RCTs using CAM interventions for cancer-related pain were abstracted using Medline, EMBASE, CINAHL, AMED, and Cochrane database. RESULTS: Eighteen trials were identified (eight poor, three intermediate, and seven high quality based on Jadad score), with a total of 1,499 patients. Median sample size was 53 patients, and median intervention duration was 45 days. All studies were from single institutions, four had sample size justification, and none reported any adverse effects. Seven trials reported significant
benefit for the following CAM therapies: acupuncture (n = 1), support groups (n = 2), hypnosis (n = 1), relaxation/imagery (n = 2), and herbal supplement/HESA-A (n = 1, but study was of low quality without control data). Seven studies reported immediate postintervention or short-term benefit of the following CAM interventions: acupuncture (n = 2), music (n = 1), herbal supplement/Al-Tong-Ping (n = 1), massage (n = 1), and healing touch (n = 2). Four studies reported no benefit of CAM interventions (music, n = 2; massage, n = 2) in reducing cancer pain compared with a control arm. CONCLUSION: There is paucity of multi-institutional RCTs evaluating CAM interventions for cancer pain with adequate power, duration, and sham control. Hypnosis, imagery, support groups, acupuncture, and healing touch seem promising, particularly in the short term, but none can be recommended because of a paucity of rigorous trials. Future research should focus on methodologically strong RCTs to determine potential efficacy of these CAM interventions.

[1265]
Perioperative hypnosis reduces hospitalization in patients undergoing the Nuss procedure for pectus excavatum.
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PURPOSE: To assess whether perioperative hypnosis can reduce the length of hospitalization and alter the need for postoperative analgesics in patients undergoing the Nuss procedure. MATERIALS AND METHODS: Ten consecutive patients (age range, 12-18 years) underwent the Nuss procedure with the same operative technique. For pain management they were divided into two sequential groups: the 5 patients in the nonhypnosis group were managed with an epidural catheter, and analgesia was supplemented with intravenous or oral narcotics as requested. These patients all required Foley catheters for bladder drainage while the epidural was in place. The second group of 5 patients was prepared by teaching them self-hypnosis for postoperative pain management in one or two brief sessions. Postoperative self-hypnosis was prescribed and encouraged. These patients were allowed patient controlled analgesia and were supplemented with intravenous or oral narcotics as requested. Four of the patients in this group required a straight catheterization of the bladder the evening of surgery. Data collected included hospitalization and analgesia requirements as well as other unusual findings. RESULTS: The patients in the hypnosis group spend an average of 2.8 days in the hospital compared with 4.6 days in the nonhypnosis group (p < 0.01). There was also a trend toward less parental narcotic use. Postoperative discomfort was better controlled with oral analgesics in the hypnosis group. There were no adverse effects from the hypnosis. CONCLUSION: In this small study, perioperative hypnosis was associated with a reduced hospital stay in patients undergoing the Nuss procedure for pectus excavatum.

[1266]
Complementary treatments for tobacco cessation: a survey.
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Little information is available regarding the prevalence of use and interest in future use of complementary and alternative medicine (CAM) for tobacco cessation among tobacco users. We conducted a self-administered anonymous survey among 1,175 patients seen at a midwestern outpatient tobacco treatment specialty clinic between November 2003 and July 2005. Patient use of CAM for tobacco cessation, perceived efficacy of these treatments, and interest in future use of CAM were ascertained. Data were summarized using descriptive statistics, and logistic regression models were used to determine the characteristics associated with past CAM use or interest in future use of CAM for tobacco cessation. All of the patients who received the survey completed it. A total of 27% of patients reported previous use of CAM for tobacco cessation. The interventions most commonly used were hypnosis, relaxation, acupuncture, and meditation. CAM treatments most commonly perceived to be efficacious were yoga, relaxation, meditation, and massage therapy. A total of 67% of the patients reported interest in future use of CAM for tobacco cessation. The treatments of greatest interest for use in the future were hypnosis, herbal products, acupuncture, relaxation, and massage therapy. Female gender, previous use of conventional tobacco cessation products, previous use of CAM treatments, and a higher level of education were significantly associated with interest in future CAM use. The high level of interest in CAM among tobacco users underscores the need to conduct further research in this field.

[1267]
Treatments for non-epileptic attack disorder.
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BACKGROUND: Psychogenic non-epileptic seizures (NES) have the outward appearance of epilepsy in the absence of physiological or electroencephalographic correlates. Non-epileptic seizures can occur in isolation or in combination with epileptic seizures. The development and maintenance of non-epileptic seizures has been well documented and there is a growing literature on the treatment of NES which includes non-psychological (including anti-anxiety and antidepressant pharmacological treatment) and psychological therapies (including cognitive behavioural therapy (CBT), hypnotherapy.
and paradoxical therapy). Various treatment methodologies have been tried with variable success. The purpose of this Cochrane review was to establish the evidence base for the treatment of NES. OBJECTIVES: To assess whether treatments for NES result in a reduction in frequency of seizures and/or improvement in quality of life, and whether any treatment is significantly more effective than others. SEARCH STRATEGY: We searched the Cochrane Epilepsy Group's Specialised Register (September 2005), the Cochrane Central Register of Controlled Trials (CENTRAL) (The Cochrane Library Issue 3, 2005), MEDLINE (1966 to July 2005), and PsycINFO (1806 to July 2005). No language restrictions were imposed. We checked the reference lists of retrieved studies for additional reports of relevant studies. SELECTION CRITERIA: Randomised or quasi-randomised studies were included that assessed one or more types of psychological or non-psychological interventions for the treatment of NES. Studies of childhood NES were excluded from our review. DATA COLLECTION AND ANALYSIS: Three review authors independently assessed the trials for inclusion and extracted data. Outcomes included reduction in seizure frequency and improvements in quality of life. MAIN RESULTS: Three small studies met our inclusion criteria and were of poor methodological quality. Two assessed hypnosis and the other paradoxical therapy. There were no detailed reports of improved seizure frequency or quality of life outcomes, and these trials provide no reliable evidence of a beneficial effect of these interventions. AUTHORS' CONCLUSIONS: In view of the methodological limitations and the small number of studies, we have no reliable evidence to support the use of any treatment including hypnosis or paradoxical injunction therapy in the treatment of NES. Randomised studies of these and other interventions are needed.

[1268]
Treating postpartum depression with hypnosis: addressing specific symptoms presented by the client.
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Postpartum depression is experienced by 10-15% of women who give birth (Bloch, Rolenberg, Koren, & Klein, 2006). This disorder causes maternal distress and has been significantly associated with infant and child developmental problems (Carter, Garrity-Rokous, Chazan-Cohen, Little, & Briggs-Gowan, 2001). Once believed to be contraindicated (Crasilneck & Hall, 1985), hypnosis for depressive disorders has been advocated as an effective intervention strategy (Yapko, 2001). Addressing specific symptoms and skill development has been promoted as an effective hypnotic strategy for depression (Yapko, 2001); however, little empirical evidence of the efficacy of hypnotherapy for postpartum depression or effective hypnotic strategies exists. The present article is a report of a single case in which hypnotherapy was successfully utilized in the treatment of Postpartum Depression by attending to the specific problems presented by the client and developing client skills to resolve existing problems and prevent their recurrence.

[1269]
Psychotherapeutic intervention for numerous and large viral warts with adjunctive hypnosis: a case study.
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Psychotherapy with adjunctive hypnosis is known to be an effective approach for the treatment of viral warts. There is an increasing clinical and scientific literature that illustrates the successful use of psychotherapeutic treatment with and without hypnosis in the reduction or elimination of viral warts (Bloch, 1927; Chandrasena, 1982; Clawson & Swade, 1975; Dreauper, 1978; Ewin, 1992; Ewin, 1995; and Goldstein, 2005; Obermayer & Greenson, 1949; McDowell, 1949; Reid, 1989; Scott, 1960; Spanos, Stenstrom & Johnston, 1988; Spanos, Williams & Gwynn, 1990; Surman et al., 1973; Morris, 1985; Noll, 1994; Noll, 1988; O'Laughlan, 1995; Tasini & Hackett, 1977; Vollmer, 1946; Yalom, 1964). In this case study the veracious area experienced a 100% reduction in five treatment sessions spanning a total of seven weeks. In this case, psychotherapy with hypnotic treatment relied upon an emphasis on two interventions: reduction of wart area with guided imagery and suggestions for the optimization of the client’s immune system functioning. Photos illustrate the client’s pre-treatment, mid-treatment, and post-treatment state. Causal factors in the client’s recovery cannot be easily isolated but the startling results attest to the efficacy of the overall interventions and treatment context compared to prior medical interventions.

[1270]
Suggestibility and hypnotizability: mind the gap.
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Suggestion, both within and outside of hypnosis, can influence many psychological processes, including cognition and emotion. Moreover, suggestion may account for many individual differences and promote the investigation of such mainstream fields as attention and memory. To be sure, exploring the power of suggestion will likely pave the road to a more scientific understanding of such psychological phenomena as motivation, expectation, and the placebo effect.
I believe the paper by Kirsch, Mazzoni and Montgomery (this issue) should surprise about 95% of ASCH members (maybe only 93% of SCEH members) because the three facts espoused in their paper speciously seem to be 100% true. To paraphrase from their abstract: 1) nothing that can be produced by hypnotic induction plus suggestion cannot also be produced by suggestion alone; 2) administration of a hypnotic induction does not produce a meaningful increase in response to suggestion relative to suggestion alone; and 3) responsivity to suggestions are highly correlated to responsivity on the same measure when preceded by a hypnotic induction ceremony. In order to persuade that these propositions are true, several objections to them must be addressed. However, just because one's facts are true does not mean that one's interpretation of the facts and their interrelationships are also true. The ramifications of the above facts and their interrelationships for the future of professional hypnosis (experimental, clinical and forensic) are identified and discussed.

The history of the most enduring experimental design in hypnosis research is reviewed. More than 75 years of research converge to indicate that: (1) all of the phenomena produced in hypnosis by suggestion also can be produced by suggestion without the induction of hypnosis, (2) the induction of hypnosis produces a relatively small increase in responsiveness to suggestion, and (3) hypnotic and waking suggestion are highly correlated, in many cases rivalling the reliability of the suggestibility measure. The importance of these data to both clinical and experimental hypnosis is emphasized.

Many theories of hypnotic responding have proposed that differences in hypnotic trait rely on differences in frontal attentional functions. Evidence of hypnotizability-related attentional abilities are, however, very scant. This study was designed to investigate the relationship between hypnotizability and executive control components of attention in the spatial domain. We chose the Attention Network Test that enables to analyze alerting, orienting and executive control functions by measuring reaction times (RTs) to targets cued for different locations in space. According to Posner theory, alerting, orienting and executive control effects were found in both groups. No differences between highly susceptible (Highs) and low susceptible individuals (Lows) on executive control functions were found. However, in Highs alerting was significantly smaller than in Lows and Highs were significantly faster than Lows in the no and central cue conditions. These findings suggest that Highs would be endowed with a basal higher efficiency in achieving and maintaining their readiness to respond to incoming stimuli. This relation between hypnotizability and alerting, is discussed in terms of a possible more efficient noradrenergic activity driven by frontal attentional systems.

OBJECTIVE: To evaluate the effect of Ericksonian therapy on tinnitus STUDY DESIGN: Non-randomised, prospective longitudinal study. SETTING: Tertiary referral centre. PATIENTS: A total of 49 patients underwent hypnosis therapy. Fourteen patients failed to finish the therapy (drop-out rate: 35%). Of the 35 patients who completed the therapy, 20 were male and 15 female. The average age was 46.3 years (range 17-78). INTERVENTION: The treatment is based on the principles and approaches of Ericksonian hypnosis. The first session was mainly dedicated to the evaluation of the impact of tinnitus on the patient's life and to an explanation of hypnosis therapy. The next sessions were "learning sessions" based on relaxation and mental imaging. Exercises were first based on all senses other than hearing. Then they focused on hearing, teaching patients how to modulate sound intensity, and finally how to modulate tinnitus intensity. Patients also learnt self-hypnosis. MAIN OUTCOME MEASURE(S): To evaluate the effect of the treatment, tinnitus was assessed with the Tinnitus Handicap Inventory questionnaire before and after the therapy. Results: After 5 to 10 sessions (mean: 8.09
ranging in age from 5 to 10 years were administered an ABM questionnaire. Children were asked about details of autism spectrum disorder (ASD). Children with ASD (N = 30) and typically developing chronological age-matched children (N = 30) were compared.

Two paradigms were developed to examine autobiographical memory (ABM) and suggestibility in children with autism spectrum disorder. The first paradigm involved asking children to recall specific events from their past, and the second involved suggesting events to the children. The results showed that children with ASD had lower ABM scores than typically developing children.

CONCLUSIONS: The results of this clinical trial demonstrate that Ericksonian hypnosis, in particular using self-hypnosis, is a promising technique for treating patients with tinnitus.

[1275]
Perioperative pain management.
CNS Drugs. 2007;21(3):185-211.
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Department of Anesthesiology, Duke University Medical Center, Durham, NC 27710, USA.

The under-treatment of postoperative pain has been recognised to delay patient recovery and discharge from hospital. Despite recognition of the importance of effective pain control, up to 70% of patients still complain of moderate to severe pain postoperatively. The mechanistic approach to pain management, based on current understanding of the peripheral and central mechanisms involved in nociceptive transmission, provides newer options for clinicians to manage pain effectively. In this article we review the rationale for a multimodal approach with combinations of analgesics from different classes and different sites of analgesic administration. The pharmacological options of commonly used analgesics, such as opioids, NSAIDs, paracetamol, tramadol and other non-opioid analgesics, and their combinations are discussed. These analgesics have been shown to provide effective pain relief and their combinations demonstrate a reduction in opioid consumption. The basis for using non-opioid analgesics is to reduce opioid consumption and consequently alleviate opioid-related adverse effects. We review the evidence on the opioid-sparing effect of ketamine, clonidine, gabapentin and other novel analgesics in perioperative pain management. Most available data support the addition of these adjuvants to routine analgesic techniques to reduce the need for opioids and improve quality of analgesia by their synergistic effect. Local anaesthetic infiltration, epidural and other regional techniques are also used successfully to enhance perioperative analgesia after a variety of surgical procedures. The use of continuous perineural techniques that offer prolonged analgesia with local anaesthetic infusion has been extended to the care of patients beyond hospital discharge. The use of nonpharmacological options such as acupuncture, relaxation, music therapy, hypnosis and transcutaneous nerve stimulation as adjuvants to conventional analgesia should be considered and incorporated to achieve an effective and successful perioperative pain management regimen.

[1276]
The use of hypnosis to improve pain management during voluntary interruption of pregnancy: an open randomized preliminary study.
Marc I, Rainville P, Verreault R, Vaillancourt L, Masse B, Dodin S.
Chaire Lucie et André Chagnon pour l’Avancement d’Une approche intégrée en santé, Hôpital St-François d’Assise, CHUQ, Université Laval, Quebec City, PQ, Canada.

OBJECTIVE: This report describes an open randomized study that aims to determine whether a brief hypnotic intervention during first-trimester surgical abortion reduces requests for pain medication. METHODS: Thirty women undergoing first-trimester surgical abortion at the family planning clinics of a large hospital in Quebec City were randomized into a control group that received standard care and a hypnosis group that received additional hypnotic induction and suggestions. The patient’s self-reported anxiety and pain were assessed through a nose mask as often and for as long as they wanted during the procedure. N(2)O sedation as the primary outcome was assessed at each step of the procedure. The patient’s self-reported anxiety and pain were also assessed during the procedure as secondary outcomes. RESULTS: Thirty-six percent of patients in the hypnosis group reported N(2)O consumption during the procedure versus 87% in the control group (p<.01). No differences between the groups were found in reports of pain and anxiety during the procedure. CONCLUSION: These results suggest that hypnosis can be integrated into standard care and reduces the need for N(2)O in patients undergoing first-trimester surgical abortion. This reduction in N(2)O consumption did not lead to significant changes in pain or anxiety, and a larger sample size is required to assess the possible effects of hypnosis on these variables.

[1277]
Autobiographical memory and suggestibility in children with autism spectrum disorder.
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Two paradigms were developed to examine autobiographical memory (ABM) and suggestibility in children with autism spectrum disorder (ASD). Children with ASD (N = 30) and typically developing chronological age-matched children (N = 38) ranging in age from 5 to 10 years were administered an ABM questionnaire. Children were asked about details of
current and past personally experienced events. Children also participated in a staged event, and later were provided with true and false reminders about that event. Later, children again were interviewed about the staged event. The results from both paradigms revealed that children with ASD showed poorer ABM compared to controls. Generally, their ABM was marked by errors of omission rather than by errors of commission, and memory was particularly poor for early-life events. In addition, they were as suggestible as the typically developing children. The results are discussed in terms of applied and theoretical implications.

[1278]
Hypnotizability, eating behaviors, attitudes, and concerns: a literature survey.
Hutchinson-Phillips S, Gow K, Jamieson GA.
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The literature suggests that aspects of hypnotizability may be involved in the etiology and maintenance of self-defeating eating. However, interpretation of the published research findings has been complicated by the use of instruments that appear to have measured different or, at best, only related facets of the underlying constructs. This article reports relationships between weight, shape, dietary concerns, hypnotizability, dissociative capacity, and fantasy proneness. Implications for a key role for hypnosis in the treatment of eating behaviors, attitudes, and concerns are discussed.

[1279]
Effectiveness of hypnosis in reducing mild essential hypertension: a one-year follow-up.
Gay MC.
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The present study investigates the effectiveness of hypnosis in reducing mild essential hypertension. Thirty participants were randomly assigned to hypnosis (standardized, individual 8-session hypnosis treatment) or to a control group (no treatment). Results show that hypnosis is effective in reducing blood pressure in the short term but also in the middle and long terms. We did not find any relationship between the practice of self-hypnosis and the evolution of blood pressure or between anxiety, personality factors, and therapeutic results. The implications of the results of the psychological treatment of hypertension are discussed.

[1280]
A Spanish version of the Barber Suggestibility Scale for the Puerto Rican population.
Guzmán-Hosta L, Martínez-Taboas A, Rodríguez-Gómez J.
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Currently in Puerto Rico, there are no reliable and valid instruments to assess hypnotic responsiveness. The most widely utilized scales have not been scientifically translated and adapted with Puerto Ricans. In the present study, the Barber Suggestibility Scale (BSS) was translated and adapted using back-translation and decentralization. The translated BSS (the ESB) was individually administered to Puerto Rican college students (N = 85). No significant differences were found among the mean scores for the current sample on the ESB and the 1965 sample on the BSS. Both samples had similar score distributions. The internal consistency of the ESB was adequate, and there were significant correlations among scale items and total scores. The authors conclude that the ESB is an adequate instrument to measure hypnotic response within the Puerto Rican population.

[1281]
Hypnotic depth and response to suggestion under standardized conditions and during FMRI scanning.
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Hypnosis is a potentially valuable cognitive tool for neuroimaging studies. However, understandable concern that Magnetic Resonance Imaging (MRI) in particular may adversely affect hypnotic procedures remains. Measurements of hypnotic depth and responsiveness to suggestions were taken using a standardized procedure that met all the requirements for functional MRI (fMRI). Testing outside the scanning environment showed reliable and stable changes in subjective hypnotic depth, with no carryover once the hypnosis had been terminated. Within-subject comparisons showed that the magnitude and pattern of these changes and the degree of responsiveness to hypnotic suggestion were not discernibly affected by the fMRI environment. It is concluded that hypnosis can be employed as a discrete and reliable cognitive tool within fMRI neuroimaging settings.

[1282]
Fractal analysis was applied to study the trends of EEG signals in the hypnotic condition. The subjects were 19 psychiatric outpatients. Hypnotizability was measured with the Hypnotic Induction Profile (HIP). Fifty-four sets of EEG data were analyzed by detrended fluctuation analysis (DFA), a well-established fractal analysis technique. The scaling exponents, which are the results of fractal analysis, are reduced toward white noise during the hypnotic condition, which differentiates the hypnotic condition from the waking condition. Further, the decrease in the scaling exponents during hypnosis was solely associated with the eye-roll sign within specific cortical areas (F3, C4, and O1/2) closely related to eye movements and attention. In conclusion, the present study has found that the application of the fractal analysis technique can demonstrate the electrophysiological correlations with hypnotic influence on cerebral activity.

[1283]
Hypnotizability and somatic complaints: a gender-specific phenomenon.
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The relationship between hypnotizability and somatic illness was measured in 45 college students. Several weeks after completing the Waterloo-Stanford Group C Scale (WSGC), participants filled out a somatic-complaint checklist and measures of psychopathology. Results indicated a positive correlation between hypnotizability and somatic illness, and the relationship was stronger for female participants. In contrast to the quadratic model proposed by Wickramasekera, the current data demonstrated a linear relationship between hypnotizability and somatic complaint. Further analyses showed that somatic complaints were associated with hallucination and imagery items, corresponding to the perceptual-cognitive factor identified in Woody, Barnier, and McConkey's (2005) factor analysis of the Stanford Hypnotic Susceptibility Scale, Form C. The results call into question some claims that high hypnotizability is an adaptive and healthy trait.

[1284]
Role of relaxation and specific suggestions in hypnotic emotional numbing.
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The cognitive characteristics of highly hypnotizable subjects (Highs) allow them to easily modify their cognitive and autonomic state. Under hypnosis, Highs receiving cognitive, fear-like stimulation exhibit the cardiovascular changes typical of fear/stress, but also show an EEG pattern indicating a balance between fear-induced arousal and hypnotic relaxation. Indeed, hypnotism is effective in the attenuation of both emotional experience and behaviour (emotional numbing). The aim of the present experiment was to investigate the possible different role of relaxation and suggestion in hypnotic emotional numbing. Tonic skin conductance, respirogram, heart rate, systolic and diastolic blood pressure were recorded in 3 groups of hypnotized subjects: Group 1 received a fearful guided imagery associated with threat suggestions (Threat) followed by the same fearful suggestion associated with numbing instructions (relaxation and "No-Threat"); Group 2 received the same instructions in the opposite order of presentation; Group 3 received the fearful suggestion with threat instructions twice. The numbing suggestion reduced fear-related emotional experience and autonomic responses; if No-Threat preceded Threat, the heart rate, heart rate variability and blood pressure were also reduced during Threat, in spite of self reports of high negative emotion. Thus, 1) the subjective experience and the autonomic response to fear can be dissociated; 2) the efficacy of numbing suggestion is extended to a subsequent Threat stimulation; 3) habituation does not contribute to the numbing effect. The results indicate that the specific numbing suggestion is the main factor in hypnotic modulation of the experience of fear.

[1285]
Behavioral interventions in treating anticipatory nausea and vomiting.
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Anticipatory nausea and vomiting (ANV) is associated with a significant reduction in the quality of life for many chemotherapy patients. The use of 5-hydroxytryptamine type 3 receptor antagonists provides some relief for chemotherapy-induced nausea and vomiting, but does not seem to control ANV. Nonpharmacologic approaches, which include behavioral interventions, may provide the greatest promise in relieving symptoms. Little evidence supports the use of complementary and alternative methods, such as acupuncture and acupressure, in relieving ANV. Behavioral interventions, especially progressive muscle relaxation training and systematic desensitization, should be considered...
important methods for preventing and treating ANV.

[1286] Carpal tunnel syndrome, diabetic neuropathy, fibromyalgia, glucosamine and chondroitin, hypnosis in pain management, marijuana for pain.
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This feature presents information for patients in a question and answer format. It is written to simulate actual questions that many pain patients ask and to provide answers in a context and language that most pain patients will comprehend. Issues addressed in this issue are carpel tunnel syndrome, fibromyalgia, glucosamine and chondroitin, hypnosis, marijuana.

[1287] Pain and palliative medicine.
Chang VT, Sorger B, Rosenfeld KE, Lorenz KA, Bailey AF, Bui T, Weinberger L, Montagnini M.
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Severe pain is highly prevalent, with rates of 40% to 70% in patients with advanced cancer, liver disease, heart failure, human immunodeficiency virus, and renal failure. Wide variations in pain assessment and reporting methods and the measurement of multiple symptoms should be addressed in future studies. Regarding psychological approaches, determining whether hypnotherapy or other individual psychotherapeutic interventions reduce pain and/or psychological distress in a palliative care population is difficult. Interest is increasing in the concept of demoralization syndromes and the role of posttraumatic stress disorder in modulating responses to pain at the end of life. We review evidence from multiple studies that the use of rehabilitative therapy improves functional status and pain control among patients with advanced cancer, and we raise the possibility that rehabilitation therapy will be helpful in patients with other advanced diseases. We summarize ongoing clinical trials of electronic order sets, clinical care pathways, and care management pathways to improve pain management in palliative care. Wagner's Chronic Illness Model provides a way of analyzing how healthcare systems can be changed to provide adequate and continuing pain management in palliative care. Much work remains to ensure that pain is recognized, treated, and monitored effectively.

[1288] [Depressive syndrome in gastroenterology: diagnosis and treatment]
[Article in Russian]
Tsimmerman IaS, Tsimmerman Ila.

The article presents modern data on depressive syndrome, its prevalence and possible reasons for its growth, the role of psychoemotional stress in the development of anxiety depression (AD), as well as psychosomatic diseases and syndromes and modern views on the mechanisms of their formation. The authors discuss methods of revealing and diagnostic criteria of AD and psychosomatic diseases, including those that develop against the background of masked depression. Associations between depressive syndrome and the development of gastroenterological diseases and psychosomatic syndromes such as peptic ulcer, functional dyspepsia, irritated bowel syndromes, chronic cholecystitis, and chronic duodenal obstruction syndrome are discussed in detail. Special attention is paid to treatment of AD in gastroenterological patients using psycho- and hypnotherapy as well as psychotropic drugs such as antidepressives, anxiolytics, neuroleptics, and nootropic agents.

[1289] Successful interventions for smoking cessation in pregnancy.
Barron J, Petrilli F, Strath L, McCaffrey R.
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The purpose of this article is to evaluate research regarding beneficial approaches to smoking cessation interventions during pregnancy. Research about nicotine replacement, nurse-managed counseling sessions, hypnosis, and behavioral modifications are presented. One of the most useful types of program for smoking cessation in pregnancy (as measured by cotinine-validated abstinence) described in the literature thus far has been the nurse-managed smoking cessation program, which includes a 15-minute individualized counseling session combined with a telephone contact 7-10 days after the prenatal visit. More research is needed in this important area of nursing practice.
BACKGROUND: Use of complementary medicine is common, consumer driven and usually outpatient focused. We wished to determine interest among the medical staff at a North Carolina academic medical center in integrating diverse therapies and services into comprehensive care. METHODS: We conducted a cross sectional on-line survey of physicians, nurse practitioners and physician assistants at a tertiary care medical center in 2006. The survey contained questions on referrals and recommendations in the past year and interest in therapies or services if they were to be provided at the medical center in the future. RESULTS: Responses were received from 173 clinicians in 26 different departments, programs and centers. There was strong interest in offering several specific therapies: therapeutic exercise (77%), expert consultation about herbs and dietary supplements (69%), and massage (66%); there was even stronger interest in offering comprehensive treatment programs such as multidisciplinary pain management (84%), comprehensive nutritional assessment and advice (84%), obesity/healthy lifestyle promotion (80%), fit for life (exercise and lifestyle program, 76%), diabetes healthy lifestyle promotion (73%); and comprehensive psychological services for stress management, including hypnosis and biofeedback (73%). CONCLUSION: There is strong interest among medical staff at an academic health center in comprehensive, integrated services for pain, obesity, and diabetes and in specific services in fitness, nutrition and stress management. Future studies will need to assess the cost-effectiveness of such services, as well as their financial sustainability and impact on patient satisfaction, health and quality of life.

Illness by suggestion: expectancy, modeling, and gender in the production of psychosomatic symptoms.

BACKGROUND: Expectancy and modeling have been cited as factors in mass psychogenic illness (MPI), which reportedly affects more women than men. PURPOSE: The purpose of the study is to assess the effects of expectancy and modeling in a controlled laboratory analogue of MPI. METHODS: Students were randomly assigned to inhale or not inhale an inert placebo described as a suspected environmental toxin that had been linked to four symptoms typical of reported instances of MPI. Half of the students observed a female confederate inhale the substance and subsequently display the specified symptoms. RESULTS: Students who inhaled the placebo reported greater increases in symptoms, and the increase was significantly greater for the specified symptoms than for other symptoms. Observation of the confederate displaying symptoms increased specified symptoms significantly among women but not among men. Changes in reported symptoms were significantly associated with changes in unobtrusively observed behavior. CONCLUSIONS: Symptoms typical of clinical reports of MPI can be induced by manipulating response expectancies, and the effects are specific rather than generalized. Among women, this effect is enhanced by observing another participant (who in this study is also female) display symptoms. This suggests that the preponderance of women showing symptoms in outbreaks of MPI may be due to gender-linked differences in the effects of modeling on psychosomatic symptoms.

Effects of age on responsiveness to adjunct hypnotic analgesia during invasive medical procedures.

OBJECTIVES: To assess the effects of age on responsiveness to self-hypnotic relaxation as an analgesic adjunct in patients undergoing invasive medical procedures. MATERIAL AND METHODS: Secondary data analysis from a prospective trial with 241 patients randomized to receive hypnosis, attention, and standard care treatment during interventional radiological procedures. Growth curve analyses, hierarchical linear regressions, and logistic regressions using orthogonal contrasts were used for analysis. Outcome measures were Hypnotic Induction Profile scores, self-reported pain and anxiety, medication use, oxygen desaturation < or =89%, and procedure time. RESULTS: Hypnotizability did not vary with age (p = .19). Patients receiving attention and hypnosis had greater pain reduction during the procedure (p = .02), with trends toward lower pain with hypnosis (p = .07); this did not differ by age. As age increased, patients experienced more rapid pain control with hypnosis (p = .03). There was more rapid anxiety reduction with attention and hypnosis (p = .03). Trends toward lower final anxiety were also observed with attention and hypnosis versus standard care (p = .08), and with hypnosis versus attention (p = .059); these relationships did not differ by age. Patients requested and received less medication and had less oxygen desaturation < or =89% with attention and hypnosis (p < .001); this did not differ by age. However, as age increased, oxygen desaturation was greater in standard care (p = .03). Procedure time was reduced in the attention and hypnosis groups (p = .007); this did not vary by age. CONCLUSIONS: Older patients are hypnotizable and increasing age does not appear to mitigate the usefulness of hypnotic analgesia.
during invasive medical procedures.

Management of the anxious patient: what treatments are available?  
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Fear of the dentist is a common phenomenon. There are many ways of dealing with anxious patients and this review aims to present the most common methods available to general dental practitioners. Clinical Relevance: An ability to deal with anxious patients successfully is undoubtedly a practice builder. Anxious patients can be stressful to manage but they often become the most vocal advocates of dentists that they trust.

Hypnotherapy for irritable bowel syndrome in Saudi Arabian patients.  
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This study investigated whether hypnotherapy provides a significant therapeutic effect in Saudi Arabian patients with irritable bowel syndrome. Patients (n=26) were consecutively recruited at a psychiatry outpatient clinic after diagnosis by a gastroenterologist and a medical evaluation for irritable bowel syndrome. Each patient had 12 sessions of hypnotherapy over a period of 12 weeks (1 session per week). Patients completed a scale measuring symptom severity before and 3 months after the trial. Hypnotherapy significantly enhanced a feeling of better quality of life more in male than in female patients, and bowel habit dissatisfaction was reduced more in female than in male patients.

Use of mind-body therapies in psychiatry and family medicine faculty and residents: attitudes, barriers, and gender differences.  
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BACKGROUND: Mind-body medicine (MBM) approaches to many health problems have been well documented in the literature, including through multiple meta-analyses. Efficacy has been well demonstrated in conditions such as headache, irritable bowel syndrome, anxiety, fibromyalgia, hypertension, low back pain, depression, cancer symptoms, and postmyocardial infarction. However, an apparent disconnect (ie, translational block) prevents more widespread adoption of such therapies into practice. Biofeedback, relaxation therapy, hypnosis, guided imagery, cognitive behavioral therapy, and psychoeducational approaches are the domain of MBM we examined in assessing physician attitudes, beliefs, and practices. METHODS: Using a Web-based survey, we obtained responses from 74 faculty and resident physicians in the Department of Family Medicine and the Department of Psychiatry. Our response rate was 69%. We conducted descriptive statistics, bivariate analysis, and multivariate analysis using a logistic regression model. Various statistics were chosen depending on the nature of analyzed variables. Synoptic tables are presented. RESULTS: Comparing these cohorts, we found little difference between physicians in the two specialties, but substantial reports that barriers to the use of MBM were largely based on lack of training, inadequate expertise, and insufficient clinic time. Lack of expertise and insufficient clinic time were higher among family physicians than among psychiatrists. There was a high interest in both groups in learning relaxation techniques and meditation and lower interest in biofeedback and hypnosis. Female physicians were significantly more likely to use MBM, both with patients and for their own self-care, and were less likely to be concerned that recommending these therapies would make patients feel that their symptoms were being discounted. Female physicians also had significantly higher beliefs about the benefits of MBM on health disorders in several of the conditions examined, with a consistent though nonsignificant trend in others.

Effects of autogenic training on nitroglycerin-induced headaches.  
Juhasz G, Zsombok T, Gonda X, Nagyne N, Modosne E, Bagdy G.  
Neuroscience and Psychiatry Unit, University of Manchester, Manchester, UK.

OBJECTIVES: To investigate the prophylactic and acute effects of autogenic training (AT) during a nitroglycerin-induced migraine attack. METHODS: Thirty female migraineurs (without aura) and 11 controls participated in the study. Of these, 11 migraineurs and 5 controls practiced AT regularly for at least 6 months prior to and during the sublingual nitroglycerin test. Headache intensity and characteristics were recorded with a standardized method. During the nitroglycerin challenge, blood was collected for plasma cortisol determination and blood pressure and pulse rate were recorded. RESULTS: As a long-term preventative treatment, AT significantly decreased the mean headache frequency and intensity...
A critical review of complementary therapies for cancer-related fatigue.
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Mayo Clinic College of Medicine, 200 First Street SW, Rochester, MN 55905, USA. sood.amit@mayo.edu

PURPOSE: To review the available literature on the use of complementary and alternative medicine (CAM) treatments for cancer-related fatigue with an aim to develop directions for future research. METHODS: PubMed, EMBASE, CINAHL, PsycINFO, and SPORTDiscus were searched for relevant studies. Original clinical trials reporting on the use of CAM treatments for cancer-related fatigue were abstracted and critically reviewed. RESULTS: CAM interventions tested for cancer-related fatigue include acupuncture, aromatherapy, adenosine triphosphate infusions, energy conservation and activity management, healing touch, hypnosis, lectin-standardized mistletoe extract, levocarnitine, massage, mindfulness-based stress reduction, polarity therapy, relaxation, sleep promotion, support group, and Tibetan yoga. Several of these interventions seem promising in initial studies. CONCLUSION: Currently, insufficient data exist to recommend any specific CAM modality for cancer-related fatigue. Therefore, potentially effective CAM interventions ready for further study in large, randomized clinical trials (eg, acupuncture, massage, levocarnitine, and the use of mistletoe) should be pursued. Other interventions should be tested in well-designed feasibility and phase II trials.

Effectiveness of hypnosis for the treatment of vulvar vestibulitis syndrome: a preliminary investigation.
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INTRODUCTION: Vulvar vestibulitis syndrome (VVS) is a common cause of vulvar pain. Therapeutic options target different pain systems believed to be involved in its development and maintenance. Most treatments target the pain component with the assumption that sexual function will increase once the pain has decreased, yet this is not necessarily the case. AIM: Research has supported the effectiveness of hypnosis for many chronic pain disorders, and a case report demonstrated pain reduction and an increase in intercourse pleasure in a woman with VVS. This preliminary study examined the effectiveness of hypnosis on pain and psychosexual function in VVS. METHODS: Eight women suffering from VVS completed a hypnosis screening assessment, an interview, pain and psychosexual questionnaires, a gynecologic examination, vestibular pain threshold measurement, a psychosexual assessment, and six hypnotherapy sessions. The physical examinations, interview, and questionnaires were repeated at 1 and 6 months posttreatment. MAIN OUTCOME MEASURES: These included pain ratings during the gynecologic examination, vestibular pain thresholds, scores on the McGill Pain Questionnaire and Pain Catastrophizing Scale, and responses to questions on intercourse-related and nonintercourse-related pain. MEASURES of psychosexual function included the Female Sexual Function Index, State-Trait Anxiety Scale, Beck Depression Inventory-II, and the Brief Symptom Inventory. RESULTS: Significant decreases in gynecologic examination pain and in several measures assessing intercourse pain, and nonsignificant increases in threshold. Some indices of noncoital vulvar pain decreased. Overall sexual function, particularly sexual satisfaction, increased at posttreatment. There were no differences on any psychological measure. Participants reported satisfaction with the treatment and rated their VVS pain reduction as average. CONCLUSIONS: Hypnotherapy appears to be a promising treatment for reducing intercourse pain and some aspects of noncoital vulvar pain, and for restoring sexual function in women with VVS. These results suggest that a large controlled trial should be considered.
Numerous innocent people have been sent to jail based directly or indirectly on normal, but flawed, human perception, memory and decision making. Current cognitive-science research addresses the issues that are directly relevant to the connection between normal cognitive functioning and such judicial errors, and suggests means by which the false-conviction rate could be reduced. Here, we illustrate how this can be achieved by reviewing recent work in two related areas: eyewitness testimony and fingerprint analysis. We articulate problems in these areas with reference to specific legal cases and demonstrate how recent findings can be used to address them. We also discuss how researchers can translate their conclusions into language and ideas that can influence and improve the legal system.

[1300]
Cortex functional connectivity as a neurophysiological correlate of hypnosis: an EEG case study. 
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Cortex functional connectivity associated with hypnosis was investigated in a single highly hypnotizable subject in a normal baseline condition and under neutral hypnosis during two sessions separated by a year. After the hypnotic induction, but without further suggestions as compared to the baseline condition, all studied parameters of local and remote functional connectivity were significantly changed. The significant differences between hypnosis and the baseline condition were observable (to different extent) in five studied independent frequency bands (delta, theta, alpha, beta, and gamma). The results were consistent and stable after 1 year. Based on these findings we conclude that alteration in functional connectivity of the brain may be regarded as a neuronal correlate of hypnosis (at least in very highly hypnotizable subjects) in which separate cognitive modules and subsystems may be temporarily incapable of communicating with each other normally.

[1301]
Elucidating Tourette's syndrome: perspectives from hypnosis, attention and self-regulation. 
Raz A, Keller S, Norman K, Senechal D. 
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Biological psychiatry favors drug treatment over non-pharmacological intervention and shapes the way clinicians both treat and understand Tourette's Syndrome (TS). However, drug treatments for TS involve side effects and are potentially toxic to the central nervous system. Moreover, current pharmacological treatments are largely ineffective and at best only provide a modest symptom reduction. In this paper, we describe how non-pharmacological treatments such as focused attention can modulate, reduce, or indeed entirely eliminate the symptoms of TS as well as elucidate the underlying neural mechanisms. Showing that the symptoms of TS are susceptible to self-regulatory interventions such as hypnosis, we propose that attentional training could be used to both treat the disorder and better understand it.

[1302]
An update on age, hypnotic suggestibility, and gender: a brief report. 
Page RA, Green JP. 
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This study assessed the relationship of age and hypnotic suggestibility in an effort to partially update the findings of Morgan and Hilgard (1973). A total of 2,660 undergraduates were administered the Harvard Group Scale of Hypnotic Susceptibility, Form A (HGSHS:A; Shor & Orne, 1962) over a 7 year period. Consistent with Morgan and Hilgard’s results, we found a general trend for hypnotic suggestibility scores to decrease from age 17 to 40, and then increase thereafter. We also found that female participants scored higher on the HGSHS: A compared with males across the various age ranges that we sampled.

[1303]
What is a suggestion? The neuroscience of implicit processing heuristics in therapeutic hypnosis and psychotherapy. 
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Neuroscience and bioinformatics research on activity-dependent gene expression and brain plasticity in memory and learning are used to reconceptualize a fundamental question of therapeutic hypnosis, "What is a suggestion?" John Kihlstrom's cognitive-behavioral perspective of implicit (unconscious) and explicit (conscious) memory and Eric Kandel's
Nobel Prize winning neurobiological research are integrated for a 30-year update of Milton H. Erickson's "neuro-psycho-physiology" of therapeutic hypnosis. Implicit processing heuristics are proposed as a more general framework for Erickson's concept of permissive indirect suggestions in therapeutic hypnosis and psychotherapy. These perspectives are illustrated by utilizing implicit processing heuristics to facilitate the four-stage creative process in converting implicit to explicit memory in a brain-damaged patient.

[1304]
Hypnosis prevents the cardiovascular response to cold pressor test.
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To highlight the effects of hypnotic focused analgesia (HFA), 20 healthy participants underwent a cold pressor test (CPT) in waking basal conditions (WBC) by keeping the right hand in icy water until tolerable (pain tolerance); subjective pain was quantified by visual scale immediately before extracting the hand from water. The test was then repeated while the participants were under hypnosis and underwent HFA suggestions. Cardiovascular parameters were continuously monitored. Pain tolerance was 121.5+/−96.1 sec in WBC and 411.0+/−186.7 sec during HFA (p < 0.0001), and visual rating score 7.75+/−2.29 and 2.45+/−2.98 (p < 0.0001), respectively. CPT-induced increase of total peripheral resistance was non significant during HFA and +21% (p < 0.01) in WBC. HFA therefore reduced both perception and the reflex cardiovascular consequences of pain as well. This indicates that hypnotic analgesia implies a decrease of sensitivity and/or a block of transmission of painful stimuli, with depression of the nervous reflex arc.

[1305]
Hypnotic history: a reply to critics.
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This article responds to comments on Kirsch, Mazzoni, & Montgomery (2007). Contrary to the perceptions of some commentators, the target article was not aimed at supporting a particular view of hypnosis. Instead, it was a reminder of a long accepted axiom in hypnosis research: the effects of hypnotic suggestions cannot be attributed to hypnosis unless it is demonstrated that the same suggestion does not produce the effect outside of hypnosis.

[1306]
Trait dissociation and commission errors in memory reports of emotional events.
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In 2 studies we examined whether trait dissociation is related to spontaneous commission errors (reports of events that did not occur) in free recall of emotional events. We also explored whether the functional locus of the dissociation-commission link is related to repeated retrieval or shallow encoding. In Experiment 1 participants were exposed to a staged incident and were repeatedly asked to add more information to their written accounts of the event. Dissociation levels were related to commission errors, indicating that people who report many dissociative experiences tend to make more commission errors. However, it was not the case that the overall increase in commission errors over successive retrieval attempts was typical for high dissociative participants. In Experiment 2 participants saw a video fragment of a severe car accident. During the video, half the participants performed a dual task, and the other half did not. Participants performing the dual task made more commission errors than controls, but this effect was not more pronounced in those with high trait dissociation scores. These studies show that there is a link between dissociation and spontaneous commission errors in memory reports of emotional events, but the functional locus of this link remains unclear.

[1307]
Evidence-based hypnotherapy for asthma: a critical review.
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Asthma is a chronic disease with intermittent acute exacerbations, characterized by obstructed airways, hyper-responsiveness, and sometimes by chronic airway inflammation. Critically reviewing evidence primarily from controlled outcome studies on hypnosis for asthma shows that hypnosis is possibly efficacious for treatment of symptom severity and illness-related behaviors and is efficacious for managing emotional states that exacerbate airway obstruction.
Hypnosis is also possibly efficacious for decreasing airway obstruction and stabilizing airway hyper-responsiveness in some individuals, but there is insufficient evidence that hypnosis affects asthma’s inflammatory process. Promising research needs to be replicated with larger samples and better designs with careful attention paid to the types of hypnotic suggestions given. The critical issue is not so much whether it is used but how it is used. Future outcome research must address the relative contribution of expectancies, hypnotizability, hypnotic induction, and specific suggestions.

[1308]
Hypnosis and the treatment of posttraumatic conditions: an evidence-based approach.
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This article reviews the evidence for the use of hypnosis in the treatment of posttraumatic conditions including posttraumatic stress disorder and acute stress disorder. The review focuses on empirically supported principles and practices and suggests that hypnosis can be a useful adjunctive procedure in the treatment of posttraumatic conditions. Cognitive-behavioral and exposure-based interventions, which have the greatest empirical support, are highlighted, and an illustrative case study is presented.

[1309]
Review of the efficacy of clinical hypnosis with headaches and migraines.
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The 12-member National Institute of Health Technology Assessment Panel on Integration of Behavioral and Relaxation Approaches into the Treatment of Chronic Pain and Insomnia (1996) reviewed outcome studies on hypnosis with cancer pain and concluded that research evidence was strong and that other evidence suggested hypnosis may be effective with some chronic pain, including tension headaches. This paper provides an updated review of the literature on the effectiveness of hypnosis in the treatment of headaches and migraines, concluding that it meets the clinical psychology research criteria for being a well-established and efficacious treatment and is virtually free of the side effects, risks of adverse reactions, and ongoing expense associated with medication treatments.

[1310]
Hypnotically facilitated treatment of obsessive-compulsive disorder: can it be evidence-based?
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There are extensive evidence-based guidelines for the treatment of Obsessive-Compulsive Disorder (OCD) with medication, behavior therapy, and cognitive therapy. Nevertheless, there remain a significant percentage of patients whose symptoms are more or less refractory to standardized treatments. This situation could be rooted in the phenotypic heterogeneity of the disorder as well as in its high rates of comorbid psychopathology. Studies have also found OCD to be associated with higher levels of dissociation. This paper examines what may be needed to establish evidence-based hypnotically facilitated therapies for treatment-resistant OCD. It provides an introduction to the complexity of the treatment issues surrounding OCD and considers both possibilities for and obstacles to setting up an evidence-base for using hypnotically facilitated psychotherapies for its treatment.

[1311]
Cognitive hypnotherapy for depression: an empirical investigation.
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To investigate the effectiveness of cognitive hypnotherapy (CH), hypnosis combined with cognitive-behavioral therapy (CBT), on depression, 84 depressives were randomly assigned to 16 weeks of treatment of either CH or CBT alone. At the end of treatment, patients from both groups significantly improved compared to baseline scores. However, the CH group produced significantly larger changes in Beck Depression Inventory, Beck Anxiety Inventory, and Beck Hopelessness Scale. Effect size calculations showed that the CH group produced 6%, 5%, and 8% greater reduction in depression, anxiety, and hopelessness, respectively, over and above the CBT group. The effect size was maintained at 6-month and 12-month follow-ups. This study represents the first controlled comparison of hypnotherapy with a well-established psychotherapy for depression, meeting the APA criteria for a "probably efficacious" treatment for depression.
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There are a number of clinical reports and a body of research on the effectiveness of hypnotherapy in the treatment of irritable bowel syndrome (IBS). Likewise, there exists research demonstrating the efficacy of cognitive-behavioral therapy (CBT) in the treatment of IBS. However, there is little written about the integration of CBT and hypnotherapy in the treatment of IBS and a lack of clinical information about IBS-induced agoraphobia. This paper describes the etiology and treatment of IBS-induced agoraphobia. Cognitive, behavioral, and hypnototherapeutic techniques are integrated to provide an effective cognitive-behavioral hypnotherapy (CBH) treatment for IBS-induced agoraphobia. This CBH approach for treating IBS-induced agoraphobia is described and clinical data are reported.

What should we mean by empirical validation in hypnotherapy: evidence-based practice in clinical hypnosis.
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This paper briefly surveys the trend of and controversy surrounding empirical validation in psychotherapy. Empirical validation of hypnotherapy has paralleled the practice of validation in psychotherapy and the professionalization of clinical psychology, in general. This evolution in determining what counts as evidence for bona fide clinical practice has gone from theory-driven clinical approaches in the 1960s and 1970s through critical attempts at categorization of empirically supported therapies in the 1990s on to the concept of evidence-based practice in 2006. Implications of this progression in professional psychology are discussed in the light of hypnosis’s current quest for validation and empirical accreditation.

To test the impact of hypnotherapy upon immunity and circadian rhythms among palliative cancer patients: a promising goal?
[Article in French]
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Epidemiological and clinical researches in the borderline domain between psychology and cancer have produced consequent results, despite the large variety of employed approaches and aimed goals: these results permit to define domains where new investigations still appear promising. If randomized prospective controlled trials that test the impact of psychosocial interventions, constitute to our mind a strategy that must not be bypassed, a special attention should be focussed on the following topics: 1) it seems necessary to add to standard goals (survival and quality of life) the evaluation of the impact on immunity and main biological rhythms (circadian and ultradian). Specific questionnaires should be included (pain, sleep, mood, self-esteem, life events...) and others may need to be developed or adapted (sexuality, spirituality, coping with death); 2) among types of psychosocial management, hypnosis and/or learning of self-hypnosis appears to be a modality of choice since some results have already been obtained on immune pathologies and also on cancer. Mixed to an approach of clinical psychology, such a management could arouse behavior changes toward pathology but also promote an improvement of biological rhythms (action on sleep...) and perhaps, by the way, an immune rebound; 3) on a methodological point of view, trials cannot be double-blind. The effort must then concern sample sizes, that were often insufficient in many trials, but also targeted populations: palliative cancer patients with a good performance status seem more relevant for this type of investigation, since psychosocial interventions usually improve quality of life.

Hypnosis and surgery: past, present, and future.
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Hypnosis has been defined as the induction of a subjective state in which alterations of perception or memory can be elicited by suggestion. Ever since the first public demonstrations of "animal magnetism" by Mesmer in the 18th century, the use of this psychological tool has fascinated the medical community and public alike. The application of hypnosis to alter pain perception and memory dates back centuries. Yet little progress has been made to fully comprehend or appreciate its potential compared to the pharmacologic advances in anesthesiology. Recently, hypnosis has aroused interest, as hypnosis seems to complement and possibly enhance conscious sedation. Contemporary clinical investigators claim that the combination of analgesia and hypnosis is superior to conventional pharmacologic analgesia.
for minor surgical cases, with patients and surgeons responding favorably. Simultaneously, basic research of pain pathways involving the nociceptive flexion reflex and positron emission tomography has yielded objective data regarding the physiologic correlates of hypnosis. In this article I review the history, basic scientific and clinical studies, and modern practical considerations of one of the oldest therapeutical tools: the power of suggestion.

[1316]
Hypnosis for treatment of pain in children.
Can Fam Physician. 2007 May;53(5):823-5.
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QUESTION: Many children suffer from chronic and painful illnesses. Hypnosis was found to be effective for analgesia in adults. Is it effective for managing pain in children? ANSWER: Children can be easier to hypnotize than adults. Studies have shown clinical hypnosis and self-hypnosis to be effective as adjunct treatments for children in pain. Examples include painful medical procedures, such as bone marrow aspiration and lumbar puncture in pediatric cancer patients, postoperative pain and anxiety in children undergoing surgery, and chronic headache.

[1317]
The effects of prayer, relaxation technique during general anesthesia on recovery outcomes following cardiac surgery.
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During general anesthesia the possibility of subconscious perception of intraoperative events is a controversial subject. Some studies found that positive verbal suggestions, or music improved intraoperative relaxation and postoperative recovery. The aim of the current study was to evaluate the effect of prayer and relaxation technique applied while patients are under general anesthesia for open-heart surgery. A randomized, controlled, double-blind trial study included 78 patients who underwent cardiac surgery. During the surgery the patients used a headphone connected to a CD player. They were randomly divided into three groups. One group listened to prayer during the surgery, the other listened to relaxation technique and one, placebo. There was only one significant finding: the prayer group is less likely to believe that prayer would assist conventional medical treatments. Although not statistically significant, we discussed the length of stay (LOS) after surgery and the incidence of sternal wound infection.

[1318]
The power of the placebo.
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The placebo is much more than a control medicine in a clinical trial. The placebo response is the largest component of any allergy treatment and consists of two components: nonspecific effects (eg, natural recovery) and a "true placebo effect" that is the psychological therapeutic effect of the treatment. Belief in the beneficial nature of the treatment is a key component of the true placebo effect, and can be enhanced by factors such as interaction with the physician and the sensory impact of the treatment. Negative beliefs can generate a nocebo effect that may explain some psychogenic illnesses; this is the basis of much research in psychoneuroimmunology. An understanding of the placebo and nocebo effects is important for general allergy practice, and harnessing the power of the true placebo effect is a major challenge to modern medicine.

[1319]
Ericksonian hypnosis in tinnitus therapy: effects of a 28-day inpatient multimodal treatment concept measured by Tinnitus-Questionnaire and Health Survey SF-36.
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For the first time, the therapeutic effects on subacute and chronic tinnitus of an inpatient multimodal treatment concept based on principles of Ericksonian hypnosis (EH) were examined by standardized criteria of the Tinnitus Questionnaire (TQ) and Health Survey (SF-36) within a controlled prospective, longitudinal study. A total of 393 patients were treated within an inpatient closed-group 28-day-setting based on a resource-oriented, hypnotherapeutic concept. The severity of tinnitus was assessed by TQ at times of admission, discharge and also at a 6- and 12-month follow-up. Health-related quality of life was evaluated before and after therapy using the SF-36. After therapy, a decrease in TQ score was seen in 90.5% of the patients with subacute tinnitus and in 88.3% of those with chronic tinnitus. Assessment of the TQ score at the end of therapy revealed highly significant improvements of 15.9/14.1 points in mean. Effect sizes in the treatment groups (0.94/0.80) were superior to those in the waiting-list controls (0.14/0.23). The TQ score remained stable in the...
follow-up controls. Significant improvement in health-related quality of life has been observed within the treatment groups depending on initial level of tinnitus severity I-IV according to TQ. Using a multimodal treatment concept with emphasis on resource-activating approaches of EH the annoyance of tinnitus can be significantly reduced while health-related quality of life is enhanced within a comparatively short treatment period of 28 days.

[1320]
Effect of hypnotic suggestion on fibromyalgic pain: comparison between hypnosis and relaxation.

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The main aims of this experimental study are: (1) to compare the relative effects of analgesia suggestions and relaxation suggestions on clinical pain, and (2) to compare the relative effect of relaxation suggestions when they are presented as "hypnosis" and as "relaxation training". Forty-five patients with fibromyalgia were randomly assigned to one of the following experimental conditions: (a) hypnosis with relaxation suggestions; (b) hypnosis with analgesia suggestions; (c) relaxation. Before and after the experimental session, the pain intensity was measured using a visual analogue scale (VAS) and the sensory and affective dimensions were measured with the McGill Pain Questionnaire. The results showed: (1) that hypnosis followed by analgesia suggestions has a greater effect on the intensity of pain and on the sensory dimension of pain than hypnosis followed by relaxation suggestions; (2) that the effect of hypnosis followed by relaxation suggestions is not greater than relaxation. We discuss the implications of the study on our understanding of the importance of suggestions used in hypnosis and of the differences and similarities between hypnotic relaxation and relaxation training.

[1321]
Imagery of different sensory modalities: hypnotizability and body sway.

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Postural control in subjects with high (Highs) and low (Lows) susceptibility to hypnosis is differentially affected by changes in visual and neck tactile/proprrioceptive input. The aim of the present experiment was to investigate whether imagery of the visual and tactile sensory modalities also induces different modulation of postural control in Highs and Lows. Fourteen Highs and 16 Lows were included in the study; they were recorded while standing upright with eyes closed during visual and tactile imagery tasks and during mental computation. Their posture and movement were recorded with an Elite System and their experience was assessed after each task in a structured interview. Visual imagery was judged "easier" than tactile imagery by Lows, while Highs performed both tasks easily and judged the tactile imagery less effortful and more vivid than Lows. No difference was observed for the mental computation. The Highs' body sway was not affected by the cognitive tasks, while Lows showed a task-related modulation of body sway. The results are in line with the hypothesis of lower vulnerability of Highs to the effects of tasks interfering with postural control and of different sensory-motor integration in Highs and Lows.

[1322]
Searching for CAM evidence: an evaluation of therapy-specific search strategies.

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OBJECTIVES: The aim of this investigation was to explore the effectiveness of search strategies developed to identify trials of specific complementary therapies in a range of clinical conditions. DESIGN: All primary studies included in a series of systematic reviews were identified. An analysis of the original source of the study and search term(s) by means of which the study had originally been retrieved was carried out. Each study was then searched for in each of 6 databases (AMED, Cochrane CENTRAL, MEDLINE/PubMed, EMBASE, CINAHL, PsycINFO). The proportion of studies located on each database was assessed and the indexing terms identified for each therapy were compared against the original search strategies. RESULTS: A total of 127 primary studies were identified from 35 systematic reviews. The number of studies on each therapy varied, but Cochrane CENTRAL listed the highest proportion for all therapies. No database listed all studies, and at least one unique study was listed on all databases except MEDLINE, whereas several studies were not found on any of the databases. Index terms were effective in locating studies on acupuncture, individual herbs, hypnosis, massage, and yoga. For the remaining therapies, use of text word search terms was important and particularly so for homeopathy, meditation, and reflexology. Variation in terminology for most of the therapies was encountered. CONCLUSIONS: The small numbers of studies preclude firm recommendations, but several potential challenges in searching for complementary and alternative medicine (CAM) trials are highlighted. The findings suggest that a range of different sources is required for identifying relevant studies, particularly for certain therapies. The development of an optimum generic search strategy for each therapy is hampered by the variation in indexing of CAM studies. Possible optimum strategies are presented as a basis for discussion, and further testing of the effectiveness of these strategies is
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BACKGROUND: Individuals with autism spectrum disorders (ASD) present with a particular profile of memory deficits, executive dysfunction and impaired social interaction that may raise concerns about their recall and reliability in forensic and legal contexts. Extant studies of memory shed limited light on this issue as they involved either laboratory-based tasks or protocols that varied between participants. METHOD: The current study used a live classroom event to investigate eye-witness recall and suggestibility in children with Asperger syndrome (AS group; N = 24) and typically developing children (TD group; N = 27). All participants were aged between 11 and 14 years and were interviewed using a structured protocol. Two measures of executive functioning were also administered. RESULTS: The AS group were found to be no more suggestible and no less accurate than their peers. However, free recall elicited less information, including gist, in the AS group. TD, but not AS, participants tended to focus on the socially salient aspects of the scene in their free recall. Both general and specific questioning elicited similar numbers of new details in both groups. Significant correlations were found between memory recall and executive functioning performance in the AS group only. CONCLUSIONS: The present study indicates that children with AS can act as reliable witnesses but they may be more reliant on questioning to facilitate recall. Our findings also provide evidence for poor gist memory. It is speculated that such differences stem from weak central coherence and lead to a reliance on generic cognitive processes, such as executive functions, during recall. Future studies are required to investigate possible differences in compliance, rates of forgetting and false memory.

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STUDY DESIGN: We conducted a structured review of eight mind-body interventions for older adults with chronic nonmalignant pain. OBJECTIVES: To evaluate the feasibility, safety, and evidence for pain reduction in older adults with chronic nonmalignant pain in the following mind-body therapies: biofeedback, progressive muscle relaxation, meditation, guided imagery, hypnosis, tai chi, qi gong, and yoga. METHODS: Relevant studies in the MEDLINE, PsycINFO, AMED, and CINAHL databases were located. A manual search of references from retrieved articles was also conducted. Of 381 articles retrieved through search strategies, 20 trials that included older adults with chronic pain were reviewed. RESULTS: Fourteen articles included participants aged 50 years and above, while only two of these focused specifically on persons aged >65 years. An additional six articles included persons aged >65 years. Fourteen articles were controlled trials. There is some support for the efficacy of progressive muscle relaxation plus guided imagery for osteoarthritis pain. There is limited support for meditation and tai chi for improving function or coping in older adults with low back pain or osteoarthritis. In an uncontrolled biofeedback trial that stratified by age group, both older and younger adults had significant reductions in pain following the intervention. Several studies included older adults, but did not analyze benefits by age. Tai chi, yoga, hypnosis, and progressive muscle relaxation were significantly associated with pain reduction in these studies. CONCLUSION: The eight mind-body interventions reviewed are feasible in an older population. They are likely safe, but many of the therapies included modifications tailored for older adults. There is not yet sufficient evidence to conclude that these eight mind-body interventions reduce chronic nonmalignant pain in older adults. Further research should focus on larger, clinical trials of mind-body interventions to answer this question.

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This single arm, pilot study investigated the use of hypnosis to reduce hot flashes in 16 breast cancer survivors. Each patient provided baseline data and received 4 weekly sessions of hypnosis that followed a standardized transcript. Patients were also instructed in self-hypnosis. Throughout the clinical care, patients completed daily diaries of the frequency and severity of their hot flashes. Patients also completed baseline and post-treatment ratings of the degree to which hot flashes interfered with daily activities and quality of life. Results indicated a 59% decrease in total daily hot flashes and a 70% decrease in weekly hot flash scores from their baselines. There was also a significant decrease in the degree to which hot flashes interfered with daily activities for all measures including work, social activities, leisure activities, sleep, mood, concentration, relations with others, sexuality, enjoyment of life, and overall quality of life. This pilot study suggests that clinical hypnosis may be an effective non-hormonal and non-pharmacological treatment for hot flashes.
flashes. A randomized, controlled clinical trial is planned to more definitively elucidate the efficacy and applicability of hypnosis for reducing hot flashes.

[1326]
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GOALS OF WORK: Complementary and alternative medicines (CAM) use among cancer patients is becoming more prevalent; however, our understanding of factors contributing to patients' decisions to participate in CAM is limited. This study examined correlates of CAM use among colorectal cancer (CRC) survivors, an understudied population that experiences many physical and psychological difficulties. MATERIALS AND METHODS: The sample was 191, predominantly white, CRC survivors (mean age = 59.9 +/- 12.6) who were members of a colon disease registry at a NYC metropolitan hospital. Participants completed assessments of sociodemographic characteristics, psychosocial factors [e.g., psychological functioning, cancer specific distress, social support (SS), quality of life (QOL)], and past CAM use [e.g., chiropractic care, acupuncture, relaxation, hypnosis, and homeopathy]. MAIN RESULTS: Seventy-five percent of participants reported using at least one type of CAM; most frequently reported was home remedies (37%). Younger (p < 0.01) or female patients (p < 0.01) were more likely to participate in CAM than their older male counterparts. Among psychosocial factors, poorer perceived SS (p = 0.00), more intrusive thoughts (p < 0.05), and poorer overall perceived QOL (p < 0.05) were associated to CAM use. In a linear regression model (including age, gender, SS, intrusive thoughts, and perceived QOL), only age remained a significant predictor of CAM use. CONCLUSION: These findings demonstrate that CAM use is prevalent among CRC survivors and should be assessed routinely by providers. CAMs may serve as a relevant adjunct to treatment among CRC patients as well as an indication of need for additional SS, especially among younger patients.

[1327]
Influence of "animal hypnosis" on intersignal movements of rabbits during rhythmical defensive dominant
Zh Vyssh Nerv Deiat Im I P Pavlova. 2007 May-Jun;57(3):313-22.
[Article in Russian]
Bogdanov AV, Galashina AG, Kulikov MA.
Defensive dominanta was produced in four rabbits with electrodermal rhythmic stimulation of the left fore paw with the frequency of 0.5 Hz. During testing the dominanta with acoustical stimuli, the paw muscles responded with either a decrease in its non-rhythmic activity or rhythmic quiver with the frequency close to that of electrodermal stimulation. In intersignal periods, the paw shuddered with mean intervals of about 2 seconds. After the hypnotization procedure, the intersignal paw shudders in three rabbits became longer (1.5-6 minutes) and more powerful (the amplitude of movements 1.5-2 times increased as compared to that before the hypnotization). The intervals between movements of a paw increased from 2 to 4.5 seconds.

[1328]
Is hypnotic suggestibility a stable trait?
Conscious Cogn. 2007 Jun 16 [Epub ahead of print]
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The present study examined the trait-like nature of hypnotic suggestibility by examining the stability of hypnotic responsiveness in a test-retest design in which the procedures were administered either live or by audiotape. Contrary to the idea that hypnotizability is a largely immutable, stable trait, scores on the scale of hypnotic responsiveness decreased significantly at the second session. Measures of subjective experiences and expectancies accounted for a sizable portion of the variance in hypnotic responding, both at initial test and at retest. Participants became disengaged with the hypnotic procedures at retest. Participants who received the hypnotic induction by audiotape did not differ from participants who received it live. The results are consistent with sociocognitive and altered state theories of hypnosis, and underline the important role of subjective experiences in hypnotic responding.

[1329]
The treatment of parasomnias with hypnosis: a 5-year follow-up study.
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STUDY OBJECTIVES: This study involves a replication and extension of a previous one reported by Hurwitz et al (1991) on the treatment of certain parasomnias with hypnosis. METHODS: Thirty-six patients (17 females), mean age 32.7 years
Four were children aged 6 to 16. All had chronic, "functionally autonomous" (self-sustaining) parasomnias. All underwent 1 or 2 hypnotherapy sessions and were then followed by questionnaire for 5 years. RESULTS: Of the 36 patients, 45.4% were symptom-free or at least much improved at the 1-month follow-up, 42.2% at the 18-month follow-up, and 40.5% at the 5-year follow-up. CONCLUSIONS: One or 2 sessions of hypnotherapy might be an efficient first-line therapy for patients with certain types of parasomnias.


Cognitive scientists distinguish between automatic and controlled mental processes. Automatic processes are either innately involuntary or become automatized through extensive practice. For example, reading words is a purportedly automatic process for proficient readers and the Stroop effect is consequently considered the "gold standard" of automated performance. Although the question of whether it is possible to regain control over an automatic process is mostly unasked, we provide compelling data showing that posthypnotic suggestion reduced and even removed Stroop interference in highly hypnotizable individuals. Drawing on a large sample of highly hypnotizable participants, we examined the effects of suggestion on Stroop performance both with and without a posthypnotic suggestion to perceive the input stream as meaningless symbols. We show that suggestion administered to highly hypnotizable persons significantly reduced Stroop interference and derailed a seemingly automatic process.

[1331] Potential Synergism between Hypnosis and Acupuncture-Is the Whole More Than the Sum of Its Parts? Evid Based Complement Alternat Med. 2007 Jun;4(2):233-240. Epub 2006 Oct 31. Schiff E, Gurgevich S, Caspi O. Bnai Zion Medical Center, Internal Medicine Division Haifa, Israel, University of Arizona, Program in Integrative Medicine Arizona, USA and The Recanati Center for Medicine and Research and the Section for Integrative Medicine, Rabin Medical Center (Beilinson Campus) and the Tel-Aviv University Sackler Faculty of Medicine Israel.

Both hypnosis and acupuncture have gained credibility over the years in their effectiveness for treating various health conditions. Currently, each of these treatments is administered in distinct settings and separate times. That is, even if patients receive both treatments as part of a multidimensional therapeutic program, they would typically receive them separately rather than simultaneously at the same session. This separation however might be undesirable since, at least theoretically, hypnosis and acupuncture could potentially augment each other if administered concomitantly. In this article we outline the rationale for this hypothesis and discuss the potential ramifications of its implementation.


Rapid relaxation (RR) is a brief set of suggestions, given while applying topical anesthetic, to reduce anxiety during local anesthesia and subsequent dental treatment. RR is recommended for managing mild dental anxiety, which is almost universal. RR combines elements of hypnosis, meditation and good basic chairside manner. It is noninvasive, takes little additional time, and empowers patients by providing them with an attractive, immediate alternative to catastrophization. We have found that RR markedly improves the quality of the dental experience.


OBJECTIVE: To describe the effect of treatment with self-hypnosis for youth with recurrent headaches. STUDY DESIGN: A retrospective review was conducted of outpatient clinical records of 178 consecutive youths referred to the Behavioral Pediatrics Program (University of Minnesota) from 1988 to 2001 for recurrent headaches. All patients were taught self-hypnosis for self-regulation. Intensity, frequency, and duration of headaches before, during, and after treatment were measured. Outcomes included number and frequency of visits, types of medication, and nature of self-hypnosis practice. RESULTS: Data were available for 144 patients in this patient self-selected and uncontrolled observation. Compared with self-reports before learning self-hypnosis, children and youths who learned self-hypnosis for recurrent headaches.
reported reduction in frequency of headache from an average of 4.5 per week to 1.4 per week (P < .01), reduction in intensity (on a self-rating scale of 0 to 12) from an average of 10.3 to 4.7, P < .01, and reduction in average duration from 23.6 hours to 3.0 hours, (P < .01). There were no adverse side effects of self-hypnosis. CONCLUSIONS: Training in self-hypnosis is associated with significant improvement of chronic recurrent headaches in children and adolescents.

[1334]
Imagery in the clinical setting: a tool for healing.
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This article addresses the why and how of imagery and its relation with holistic theories. The description of clinical applications, program development, and research demonstrates successful interventions in virtually every area of nursing. Case examples show the profound healing that is experienced by the patient and the nurse simultaneously through this work. Imagery is harmless, is time- and cost-effective, and creates a healing partnership between the nurse and patient.

[1335]
An exploration of the utility of hypnosis in pain management among rural pain patients.
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OBJECTIVE: Hypnosis is an adjunctive, noninvasive treatment with few side effects that can be useful in the management of chronic pain. However, it has fallen into disfavor in recent years and is often perceived by physicians as simple charlatanism. We evaluated the efficacy of this treatment as used clinically in a large, mostly rural, pain management center. METHODS: We conducted a chart review of 300 pain patients from the Pain Treatment Center of the Bluegrass who had undergone hypnosis for their pain concerns. A chart audit tool was developed consisting of basic demographics, pre- and posthypnosis pain ratings, a rating of relaxation achieved posthypnosis, and scores on the Beck Depression Inventory, Perceived Disability Scale, and the Pain Anxiety Symptom Scale. RESULTS: The sample consisted of 79 men (26.3%) and 221 women (73.7%) with a mean age of 46.3 years (SD = 9.9, range = 19-78). Pain levels recorded pre- and posthypnosis revealed significant improvement as a result of the intervention (mean difference = 2.5, t (1,298) = 25.9, p < .001). Patients reported an average of 49.8% improvement in relaxation level posthypnosis (SD = 24.2%) and had a mean score of 19.0 on the Beck Depression Inventory (SD = 9.9), indicating moderate levels of depression. Also, patients saw themselves as severely disabled regarding their ability to engage in physical (8.3/10) or job-related (7.7/10) activities. Attempts to identify predictors of hypnosis success were not fruitful with one exception. "Poor" responders to hypnosis reported greater levels of perceived dysfunction in their sexual functioning compared to the "good" responders, F(1,187) = 7.2, p < .01. SIGNIFICANCE OF RESULTS: Hypnosis appears to be a viable adjunct for pain management patients, including those from rural and relatively disadvantaged backgrounds. Prospective trials are needed to examine the utility of this modality in end-of-life and palliative care patients.

[1336]
[Pain and consciousness. Articles from the summer workshop held by the German Interdisciplinary Collaboration for Pain Therapy (DIVS) in 2005]
[Article in German]
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Six articles are presented which illustrate the activities at the summer workshop "Pain and awareness" held 27-28 May 2005 in Marienfeld by the German Interdisciplinary Collaboration for Pain Therapy (DIVS). One article on pain constructs in the mind explains the advantages of functional imaging methods: these enable characterization of partial aspects of pain processing in the brain and the mechanisms that lead to chronic states of pain syndromes. A further overview explains the influence of different drugs on pain perception and various conscious states. How back pain patients experience their illness was analyzed in a study using an explanatory model interview: somatic aspects were dominant, but in three-fourths of the patients psychological illness attributions also played a role. A summary from the perspective of religious history and theology explores how pain is interpreted and accepted in various religious communities. Another article addresses hypnosis as a complementary technique to anesthesia procedures in surgical medicine, for treating chronic pain and experimental acute pain. The last contribution deals with how people in different cultures experience pain: ethnocentric bias can lead to difficulties in communication and misjudgments when treating foreign-born patients. All in the workshop highlighted important formative factors in pain processing in a condensed form and offered stimulating perspectives for this area of pain research and future treatment options.
Psychological and educational interventions for atopic eczema in children.
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BACKGROUND: Psychological and educational interventions have been widely used in the treatment of atopic eczema to enhance the effectiveness of topical therapy. A lack of comparable data prevented data synthesis. MAIN RESULTS: Five RCTs met the inclusion criteria. Some included studies required clearer reporting of trial procedures. Rigorous established outcome measures were not always used. Interventions described in all 5 RCTs were adjuncts to conventional therapy. Four focused on intervention directed towards the parents; data synthesis was not possible. Psychological interventions remain virtually unevaluated by studies of robust design; the only included study examined the effect of relaxation techniques (hypnotherapy and biofeedback) on severity. Three educational studies identified significant improvements in disease severity between intervention groups. A recent German trial evaluated long term outcomes and found significant improvements in both disease severity (3 months to 7 years, p=0.0002, 8 to 12 years, p=0.003, 13 to 18 years, p=0.0001) and parental quality of life (3 months to 7 years, p=0.0001, 8 to 12 years p=0.002), for children with atopic eczema. One study found video-based education more effective in improving severity than direct education and the control (discussion) (p<0.001). The single psychological study found relaxation techniques improved clinical severity as compared to the control at 20 weeks (t=2.13) but this was of borderline significance (p=0.042). AUTHORS' CONCLUSIONS: A lack of rigorously designed trials (excluding one recent German study) provides only limited evidence of the effectiveness of educational and psychological interventions in helping to manage the condition of children with atopic eczema. Evidence from included studies and also adult studies indicates that different service delivery models (multi-professional eczema school and nurse-led clinics) require further and comparative evaluation to examine their cost-effectiveness and suitability for different health systems.

Psychological treatment of post-traumatic stress disorder (PTSD).
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BACKGROUND: Psychological interventions are widely used in the treatment of post-traumatic stress disorder (PTSD). OBJECTIVES: To perform a systematic review of randomised controlled trials of all psychological treatments following the guidelines of The Cochrane Collaboration. SEARCH STRATEGY: Systematic searches of computerised databases, hand search of the Journal of Traumatic Stress, searches of reference lists, known websites and discussion fora, and personal communication with key workers. SELECTION CRITERIA: Types of studies - Any randomised controlled trial of a psychological treatment. Types of participants - Adults suffering from traumatic stress symptoms for three months or more. Types of interventions - Trauma-focused cognitive behavioural therapy/exposure therapy (TFCBT); stress management (SM); other therapies (supportive therapy, non-directive counselling, psychodynamic therapy and hypnotherapy); group cognitive behavioural therapy (group CBT); eye movement desensitisation and reprocessing (EMDR). Types of outcomes - Severity of clinician rated traumatic stress symptoms. Secondary measures included self-reported traumatic stress symptoms, depressive symptoms, anxiety symptoms, adverse effects and dropouts. DATA COLLECTION AND ANALYSIS: Data were entered using Review Manager software. Quality assessments were performed. Data were analysed for summary effects using Review Manager 4.2. MAIN RESULTS: Thirty-three studies were included in the review. With regards to reduction of clinician assessed PTSD symptoms measured immediately after treatment TFCBT did significantly better than waitlist/usual care (standardised mean difference (SMD) = -1.40; 95% CI, -1.89 to -0.91; 14 studies; n = 649). There was no significant difference between TFCBT and SM (SMD = -0.27; 95% CI, -0.71 to 0.16; 6 studies; n = 239). TFCBT did significantly better than other therapies (SMD = -0.81; 95% CI, -1.19 to -0.42; 3 studies; n = 120). Stress management did significantly better than waitlist/usual care (SMD = -1.14; 95% CI, -1.62 to -0.67; 3 studies; n = 86) and than other therapies (SMD = -1.22; 95% CI, -2.09 to -0.35; 1 study; n = 25). There was no significant difference between other therapies and waitlist/usual care control (SMD = -0.43; 95% CI, -0.90 to 0.04; 2 studies; n = 72). Group TFCBT was significantly better than waitlist/usual care (SMD = -0.72; 95% CI, -1.14 to -0.31). EMDR did significantly better than waitlist/usual care (SMD = -1.51; 95% CI, -1.87 to -1.15; 5 studies; n = 162). There was no significant difference between EMDR and TFCBT (SMD = 0.02; 95% CI, -0.28 to 0.31; 6 studies; n = 187). There was no significant difference between EMDR and SM (SMD = -0.35; 95% CI, -0.90 to 0.19; 2 studies; n = 53). EMDR did significantly better than other therapies (self-report) (SMD = -0.84; 95% CI, -1.21 to -0.47; 2 studies; n = 124). AUTHORS'
CONCLUSIONS: There was evidence individual TFCBT, EMDR, stress management and group TFCBT are effective in the treatment of PTSD. Other non-trauma focused psychological treatments did not reduce PTSD symptoms as significantly. There was some evidence that individual TFCBT and EMDR are superior to stress management in the treatment of PTSD at between 2 and 5 months following treatment, and also that TFCBT, EMDR and stress management were more effective than other therapies. There was insufficient evidence to determine whether psychological treatment is harmful. There was some evidence of greater drop-out in active treatment groups. The considerable unexplained heterogeneity observed in these comparisons, and the potential impact of publication bias on these data, suggest the need for caution in interpreting the results of this review.

[1339]
Systemic hypnotherapy: deconstructing entrenched ambivalent meanings in self-organizing systems.
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Systemic hypnosis is often seen as equivalent to an Ericksonian approach even though they reflect different epistemologies. Second-order articulations of systems theory emphasize the self-organization and autonomy of living systems: all systemic actions are aimed at the conservation of the system's autonomy; loss of autonomy means death as a system. In human systems verbal and non-verbal language reflects the meanings central to the system's autonomy and its conservation. Previous work has shown how symptomatic behaviour can be seen as linguistic expressions of the conservation of an ambivalent autonomy (Fourie, 1996a, 2003). Such behaviour therefore implies, expresses and even recursively conserves certain meanings that in time have become entrenched in the system. In this view, psychotherapy is aimed at the co-operative deconstruction of such entrenched meanings, helping them to transform into more functional, less ambivalent, understandings and actions. It is the aim of this paper to show how hypnosis can be employed for this purpose in a way which is coherent with a systemic rather than an Ericksonian epistemology.

[1340]
Empathic features of absorption and incongruence.
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A study was undertaken to examine whether empathy could be related to absorption and incongruence (repressive coping). The participants were 71 graduate students who completed measures of empathy, absorption, and incongruence (repressive coping). The results confirmed a previous finding that empathy appears positively related to absorption ($r = .42, p < .001$). The results also suggest that affective components of empathy are inversely related to repressive coping ($r = -.29, p < .05$) while cognitive components are positively related to the social desirability aspects of incongruence ($r = .31, p < .01$). The findings are collectively discussed in terms of the Empathic Involvement Hypothesis of Hypnosis (Wickramasekera II, 2001), the Four-factor theory of Repressive Coping (Eysenck, 1997), Incongruence (Rogers, 1957), and the High Risk Model of Threat Perception (I. E. Wickramasekera I, 1998).

[1341]
Hypnosis, hypnotizability, and placebo.
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Dr. Raz' speculations about the relation between placebo responsivity and hypnotizability are critically examined. While there is no generally accepted theoretical definition of hypnosis, there is a general consensus that hypnotizability can be reliably measured. In contrast, there seems to be a general consensus about a theoretical definition of placebo (including placebo effect, placebo response and nocebo). There is no widely accepted measure of individual differences in placebo responsivity. Various methodological considerations about how to examine the relation between placebo responsivity and hypnotizability are identified. Studies are identified which indicate that response to treatments which utilize adjunctive hypnosis are superior to placebo treatments. The only study which examined whether placebo responsivity was correlated with hypnotizability seems to indicate that they are only slightly related at best. The possibility that there may be such thing as a "good placebo responder (GPR)" is questioned, while the known clinical value of hypnotizability assessment is reaffirmed. Future directions for empirical research on the relation between placebo responsivity and hypnotizability are identified.

[1342]
Hypnosis, placebos, and systematic research bias in biological psychiatry.
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In an elaboration on the contribution by Raz (current issue), placebo response is further reviewed in relation to psychotropic drug research. Many therapists are unaware that placebo controlled research documents that antidepressant and anxiolytic drugs on average are only mildly more effective than a placebo. Systematic biases in research design are noted that could account for the small differences. These factors, and turf and financial motivations associated with the rise of "biological psychiatry," are discussed because they impact the practice of clinical hypnosis and psychotherapy. Although placebo research is fascinating and expectancy is certainly an important factor in hypnotic response, thus far, there is little research to support the strong involvement of placebo response as part of hypnotic responsiveness.


Hypnosis and placebo share in phenomenology. While hypnosis-like phenomena have a documented history going back thousands of years, accounts of placebo effects span several centuries. With the rise of biological psychiatry and the "pharmacological revolution," drug trials have taken a central place in clinical research. These clinical trials increasingly incorporate placebo-controlled conditions as part of their paradigms and may even involve an element of deception. In contrast, the therapeutic effects of hypnosis do not require deception. As researchers begin to identify genetic and neural correlates of hypnotizability, these findings may further elucidate placebo phenomena. Whereas identifying highly hypnotizable individuals may be of limited interest, identifying good placebo responders may revolutionize both basic research and clinical science, offer insights into transcultural psychiatry and elucidate individual differences.


Six papers of special interest to the hypnosis community have recently appeared in the general scientific literatures. Three of these papers were published as part of the 2006 Cochrane Collaboration on the utility of medical interventions. These reviews analyze the research literature on the efficacy of hypnosis for treatment of needle-related pain in children, pain management during childbirth, and conversion disorder. Hypnosis is the most promising psychological intervention studied for needle-related procedural pain and distress in children and adolescents; it is effective as an adjunctive analgesic during childbirth; and it is of uncertain usefulness in treatment of conversion disorder. A second cluster of three studies unambiguously demonstrates the central role of hypnotizability as a predictor of responsiveness in laboratory, analogue treatment, and medical practice settings. One of these articles may well be the most important hypnosis paper in many years.


This paper reviews the benefits and effectiveness of hypnosis in obstetrics and labor and delivery, demonstrating significant reductions in the use of analgesics and anesthesia and in shorter Stages 1 and 2 labors. It presents empirical and theoretical rationales for use of hypnosis in preterm labor (PTL) and labor and delivery at term. The benefits of hypnosis in relation to labor length, pain levels, and the enjoyment of labor, as well as its effectiveness in preterm labor are noted in randomized controlled trials and in a meta-analysis. Risk factors are reported for preterm delivery; hypnosis significantly prolongs pregnancy. Six cases are presented of hypnosis stopping PTL a number of times and when indicated at term. A case report of successful use of hypnosis in quadruplets is presented with some scripts. Suggestions are made for further research.

Clinical hypnosis in cancer settings provides symptom reduction (pain and anxiety) and empowers patients to take an active role in their treatments and procedures. The goal of this paper is to systematically and critically review evidence on the effectiveness of hypnotherapy for emesis, analgesia, and anxiolysis in acute pain, specifically in procedures with an emphasis on the period from 1999 to 2006. Further, it aims to provide a theoretical rationale for the use of hypnosis with cancer populations in the whole spectrum of illness/treatment trajectory in several clinical contexts. Finally, a treatment protocol for management of overt anxiety and phobic reactions in the radiotherapy suite is presented, with the intent of having such a protocol empirically validated in the future.

[1347]
Efficacy of hypnotherapy in the treatment of eating disorders.
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Research on the efficacy of hypnosis in the treatment of eating disorders has produced mixed findings. This is due in part to the interplay between the characteristics of people with eating disorders and the phenomena of hypnosis. In addition, several authors have noted that methodological limitations in hypnosis research often make evaluation of treatment efficacy difficult. Many of the studies extant provide insufficient information regarding the specifics of the hypnotic intervention(s) to facilitate replication and clinical implementation. Therefore, this paper only reviews literature with replicable methodological descriptions. It focuses on the three primary disorders of interest to clinicians: bulimia nervosa, anorexia nervosa, and obesity. The implications for evaluating treatment efficacy are discussed.

[1348]
Hypnosis for acute distress management during medical procedures.
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The use of hypnosis during medical procedures has a long-standing tradition but has been struggling for acceptance into the mainstream. In recent years, several randomized-controlled trials with sufficient participant numbers have demonstrated the efficacy of hypnosis in the perioperative domain. With the advancements of minimally invasive high-tech procedures during which the patient remains conscious, hypnotic adjuncts have found many applications. This article describes the procedural environment as well as pharmacologic and nonpharmacologic interventions to reduce distress. Current research findings, controversies in the literature, and safety considerations are reviewed. Implications for clinical practice and training as well as directions for future research are discussed. Obstacles and possible reasons for the slow acceptance of nonpharmacologic interventions, mind-body therapies, and patient-centered approaches are addressed.

[1349]
Evidenced-based hypnotherapy for the management of sleep disorders.
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There is a plethora of research suggesting that combining cognitive-behavioral therapy with hypnosis is effective for a variety of psychological, behavioral, and medical disorders. Yet, very little empirical research exists pertaining to the use of hypnotherapy as either a single or multitreatment modality for the management of sleep disorders. The existing literature is limited to a small subset of nonbiologic sleep disorders. The objectives of this paper are: to provide a review of the most common sleep disorders, with emphasis on insomnia disorders; discuss the cognitive-behavioral approaches to insomnia; and review the existing empirical literature on applications of hypnotherapy in the treatment of sleep disturbance. The overreaching goal is to educate clinicians on how to incorporate sleep therapy with hypnotherapy. There is an immediate need for research evaluating the efficacy of hypnotherapy in the management of sleep disturbance.

[1350]
Hypnotherapy for the management of chronic pain.
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This article reviews controlled prospective trials of hypnosis for the treatment of chronic pain. Thirteen studies, excluding studies of headaches, were identified that compared outcomes from hypnosis for the treatment of chronic pain to either baseline data or a control condition. The findings indicate that hypnosis interventions consistently produce significant
decreases in pain associated with a variety of chronic-pain problems. Also, hypnosis was generally found to be more effective than nonhypnotic interventions such as attention, physical therapy, and education. Most of the hypnosis interventions for chronic pain include instructions in self-hypnosis. However, there is a lack of standardization of the hypnotic interventions examined in clinical trials, and the number of patients enrolled in the studies has tended to be low and lacking long-term follow-up. Implications of the findings for future clinical research and applications are discussed.

[1351]
The efficacy of hypnotherapy in the treatment of psychosomatic disorders: meta-analytical evidence.
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Hypnotherapy is claimed to be effective in treatment of psychosomatic disorders. A meta-analysis was conducted with 21 randomized, controlled clinical studies to evaluate efficacy of hypnosis in psychosomatic disorders. Studies compared patients exclusively treated with hypnotherapy to untreated controls. Studies providing adjunctive standard medical care in either treatment condition were also admitted. Hypnotherapy was categorized into classic (n = 9), mixed form (n = 5), and modern (n = 3). Results showed the weighted mean effect size for 21 studies was d(+) = .61 (p = .0000). ANOVA revealed significant differences between classic, mixed, and modern hypnosis. Regression of outcome on treatment dose failed to show a significant relationship. Numerical values for correlation between suggestibility and outcome were only reported in three studies (mean r = .31). The meta-analysis clearly indicates hypnotherapy is highly effective in treatment of psychosomatic disorders.

[1352]
[Ericksonian hypnosis in women with fibromyalgia syndrome]
[Article in Spanish]
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BACKGROUND: Fibromyalgia syndrome (FS) is a chronic, painful, generalized musculoskeletal disorder in which some efficacy for the conventional hypnosis modality has been claimed. Objective: to assess the efficacy of the Ericksonian modality hypnosis in FS management. MATERIAL AND METHODS: Forty-three FS female patients (44 +/- 4.7 years old) were included. They were randomized to receive for six months: Ericksonian hypnosis (EH; 20 subjects) or a sham-hypnosis (SH; 23 subjects). Every month, patient and physician global disease assessment, tender point count and the Fibromyalgia Impact Questionnaire (FIQ) were measured. RESULTS: During the follow-up, we did not find inter-group differences for the rate of change related to the baseline values for the patient and physician global disease assessment and the FIQ scores. At the third month (4.0 +/- 4.6 vs. 0.6 +/- 3.1; p = 0.02), and at the fourth month (5.0 +/- 4.6 vs. 0.8 +/- 4.0; p = 0.03) of follow-up, the participants who received EH had a significant reduction of the tender point count after adjustment for patient's age. CONCLUSIONS: Despite no effect was noted on the functional status and the patient and physician global assessment, EH produced a reduction in the number of tender points in FS. Thus, HE may be an adjuvant treatment for the management of FS patients.

[1353]
[Brief selective hypnotherapy in the treatment of flying phobia]
[Article in Spanish]
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Flying phobias are common. Mishaps and accidents to aircraft make many travellers apprehensive and fearful of flying, a condition which most overcome by rationalisation and thought blocking, others develop a phobia for flying. This condition responds well to hypnotherapy which can be however be time consuming. Limited session brief, focused, selective hypnotherapy can however cure disabling fear, disturbed conditioned responses and avoidance behaviour.

[1354]
Hypnosis in the management of persistent idiopathic orofacial pain - Clinical and psychosocial findings.
Pain. 2007 Aug 3 [Epub ahead of print]
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This controlled and patient blinded study tested the effect of hypnosis on persistent idiopathic orofacial pain (PIOP) in terms of clinical and psychosocial findings. Forty-one PIOP were randomized to active hypnotic intervention or simple
relaxation as control for five individual 1-h sessions. Primary outcome was average pain intensity scored three times daily in a pain diary using visual analogue scale (VAS). Secondary outcome measures were pain quality assessed by McGill pain questionnaire (MPQ), psychological symptoms assessed by symptom check list (SCL), quality of life assessed by SF36, sleep quality, and consumption of analgesics. Data were compared between groups before and after treatment using ANOVA models and paired t-tests. The change in VAS pain scores from baseline to the last treatment (T4) was (33.1+-7.4%) in the hypnosis group and (3.2+-5.4%) in the control group (P<0.03). In the hypnosis group, highly hypnotic susceptible patients had greater decreases in VAS pain scores (55.0+-12.3%) when compared to less susceptible patients (17.9+-6.7%) (P<0.02). After the last treatment there were also statistically significant differences between groups in perceived pain area (MPQ) and the use of weak analgesics (P<0.03). There were no statistically significant changes in SCL or SF36 scores from baseline to T4. In conclusion, hypnosis seems to offer clinically relevant pain relief in PIOP, particularly in highly susceptible patients. However, stress coping skills and unresolved psychological problems need to be included in a comprehensive management plan in order also to address psychological symptoms and quality of life.

[1355]
[Efficacy of hypnosis in the treatment of palmar hyperhidrosis with botulinum toxin type A]
[Article in French]
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BACKGROUND: Injections of botulinum toxin type A are extremely effective in treating palmar hyperhidrosis. The main problem is pain during injections in the palms and pulp of the fingers. Analgesia of the hands using Emla and analgesia with an equimolar mixture of oxygen/nitrous oxide are occasionally disappointing. We analysed the value of hypnosis in reducing injection pain. PATIENTS AND METHODS: In a prospective study performed between September 2005 and September 2006, we offered a full session of hypnosis in order to relieve pain for patients presenting troublesome bilateral and palmar hyperhidrosis and requiring treatment by palmar injection of botulinum toxin. At the end of the hypnosis session, patients evaluated their pain on a scale of 0 to 10 and indicated whether or not the injections had been bearable. RESULTS: Of the 15 patients included, 13 underwent a hypnosis session. The mean pain scores following hypnosis were 2.52 and all patients considered their injections bearable. Six patients with a pain score of between 7 and 8 out of 10 during previous injections without analgesia or using Kalinox evaluated their pain as between 1 and 3 following hypnosis. DISCUSSION: Palmar injection of botulinum toxin is increasingly being used for hyperhidrosis patients. In dermatology, access to operating theatres or the presence of a trained anaesthetist is normally extremely difficult, and hypnosis appears to offer an extremely effective method of reducing the pain associated with such injections.

[1356]
How southern New England became magnetic north: the acceptance of animal magnetism.
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Charles Poyen's lecture tour introducing animal magnetism to America has been described as triumphant (Forrest, 2000), but according to Poyen's own account (1837/1982) the beginning of his tour, devoted to northern New England, was anything but successful. Poyen success did not begin until he partnered with Cynthia Gleason, a talented hypnotic subject, from Pawtucket, Rhode Island. The subsequent lectures and demonstrations by Poyen and Gleason generated the interest that Poyen had been seeking. Rhode Island appears to have developed a much more accepting attitude toward animal magnetism than the rest of New England as indicated by the wide use of magnetism in the Providence area even after Poyen had the left the United States. In this article, I examine the roles played by Cynthia Gleason as well as Thomas H. Webb, M.D., the editor of the Providence Daily Journal and Dr. Francis Wayland, the president of Brown University, and George Capron, M.D., in furthering the acceptance of magnetism in America.

[1357]
Practitioner review: clinical applications of pediatric hypnosis.
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BACKGROUND: Over the past quarter century, hypnosis has been employed in a broad range of pediatric clinical settings; however, its efficacy and feasibility as a treatment approach for children and adolescents remain in question. METHOD: Published studies on the role of clinical hypnosis in the management of specific pediatric medical and psychological conditions were identified and reviewed. RESULTS: Pediatric clinical hypnosis has been employed in diverse medical settings to treat primary conditions (e.g., enuresis), as well as to address factors related to management of the condition (e.g., skills training for asthma) or its treatment (e.g., burn dressing changes). Despite great breadth to the possible applications of pediatric hypnosis and many reported successes, much of the present research comprises case histories and small, uncontrolled group studies. CONCLUSION: To date, research in pediatrics views clinical hypnosis as
a promising tool with the potential to help manage a variety of conditions. However, additional research, particularly utilizing randomized, controlled methodologies and adequate sample sizes, is required.

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We present a case of severe needle phobia in a 5-year-old boy who learned to utilize a self-hypnosis technique to facilitate intravenous (i.v.) cannula placement. He was diagnosed with Bruton's disease at 5 months of age and required monthly intravenous infusions. The boy had received inhalational general anesthesia for i.v. cannulation on 58 occasions. Initially, this was because of difficult venous access but more recently because of severe distress and agitation when approached with a cannula. Oral premedication with midazolam or ketamine proved unsatisfactory and hypnotherapy was therefore considered. Following a 10-min conversational hypnotic induction, he was able to use switch--wire imagery to dissociate sensation and movement in all four limbs in turn. Two days later the boy experienced painless venepuncture without the use of topical local anesthetic cream. There was no movement in the 'switched-off' arm during i.v. cannula placement. This report adds to the increasing body of evidence that hypnosis represents a useful, additional tool that anesthetists may find valuable in everyday practice.

[Article in German]
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Insomnia is a common phenomenon in cancer patients; nevertheless, there are only a few intervention results published covering this topic. In a former study we examined the effects of a psychological sleep management programme with two intervention groups (n=80, n=71) and one control group (n=78) and showed significant improvements over time, indicating that 50% to 80% of the intervention group participants benefited with moderate or large scale effects on several sleep variables. Now we reanalysed data to look for predictors for those patients who improved best. Almost no demographic, cancer-related or quality of life variables predicted treatment response and persons with greater sleep disturbances at the beginning do benefit the same as persons with less problems. Additionally, better acceptance of the chosen intervention form (cognitive-behavioural programme with autogenic training or with muscle relaxation technique) positively predicted good outcome. Explained variance associated with different outcome variables varied between 9% and 18%. Therefore training should be offered for all cancer patients with sleep problems, and they should have a choice between different relaxation techniques.

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Our aim was to study the possible relationship between psychological stress and granulocyte activation primarily in healthy students during an examination period (n = 11) and also in chronically anxious patients (n = 15). We employed cell surface markers: lactoferrin, L-selectin, alphaMbeta2-integrin and CD15s and flow cytometry to detect changes in the activation state of granulocytes, with the start of the stressed state in students at the beginning of an examination period, which was associated with elevated blood plasma cortisol level, and following relaxation hypnosis in both students, during their examination term, and patients. The ratios of all four types of marker-carrier granulocytes increased at the start of the examination period in students; an especially dramatic (ca. 5-fold) enhancement was observed in the proportion of lactoferrin-bearing cells relatively to the pre-examination term value. After hypnosis, the percentage of lactoferrin-exposing granulocytes decreased considerably both in students and in patients, by about half; a similar decrease was observed in the ratio of CD15s-carrier cells in patients. No significant alteration was observed during the study in state or trait anxiety levels, and in total or differential leukocyte counts. Thus, granulocyte activation could be associated with stress, while relaxation may facilitate reducing activation of these cells. In both groups of subjects, granulocyte surface lactoferrin appeared to be a sensitive "stress indicator". This needs further evaluation.

[Article in German]
BACKGROUND / METHODS: This article presents the results of the application of hypnotherapy for obstetrics with a special focus on the hypnoreflexogenous method of childbirth preparation. RESULTS / CONCLUSION: The programme specifically developed by Schauble as the hypnoreflexogenous method is an appropriate and efficient tool to interrupt the fear-tension-pain / pain-tension-fear circuit. Women who were prepared with the hypnoreflexogenous method had significantly less fear and pain, required significantly less analgesia, had a shorter period of labour and delivery and recovered faster from labour.

[1362]
How Can We Help Witnesses to Remember More? It's an (Eyes) Open and Shut Case.
Law Hum Behav. 2007 Sep 25 [Epub ahead of print]
Perfect TJ, Wagstaff GF, Moore D, Andrews B, Cleveland V, Newcombe S, Brisbane KA, Brown L.
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Five experiments tested the idea that instructing a witness to close their eyes during retrieval might increase retrieval success. In Experiment 1 participants watched a video, before a cued-recall test for which they were either instructed to close their eyes, or received no-instructions. Eye-closure led to an increase in correct cued-recall, with no increase in incorrect responses. Experiments 2-5 sought to test the generality of this effect over variations in study material (video or live interaction), test format (cued- or free-recall) and information modality (visual or auditory details recalled). Overall, eye-closure increased recall of both visual detail and auditory details, with no accompanying increase in recall of false details. Collectively, these data convincingly demonstrate the benefits of eye-closure as an aid to retrieval, and offer insight into why hypnosis, which usually involves eye-closure, may facilitate eyewitness recall.

[1363]
Clinical holistic medicine: how to recover memory without "implanting" memories in your patient.
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Every therapeutic strategy and system teach us the philosophy of the treatment system to the patient, but often this teaching is subliminal and the philosophical impact must be seen as "implanted philosophy", which gives distorted interpretations of past events called "implanted memories". Based on the understanding of the connection between "implanted memory" and "implanted philosophy" we have developed a strategy for avoiding implanting memories arising from one of the seven most common causes of implanted memories in psychodynamic therapy: 1) Satisfying own expectancies, 2) pleasing the therapist, 3) transferences and counter transferences, 4) as source of mental and emotional order, 5) as emotional defence, 6) as symbol and 7) from implanted philosophy. Freud taught us that child sexuality is "polymorphously perverted", meaning that all kinds of sexuality is present at least potentially with the little child; and in dreams consciousness often go back to the earlier stages of development, potentially causing all kinds of sexual dreams and fantasies, which can come up in therapy and look like real memories. The therapist working with psychodynamic psychotherapy, clinical holistic medicine, psychiatry, and emotionally oriented bodywork, should be aware of the danger of implanting philosophy and memories. Implanted memories and implanted philosophy must be carefully handled and de-learned before ending the therapy. In conclusion "clinical holistic medicine" has developed a strategy for avoiding implanting memories.

[1364]
A randomized clinical trial of a brief hypnosis intervention to control side effects in breast surgery patients.
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BACKGROUND: Breast cancer surgery is associated with side effects, including postsurgical pain, nausea, and fatigue. We carried out a randomized clinical trial to test the hypotheses that a brief presurgery hypnosis intervention would decrease intraoperative anesthesia and analgesic use and side effects associated with breast cancer surgery and that it would be cost effective. METHODS: We randomly assigned 200 patients who were scheduled to undergo excisional breast biopsy or lumpectomy (mean age 48.5 years) to a 15-minute presurgery hypnosis session conducted by a psychologist or nondirective empathic listening (attention control). Patients were not blinded to group assignment. Intraoperative anesthesia use (i.e., of the analgesics lidocaine and fentanyl and the sedatives propofol and midazolam) was assessed. Patient-reported pain and other side effects as measured on a visual analog scale (0-100) were assessed at discharge, as was use of analgesics in the recovery room. Institutional costs and time in the operating room were assessed via chart review. RESULTS: Patients in the hypnosis group required less propofol (means = 64.01 versus 96.64 microg; difference = 32.63; 95% confidence interval [CI] = 3.95 to 61.30) and lidocaine (means = 24.23 versus 31.09 mL;
difference = 6.86; 95% CI = 3.05 to 10.68) than patients in the control group. Patients in the hypnosis group also reported less pain intensity (means = 22.43 versus 47.83; difference = 25.40; 95% CI = 17.56 to 33.25), pain unpleasantness (means = 21.19 versus 39.05; difference = 17.86; 95% CI = 9.92 to 25.80), nausea (means = 6.57 versus 25.49; difference = 18.92; 95% CI = 12.98 to 24.87), fatigue (means = 29.47 versus 54.20; difference = 24.73; 95% CI = 16.64 to 32.83), discomfort (means = 23.01 versus 43.20; difference = 20.19; 95% CI = 12.36 to 28.02), and emotional upset (means = 8.67 versus 33.46; difference = 24.79; 95% CI = 18.56 to 31.03). No statistically significant differences were seen in the use of fentanyl, midazolam, or recovery room analgesics. Institutional costs for surgical breast cancer procedures were $8561 per patient at Mount Sinai School of Medicine. Patients in the hypnosis group cost the institution $772.71 less per patient than those in the control group (95% CI = 75.10 to 1469.89), mainly due to reduced surgical time. CONCLUSIONS: Hypnosis was superior to attention control regarding propofol and lidocaine use; pain, nausea, fatigue, discomfort, and emotional upset at discharge; and institutional cost. Overall, the present data support the use of hypnosis with breast cancer surgery patients.


The effectiveness of mind-body therapies is sometimes doubted. The aim of this article is to evaluate trends in the development of the evidence base for autogenic training, hypnotherapy, and relaxation therapy. For this purpose, a comparison of 2 series of systematic reviews was conducted. The first is related to the evidence base in 2000, the second to that in 2005. Both employed virtually the same methodology and criteria for evaluation. The results of our comparisons show considerable changes during the observation period. The weight of the evidence has become stronger for several indications, and the direction of the evidence has been altered in a positive sense in several conditions. Applying the rules of evidence-based medicine, the following mind-body therapies are now supported by strong evidence: hypnotherapy for labor pain and relaxation therapy for anxiety and insomnia, as well as for nausea and vomiting induced by chemotherapy. It is concluded that an evidence-based approach for mind-body therapies is constructive and can generate positive results.


To systematically review the research evidence on the effectiveness of hypnosis for cancer chemotherapy-induced nausea and vomiting (CINV). A comprehensive search of major biomedical databases including MEDLINE, EMBASE, CIHAHL, PsycINFO and the Cochrane Library was conducted. Specialist complementary and alternative medicine databases were searched and efforts were made to identify unpublished and ongoing research. Citations were included from the databases’ inception to March 2005. Randomized controlled trials (RCTs) were appraised and meta-analysis undertaken. Clinical commentaries were obtained. Six RCTs evaluating the effectiveness of hypnosis in CINV were found. In five of these studies the participants were children. Studies report positive results including statistically significant reductions in anticipatory and CINV. Meta-analysis revealed a large effect size of hypnotic treatment when compared with treatment as usual, and the effect was at least as large as that of cognitive-behavioural therapy. Meta-analysis has demonstrated that hypnosis could be a clinically valuable intervention for anticipatory and CINV in children with cancer. Further research into the effectiveness, acceptance and feasibility of hypnosis in CINV, particularly in adults, is suggested. Future studies should assess suggestibility and provide full details of the hypnotic intervention.


CAM therapies have become increasingly popular in pediatric populations. Yet, little is known about children's preferences for CAM. This study examined treatment preferences in chronic pediatric pain patients offered a choice of CAM therapies for their pain. Participants were 129 children (94 girls) (mean age = 14.5 years +/- 2.4; range = 8-18 years) presenting at a multidisciplinary, tertiary clinic specializing in pediatric chronic pain. Bivariate and multivariate analyses were used to examine the relationships between CAM treatment preferences and patient's sociodemographic and clinical characteristics, as well as their self-reported level of functioning. Over 60% of patients elected to try at least one CAM approach for pain. The most popular CAM therapies were biofeedback, yoga and hypnosis; the least popular were art therapy and energy healing, with craniosacral, acupuncture and massage being intermediate. Patients with a diagnosis of fibromyalgia (80%) were the most likely to try CAM versus those with other pain diagnoses. In multivariate
analyses, pain duration emerged as a significant predictor of CAM preferences. For mind-based approaches (i.e., hypnosis, biofeedback and art therapy), pain duration and limitations in family activities were both significant predictors. When given a choice of CAM therapies, this sample of children with chronic pain, irrespective of pain diagnosis, preferred non-invasive approaches that enhanced relaxation and increased somatic control. Longer duration of pain and greater impairment in functioning, particularly during family activities increased the likelihood that such patients agreed to engage in CAM treatments, especially those that were categorized as mind-based modalities.

[1368]
The neuroimmune basis of anti-inflammatory acupuncture.
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This review article presents the evidence that the antiinflammatory actions of acupuncture are mediated via the reflexive central inhibition of the innate immune system. Both laboratory and clinical evidence have recently shown the existence of a negative feedback loop between the autonomic nervous system and the innate immunity. There is also experimental evidence that the electrical stimulation of the vagus nerve inhibits macrophage activation and the production of TNF, IL-1beta, IL-6, IL-18, and other proinflammatory cytokines. It is therefore conceivable that along with hypnosis, meditation, prayer, guided imagery, biofeedback, and the placebo effect, the systemic anti-inflammatory actions of traditional and electro-acupuncture are directly or indirectly mediated by the efferent vagus nerve activation and inflammatory macrophage deactivation. In view of this common physiological mediation, assessing the clinical efficacy of a specific acupuncture regimen using conventional double-blind placebo-controlled trials inherently lacks objectivity due to (1) the uncertainty of ancient rules for needle placement, (2) the diffuse noxious inhibitory control triggered by control-needling at irrelevant points, (3) the possibility of a dose-response relationship between stimulation and effects, and (4) the possibility of inadequate blinding using an inert sham procedure. A more objective assessment of its efficacy could perhaps consist of measuring its effects on the surrogate markers of autonomic tone and inflammation. The use of acupuncture as an adjunct therapy to conventional medical treatment for a number of chronic inflammatory and autoimmune diseases seems plausible and should be validated by confirming its cholinerigicity.

[1369]
Hypnotizability, absorption and negative cognitions as predictors of dental anxiety: two pilot studies.
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BACKGROUND: The authors conducted two pilot studies that investigated the roles of hypnotizability, absorption (defined as the ability to maintain focused attention on a task or stimulus) and state versus trait anxiety as predictors of dental anxiety. One of the studies also examined the effectiveness of hypnosis in managing dental anxiety. METHODS: Participants in study 1 completed measures of hypnotizability and anxiety, viewed a video of a dental procedure either under hypnosis or not, and completed dental anxiety questionnaires. Participants in study 2 were told either that the video showed major dental work or a routine polishing. All subjects watched the video and then completed measures assessing their perceptions of the video and their anxiety. RESULTS: The authors found a positive relationship between hypnotizability and scores on the Dental Anxiety Scale (DAS) (F(1,290) = 3.45, P = .06), as well as an interaction between hypnotizability and hypnosis (F(1,290) = 6.55, P = .01). An analysis of covariance found a relationship between trait and dental anxiety (F(1,290) = 11.50, P = .001). A two-way analysis of variance found a main effect for hypnosis (F(1,290) = 3.20, P = .07). The authors found an effect for group on the DAS (F(1,228) = 3.67, P = .057), such that subjects in the negative-cognition group scored higher on the DAS. The authors found an interaction between absorption and cognition in perceptions of pain experienced by the patient in the video (F(1,228) = 3.70, P = .05) and in ratings of one's own pain level if in the same situation (F(1,228) = 4.38, P < .05). CONCLUSIONS: Hypnotizability or absorption, pre-existing anxiety and cognitions about dental procedures predict dental anxiety, and hypnosis may be helpful for some, but not all, patients. CLINICAL IMPLICATIONS: Characteristics such as hypnotizability, trait anxiety and negative cognitions predict which people develop dental anxiety and who will be more responsive to hypnosis. The authors provide suggestions for dentists treating anxious patients.

[1370]
Hypnosis and its place in modern pain management - review article.
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This is an evidence-based review of the efficacy of hypnosis in pain management. Hypnosis is as old as mankind. It is reported in the Ebers Papyrus in ancient Egyptian cures. It went into decline in the Middle Ages with the rise of Christianity, being erroneously associated with witchcraft. There was resurgence of interest in the 19th century. In the
BACKGROUND: Irritable bowel syndrome (IBS) is a common functional gastrointestinal disorder of unknown aetiology. Current pharmacological treatments have limited value. Hypnotherapy has been reported to have beneficial effects for IBS symptoms. OBJECTIVES: To evaluate the efficacy of hypnotherapy for the treatment of irritable bowel syndrome. SEARCH STRATEGY: Published and unpublished randomised clinical trials and quasi-randomised clinical trials were identified through structured searches of MEDLINE (1966 to March 2006), EMBASE (1980 to March 2006), PsycINFO (1806 to March 2006), CINAHL (Cumulative Index to Nursing and Allied Health Literature, 1982 to March 2006), AMED (Allied and Complementary Medicine Database, 1985 to March 2006) and The Cochrane Central Register of Controlled trials. Conference proceedings from Digestive Disease Week (1980 to 2005) were also searched. SELECTION CRITERIA: Eligible studies included all randomised and quasi-randomised clinical studies comparing hypnotherapy for the treatment of irritable bowel syndrome with no treatment or another therapeutic intervention. DATA COLLECTION AND ANALYSIS: All studies were evaluated for eligibility for inclusion. Included studies were assessed for quality and data were extracted independently by four authors. The primary outcome measure of interest was the overall bowel symptom severity score which combines abdominal pain, diarrhoea or constipation and bloating. Secondary outcomes included abdominal pain, diarrhoea, constipation, bloating, quality of life, patient's overall assessment of well-being, psychological measures as per validated questionnaires, and adverse events. MAIN RESULTS: Four studies including a total of 147 patients met the inclusion criteria. Only one study compared hypnotherapy to an alternative therapy (psychotherapy and placebo pill), two studies compared hypnotherapy with waiting-list controls and the final study compared hypnotherapy to
usual medical management. Data were not pooled for meta-analysis due to differences in outcome measures and study design. The therapeutic effect of hypnotherapy was found to be superior to that of a waiting list control or usual medical management, for abdominal pain and composite primary IBS symptoms, in the short term in patients who fail standard medical therapy. Harmful side-effects were not reported in any of the trials. However, the results of these studies should be interpreted with caution due to poor methodological quality and small size. AUTHORS’ CONCLUSIONS: The quality of the included trials was inadequate to allow any conclusion about the efficacy of hypnotherapy for irritable bowel syndrome. More research with high quality trials is needed.

[1374]
Hypnosis for schizophrenia.
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BACKGROUND: Many people with schizophrenia continue to experience symptoms despite conventional treatments being used. Alternative therapies such as hypnosis, in conjunction with conventional treatments, may be helpful.
OBJECTIVES: To investigate the use of hypnosis for people with schizophrenia or schizophrenia-like illnesses compared with standard care and other interventions.
SEARCH STRATEGY: We searched the Cochrane Schizophrenia Group's Register (October 2006), contacted the Cochrane Complementary Medicine Field for additional searching (January 2003), hand searched references of included or excluded studies and made personal contact with authors of relevant trials.
SELECTION CRITERIA: We included all randomised or double blind controlled trials that compared hypnosis with other treatments or standard care for people with schizophrenia.
DATA COLLECTION AND ANALYSIS: We reliably selected studies, quality assessed them and extracted data. We excluded data where more than 50% of participants in any group were lost to follow up. For binary outcomes we calculated a fixed effects risk ratio (RR) and its 95% confidence interval (CI).
MAIN RESULTS: We included three studies (total n=149). When hypnosis was compared with standard treatment no one left the studies between 1-8 weeks (n=70, 2 RCTs, Risk Difference 0.00 CI -0.09 to 0.09). Mental state scores were unaffected (n=60, 1 RCT, MD BPRS by one week -3.6 CI -12.05 to 4.8) as were measures of movement disorders and neurocognitive function. Compared with relaxation, hypnosis was also acceptable (n=106, 3 RCTs, RR leaving the study early 2.00 CI 0.2 to 2.15) and had no discernable effect on mental state (n=60, 1 RCT, MD BPRS by one week -3.4 CI -11.4 to 4.6), movement disorders or neurocognitive function. Hypnosis was as acceptable as music (Sibelius) by four weeks (n=36, RR leaving the study early 5.0, CI 0.3 to 97.4).
AUTHORS’ CONCLUSIONS: The studies in this field are few, small, poorly reported and outdated. Hypnosis could be helpful for people with schizophrenia. If we are to find this out, better designed, conducted and reported randomised studies are required. This current update has not revealed any new studies in this area since 2003.

[1375]
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Modern medicine thrives on the ideal of specific diseases, and specificity has revolutionized thinking in clinical practice (e.g., psychiatry) as well as biomedical research (e.g., neuroscience). Different notions of specificity exist (e.g., clinical, biological, and behavioral). Behavioral specificity takes on new meaning in light of recent neuroimaging and genetic findings. Drawing on the metaphor of pharmacological specificity, we provide converging data suggesting that, at least for certain individuals, specific behavioral interventions can influence focal brain activations. Interpretation of these data paves the road to a more scientific strategy for studying the neural basis of suggestion and placebo response, and holds promise for the optimal matching of patient and treatment.

[1376]
User friendly hypnosis as an adjunct for treatment of habit cough: a case report.
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The more user friendly medical hypnosis can be, the more readily it will be accepted by patients and the medical community. Hypnosis is user friendly when it is simple to employ, and yields rapid, effective, and clinically significant results. Thus, we should define reasons for the effectiveness of such successful hypnosis methods, and provide this information to students of hypnosis. Some of the elements that may permit hypnosis to be user friendly are establishment of rapport, a belief that a symptom often has a functional role, and a flexible approach to the hypnosis encounter. This case report of a child with habit cough, illustrates the importance of these elements.
Mind-body hypnotic imagery in the treatment of auto-immune disorders.  
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For many years Western Medicine has considered the immune system to be separate and independent from the central nervous system. However, significant scientific advances and research discoveries that occurred during the past 50 years have presented additional facts that the immune system does interact with the central nervous system with mutual influence. This article provides a systematic review of the literature on the connection between the brain and the immune system and its clinical implications. It then provides a rational foundation for the role of using hypnosis and imagery to therapeutically influence the immune system. Five case examples are provided with illustrated instructions for clinicians on how hypnosis and imagery may be utilized in the treatment of patients with auto-immune disorders. Suggestions for future research in this field are included.

Selective biasing of a specific bistable-figure percept involves fMRI signal changes in frontostriatal circuits: a step toward unlocking the neural correlates of top-down control and self-regulation.  
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Attention, suggestion, context and expectation can all exert top-down influence on bottom-up processes (e.g., stimulus-driven mechanisms). Identifying the functional neuroanatomy that subserves top-down influences on sensory information processing can unlock the neural substrates of how suggestion can modulate behavior. Using functional magnetic resonance imaging (fMRI), we scanned 10 healthy participants (five men) viewing five bistable figures. Participants received a directional cue to perceive a particular spatial orientation a few seconds before the bistable figure appeared. After presentation, participants pressed a button to indicate their locking into the one desired orientation of the two possible interpretations. Participants additionally performed tests of impulse control and sustained attention. Our findings reveal the role of specific frontostriatal structures in selecting a particular orientation for bistable figures, including dorsolateral prefrontal regions and the putamen. Additional contrasts further bolstered the role of the frontostriatal system in the top-down processing of competing visual perceptions. Separate correlations of behavioral variables with fMRI activations support the idea that the frontostriatal system may mediate attentional control when selecting among competing visual perceptions. These results may generalize to other psychological functions. With special relevance to clinical neuroscience and applications involving attention, expectation and suggestion (e.g., hypnosis), our results address the importance of frontostriatal circuitry in behavioral modulation.

Psychocutaneous hypnoanalysis: detection and deactivation of emotional and mental root factors in psychosomatic skin disorders.  
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Many skin disorders have a significant psychosomatic component. Focused history-taking coupled with hypnoanalysis using ideomotor finger signals to detect positive responses to one or more of 7 common triggering or exacerbating factors permits systematic diagnosis of the presence or absence of a significant psychosomatic component. If no factor is positive, a psychosomatic component to the skin disorder can likely be excluded. If one or two of the 7 factors are positive and it is possible to identify the initiating event, treatment by reframing with suggestions in hypnosis may succeed in defusing the associated negative emotional impact associated with the psychosomatic component of the skin disorder. This may be sufficient to uproot and weed out the problem. However, if a multiple of the 7 factors are positive as in the included case report, referral to an appropriate psychotherapist is recommended.

Pediatric suggestions: using hypnosis in the routine examination of children.  
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The recognition and utilization of trance phenomena in clinical pediatrics can energize the practitioner and be therapeutically beneficial for the child. The aim of this paper is to characterize and promote the purposeful inclusion of trance and suggestion in the routine pediatric examination. This includes, but goes beyond, the child-oriented examination skills customarily associated with being a "good," child-friendly pediatrician. While this paper highlights trance recognition
from a clinician's perspective, emphasis is placed on utilizing spontaneous hypnotic moments whenever they occur to
further the agenda of the encounter, diminish doctor visit anxiety, enhance self empowerment, and improve the milieu for
pediatric care.

[1381]
Hypnosis for childbirth: a retrospective comparative analysis of outcomes in one obstetrician's practice.
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This exploratory, descriptive study, done retrospectively from perinatal medical records, compared childbirth outcomes in
one obstetrician's caseload between 50 women who elected antepartal hypnosis preparation (usually a 5-class series)
and 51 who did not. The groups were demographically similar. To achieve similar numbers to the hypnosis group, the
control group was randomly selected from the women in the caseload who opted not to take hypnosis preparation, based
on characteristics of parity and delivery mode. Prenatal hypnosis preparation resulted in significantly less use of
sedatives, analgesia, and regional anesthesia during labor and in higher 1-minute neonatal Apgar scores. Other
physiologic and outcome measures did not reveal statistical significance, although some trends were of clinical interest.
Well-controlled studies are warranted for clinicians to offer hypnosis more frequently as a pain relief option for childbirth.
Additional information provided includes pragmatic, clinical, and cost information about incorporating hypnosis into a
physician's practice.

[1382]
Preoperative hypnotherapy in the management of a child with anticipatory nausea and vomiting.
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A six-year-old boy with oesophageal strictures secondary to neonatal repair of oesophageal atresia and requiring six to
eight weekly oesophageal dilatations by bouginage developed anticipatory nausea and vomiting. This was effectively
managed by a course of preoperative hypnotherapy over four sessions. Resolution of anticipatory nausea and vomiting
occurred along with cessation of postoperative nausea and vomiting. This case supports early intervention with
preoperative hypnotherapy in children with anticipatory nausea and vomiting that has not responded to other measures.

[1383]
Classes of multichannel EEG microstates in light and deep hypnotic conditions.
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Switzerland.

The study assessed the brain electric mechanisms of light and deep hypnotic conditions in the framework of EEG
temporal microstates. Multichannel EEG of healthy volunteers during initial resting, light hypnosis, deep hypnosis, and
eventual recovery was analyzed into temporal EEG microstates of four classes. Microstates are defined by the spatial
configuration of their potential distribution maps ([Symbol: see text]potential landscapes') on the head surface. Because
different potential landscapes must have been generated by different active neural assemblies, it is reasonable to assume
that they also incorporate different brain functions. The observed four microstate classes were very similar to the four
standard microstate classes A, B, C, D [Koenig, T. et al. Neuroimage, 2002;16: 41-8] and were labeled correspondingly.
We expected a progression of microstate characteristics from initial resting to light to deep hypnosis. But, all three
microstate parameters (duration, occurrence/second and %time coverage) yielded values for initial resting and final
recovery that were between those of the two hypnotic conditions of light and deep hypnosis. Microstates of the classes B
and D showed decreased duration, occurrence/second and %time coverage in deep hypnosis compared to light hypnosis;
this was contrary to microstates of classes A and C which showed increased values of all three parameters. Reviewing
the available information about microstates in other conditions, the changes from resting to light hypnosis in certain
respects are reminiscent of changes to meditation states, and changes to deep hypnosis of those in schizophrenic states.

[1384]
[Babinski and hysteria]
[Article in French]
Allilaire JF.

Babinski made important contributions to both psychiatry and neurology. He disagreed with Charcot's theatrical
interpretation of hysteria and made a subtle distinction between Suggestion and Persuasion, thereby differentiating
Hysteria from Pithiatism. This paper examines Charcot's concepts and the way in which Babinski refined and honed his
Patients with cancer commonly experience pain, which typically is controlled pharmacologically. Despite advances in pain management, pain continues to be undertreated. Nonpharmacologic measures may effectively manage pain but often are overlooked or underused. Nurses who are familiar with simple, noninvasive, nonpharmacologic measures, such as patient positioning, thermal measures, massage therapy, aromatherapy, and mind-body therapies, can identify and educate patients who may benefit from nonpharmacologic interventions.

PURPOSE OF REVIEW: To provide a review of the rationale and evidence supporting three frequently used psychosocial interventions for chronic pain: cognitive-behavioral therapy, operant behavioral therapy and self-hypnosis training. We also review recent work in these areas, with an emphasis on the 2006 publishing year. RECENT FINDINGS: Recent clinical trials and laboratory work continue to support the use of cognitive-behavioral therapy and operant behavioral therapy as adjunctive treatments for chronic pain. Notable areas of new research include a novel program of systematic exposure to pain-related fear (such as fear of reinjury) and the adaptation of cognitive-behavioral therapy for special pain groups (e.g. juveniles and those with pain secondary to physical disability). Regarding self-hypnosis training, recent work suggests that hypnosis can provide temporary pain relief to the majority of individuals with chronic pain and that a substantial minority of these patients experience a clinically significant reduction in baseline pain over time. SUMMARY: Cognitive-behavioral therapy and operant behavioral therapy treatments focus on factors that exacerbate or maintain suffering in chronic pain, and should be considered as part of a multidisciplinary treatment paradigm. Self-hypnosis training may also be of benefit, although it appears to be no more (or less) effective than other relaxation strategies that include hypnotic elements.

Dr. Charles-Humbert Antoine Despine's (1777-1852) De L'Emploi du magnétisme animal et des eaux minerales dans le traitement des maladies nerveuses, suivi d'une observation très curieuse de guérison de névropathie [A Study of the uses of animal magnetism in the treatment of disorders of the nervous system followed by a case of a highly unusual cure of neuropathy] (Paris: Germer, Baillière, 1840) is one of the earliest published, complete accounts of a successful cure with animal magnetism of a dissociative disorder. Despine's methodical and gentle treatment of more than 20 patients with multiple personalities repeatedly brought fusion to separation. His writing style displays a lack of order and unity that resembles the dissociative symptoms of his patients, but the monograph's sloppiness belies Despine's methodical approach to his work and his thoughtful handling of his patients. This paper explores these inconsistencies and how translators of the monograph act as literary therapists for his confused and fragmented account.

A hypnotically based intervention to enhance creativity in drawing was evaluated in a controlled study. Participants were randomly assigned to either a hypnotic treatment or a nonhypnotic (task-motivational) control treatment. Subjects drew a standard still-life tableau twice. The first drawing involved no special instructions and provided a baseline measure of creativity in drawing. The second drawing was completed after the creativity-enhancement procedure. The drawings were rated blindly on several dimensions of artistic creativity. Hypnotizability, absorption, and debriefing measures were also evaluated.
administered. Results indicated that the hypnotic procedure had significantly greater effects on creativity in drawing. However, there were no significant main effects or interactions involving hypnotizability or absorption. Hypnotic and task-motivational groups did not differ on debriefing measures regarding their experience.

[1389]
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Hypnotically assisted treatments have been used to reduce stress, improve gastrointestinal motility, strengthen immune function, and potentially reduce inflammation. Such treatments may also help reduce disease flares and improve quality of life in inflammatory bowel diseases (IBD). The authors report the results of a case series of 8 white female patients with inactive IBD. All participants initiated and completed treatment, supporting the general acceptability of hypnotically assisted treatment among IBD patients. There was a significant improvement in IBD-quality of life scores for the group posttreatment, t(7) = -3.38, p = .01, with a mean improvement in quality of life of 29 points with significant changes in all 4 subscales. No negative effects of treatment were found.

[1390]
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Chaotic transitions emerge in a wide variety of cognitive phenomena and may possibly be linked to specific changes during development of mental disorders. There are several hypotheses that link the dissociation to critical chaotic shifts with the resulting self-organization of behavioral patterns during critical periods. In 2 patients, hypnotic revivification of dissociated trauma along with measurement of bilateral electrodermal activity (EDA) for therapeutic and research purposes was performed. Nonlinear data analysis of EDA records shows a difference between degree of chaos in hypnotic relaxed state before revivification of the trauma and dissociated state after reliving the traumatic memory. Results suggest that the dissociated state after revivification of the trauma is significantly more chaotic than the state during the hypnotic relaxation before the event. Findings of this study suggest a possible role of neural chaos in the processing of the dissociated traumatic memory during hypnotic revivification.

[1391]
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This study investigated the influence of hypnotic emotional inhibition on emotional response to and recall of emotional features of autobiographical memories. Twenty-nine high hypnotizable participants were administered a hypnotic induction and either emotional suppression or control instructions and then were asked to recall a personal distressing or neutral autobiographical memory. Dependent variables included self-reported emotion, EMG corrugator muscle activity, and use of affective descriptors in autobiographical memories. Participants in the suppression condition displayed less emotional responsivity on self-report and EMG corrugator muscle activity than other participants during recall of the distressing memory. In contrast, emotional suppression did not influence the use of affective descriptors in the content of personal memories. These findings point to the capacity for hypnotic emotional inhibition to differentially influence affective and semantic components of the emotional response.

[1392]
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In order to make a recommendation about the use of hypnosis as adjuvant therapy in the treatment of breast cancer, 2 studies assessing the immunological effects of hypnosis in patients with early stage breast cancer were evaluated: (a) an experiment that taught hypnotic guided-imagery therapy to patients and (b) one that provided participants with home visits and autogenic training. Both investigations demonstrated improvement in depression and increased natural killer (NK) cell counts after 2 months of hypnosis treatment. However, neither study determined the clinical significance of hypnosis in the setting of cancer, and therefore future experiments are needed to relate the immune-mediated effects of hypnosis to hard clinical outcomes like survival rates.
Hypnosis has had a gradual conceptual emergence from an alleged mystical experience, to sleep, to a psychological shift in concentration that activates a preexisting neuro-physiological circuitry. Data are presented to support the thesis that hypnotizability exists on a spectrum that has biological as well as psychosocial components. When there is synchrony between the bio-psychosocial components of hypnotizability as measured by the Hypnotic Induction Profile (an intact flow), psychotherapy is the primary treatment strategy, with medication secondary or not at all. When measurement reveals a lack of synchrony between biological factors as measured by the Eye-Roll sign and psychosocial responsivity (a nonintact flow), medication will be primary, with different degrees of psychosocial support.

Spanish histologist Santiago Ramón y Cajal, one of the most notable figures in Neuroscience, and winner, along with Camillo Golgi, of the 1906 Nobel Prize in Physiology or Medicine for his discoveries on the structure of the nervous system, did not escape experimenting with some of the psychiatric techniques available at the time, mainly hypnotic suggestion, albeit briefly. While a physician in his thirties, Cajal published a short article under the title, "Pains of labour considerably attenuated by hypnotic suggestion" in Gaceta Médica Catalana. That study may be Cajal's only documented case in the field of experimental psychology. We here provide an English translation of the original Spanish text, placing it historically within Cajal's involvement with some of the key scientific and philosophical issues at the time.

Techniques for turning a term breech baby are 1). External cephalic version (ECV) using hands and ultrasound only; 2). Acupuncture point stimulation, by needle or moxibustion; 3). Chiropractic "Webster" technique; 4). Hypnotherapy; and 5). Special exercises. Fifty % of breech fetuses at 34 weeks will turn by themselves to head down by 38 weeks. Therefore, to be considered effective, a technique for turning breech must turn the baby and keep it turned more than 50% of the time. Only ECV with an experienced practitioner has been documented to have a greater than 50% success rate at 37 weeks; in 95% of cases the head stays down. Most women experience the fetus turning by hand as quick but very painful. "Unstable lie" is sometimes used as a baseless excuse for inducing labor after the baby turns from breech to head down. (judyslome@hotmail.com).

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Modulating visceral sensation of the body is important to the understanding of emotion formation. Molecules that act during hypnosis and modify visceral pain perception are not known. We tested our hypothesis that hypnotic suggestion changes electrophysiological processing of visceroafferent signals in the human brain and that these conditions are in part dependent on histaminergic neurons. Twelve healthy male subjects were studied on two separate days: a day of treatment with histamine H1 receptor antagonist (d-chlorpheniramine 100 microg kg(-1), intravenously) and another day of that with placebo (saline, the same amount) in a randomized order. We recorded cortical evoked potentials to 100 rectal electrical stimuli after neutral, hyperalgesic or analgesic hypnotic suggestions as given to modulate the visceral perception. Analgesic suggestion reduced the amplitude of the deepest positive peak of visceroaffective evoked potential. Administration of histamine H1 antagonist diminished the attenuation of visceroaffective evoked potential by analgesic suggestion. Our results suggest that central pain modulatory system in the brain is activated by hypnotic suggestion and that brain histamine is a mediator in the hypnotic modulation of visceral sensory pathway as well as in the control of consciousness level. These findings lead us to possible new treatment for control of visceral perception.
Ericksonian hypnosis in chronic care support groups: a Rogerian exploration of power and self-defined health-promoting goals.
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This Rogerian study examined how traditional and Ericksonian hypnotherapeutic support groups facilitated self-defined health-promoting goals and power as knowing participation in change for 49 participants with chronic physical illness. The participants were randomly assigned to either a traditional support group or an Ericksonian hypnotherapeutic support group. Measurements of power and self-defined health-promoting goals were obtained seven times over a 10-week period. The results indicated that both the traditional support groups and the Ericksonian hypnotherapeutic support groups experienced significantly enhanced power and progressed significantly toward their health-promoting goals. Correlations for the self-defined health-promoting goals and power progressively and significantly increased through time. This study supports Barrett's claim that power relates to health.

[1398]
Mind-body therapies for headache.
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Headache is one of the most common and enigmatic problems encountered by family physicians. Headache is not a singular entity, and different pathologic mechanisms are involved in distinct types of headache. Most types of headache involve dysfunction of peripheral or central nociceptive mechanisms. Mind-body therapies such as biofeedback, cognitive behavior therapy, hypnosis, meditation, and relaxation training can affect neural substrates and have been shown to be effective treatments for various types of headache. Meta-analyses of randomized controlled trials show that the use of mind-body therapies, alone or in combination, significantly reduces symptoms of migraine, tension, and mixed-type headaches. Side effects generally are minimal and transient.

[1399]
Temporomandibular joint disorders.
Am Fam Physician. 2007 Nov 15;76(10):1477-82.
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Temporomandibular joint disorders are common in adults; as many as one third of adults report having one or more symptoms, which include jaw or neck pain, headache, and clicking or grating within the joint. Most symptoms improve without treatment, but various noninvasive therapies may reduce pain for patients who have not experienced relief from self-care therapies. Physical therapy modalities (e.g., iontophoresis, phonophoresis), psychological therapies (e.g., cognitive behavior therapy), relaxation techniques, and complementary therapies (e.g., acupuncture, hypnosis) are all used for the treatment of temporomandibular joint disorders; however, no therapies have been shown to be uniformly superior for the treatment of pain or oral dysfunction. Noninvasive therapies should be attempted before pursuing invasive, permanent, or semi-permanent treatments that have the potential to cause irreparable harm. Dental occlusion therapy (e.g., oral splinting) is a common treatment for temporomandibular joint disorders, but a recent systematic review found insufficient evidence for or against its use. Some patients with intractable temporomandibular joint disorders develop chronic pain syndrome and may benefit from treatment, including antidepressants or cognitive behavior therapy.

[1400]
Reduced prepulse inhibition is associated with increased hypnotizability.
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Hypnosis involves the manipulation of conscious attentional discrimination. The prepulse inhibition (PPI) paradigm assesses primary unconscious information processing. We investigated the correlation between hypnotizability and PPI of the startle reflex. Forty-eight healthy subjects were evaluated with the Stanford Hypnotic Susceptibility Scale, Form C (SHSS:C) and acoustic PPI. Subjects were divided into low, medium, and high hypnotizable groups. The low-hypnotizable group showed a significantly higher inhibition of the startle response, at lead intervals 60 ms and 120 ms, than did the medium- and high-hypnotizable groups. We conclude that hypnotizability and PPI may be negatively correlated. These findings lend further support for the role of dopaminergic neurotransmission mechanisms in the determination of hypnotizability levels.

[1401]
Are patients with somatization disorder highly suggestible?
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OBJECTIVE: High suggestibility is widely regarded as an important feature of patients with medically unexplained symptoms (MUS), particularly those with multiple MUS [i.e. somatization disorder (SD)], although there are few empirical data attesting to this assumption. A study was therefore conducted to compare levels of non-hypnotic suggestibility in patients with SD and medical controls. METHOD: A modified version of the Barber Suggestibility Scale was administered to 19 patients with SD and 17 controls with an established organic dystonia. RESULTS: Patients with SD were no more suggestible than control patients. Dystonia controls were more likely to deliberately comply with suggestions than the SD patients. CONCLUSION: Contrary to popular belief, high suggestibility is not necessarily a feature of SD.

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Somatosensory event-related potentials (SERPs) to painful electric standard stimuli under an odd-ball paradigm were analyzed in 12 high hypnotizable (HH), 12 medium hypnotizable (MH), and 12 low hypnotizable (LH) subjects during waking, hypnosis, and a cued eyes-open posthypnotic condition. In each of these conditions subjects were suggested to produce an obstructive imagery of stimulus perception as a treatment for pain reduction. A No-Analgesia treatment served as a control in waking and hypnosis conditions. The subjects were required to count the number of delivered target stimuli. HH subjects experienced significant pain and distress reductions during posthypnotic analgesia as compared to hypnotic analgesia and between these two analgesic conditions as compared to the two control conditions. Outside of hypnosis, these subjects remembered less pain and distress levels than they reported during hypnotic and posthypnotic analgesia treatments. In contrast, for waking-analgesia treatment, HH subjects remembered similar pain and distress levels to those they reported concurrently with the stimulation. HH subjects, during hypnotic and posthypnotic analgesia treatments, detected a smaller number of target stimuli and displayed a significant amplitude reduction of the midline frontal and central N140 and P200 SERP components. No significant SERP differences were observed for these subjects between treatments in waking condition and between hypnotic and posthypnotic analgesic treatments. For the MH and LH subjects no significant N140 and P200 amplitude changes were observed among analgesic conditions as compared to control conditions. These amplitude findings are seen as indicating that hypnotic analgesia can affect earlier and later stages of stimulus processing.

[Article in German]
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Obesity is a serious chronic disease, associated with severe sequelae and increased mortality rates, and therefore requires long-term care. This article gives an overview of the current state of research on psychotherapeutic treatment of obesity, focusing on behavioral approaches. Systematic well-controlled studies on humanistic and psychodynamic therapies are not available. A small number of studies on psychotherapy-related approaches, e.g. relaxation therapy or hypnotherapy, failed to demonstrate any decisive positive outcomes. While weight loss programs using methods of behavior therapy and lifestyle modification approaches result, on the average, in a short-term weight loss of 10% of the initial weight, long-term effects of such programs are disappointing. Further evidence suggests, however, that long-term maintenance programs may facilitate lasting behavioral changes of patients in their daily lives and work against weight regain. More research on effective maintenance programs is called for to further improve care of obese patients; it should lay stronger emphasis on internet-based weight maintenance programs.

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In Experiment 1, 6- and 9-year-old children and adults were asked to imagine various types of objects. The experimenter then attempted to change the image of those objects in participants' minds by either suggesting that the objects may
change against the participants' will, or by asking participants to change the objects as a favor to the experimenter. Two types of suggestive causation were employed: Magical-suggestion (a magic spell was cast with the aim of changing the imagined objects) and ordinary-suggestion (participants were told that the objects in their minds could alter against their will). Ordinary-suggestion was as effective as magical-suggestion in changing the participants' imagined objects. For adults, a direct request for compliance produced a stronger effect than did magical suggestion. This effect was not found in children. In Experiment 2, the two types of suggestion were tested on an alternative type of imagined objects. Adult participants were asked to imagine their futures. It was then proposed that (a) a magic spell could be cast on their futures with the aim of changing them either for the worse or for the better (magical-suggestion), or (b) changing a numerical pattern on a computer screen could change their futures (ordinary-suggestion). All participants denied that changing a numerical pattern on a computer screen could affect their lives, yet in their actions they demonstrated an element of belief in this possibility. As in Experiment 1, in Experiment 2 ordinary suggestion was as effective as magical suggestion. The hypothesis of an historic contiguity between magical causality and ordinary suggestion is discussed.

[1405]
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BACKGROUND & AIMS: Functional abdominal pain (FAP) and irritable bowel syndrome (IBS) are highly prevalent in childhood. A substantial proportion of patients continues to experience long-lasting symptoms. Gut-directed hypnotherapy (HT) has been shown to be highly effective in the treatment of adult IBS patients. We undertook a randomized controlled trial and compared clinical effectiveness of HT with standard medical therapy (SMT) in children with FAP or IBS.

METHODS: Fifty-three pediatric patients, age 8-18 years, with FAP (n = 31) or IBS (n = 22), were randomized to either HT or SMT. Hypnotherapy consisted of 6 sessions over a 3-month period. Patients in the SMT group received standard medical care and 6 sessions of supportive therapy. Pain intensity, pain frequency, and associated symptoms were scored in weekly standardized abdominal pain diaries at baseline, during therapy, and 6 and 12 months after therapy. RESULTS: Pain scores decreased significantly in both groups: from baseline to 1 year follow-up, pain intensity scores decreased in the HT group from 13.5 to 1.3 and in the SMT group from 14.1 to 8.0. Pain frequency scores decreased from 13.5 to 1.1 in the HT group and from 14.4 to 9.3 in the SMT group. Hypnotherapy was highly superior, with a significantly greater reduction in pain scores compared with SMT (P < .001). At 1 year follow-up, successful treatment was accomplished in 85% of the HT group and 25% of the SMT group (P < .001). CONCLUSIONS: Gut-directed HT is highly effective in the treatment of children with longstanding FAP or IBS.

[1406]
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OBJECTIVE: The purpose of this Cochrane Review was to establish the evidence base for treatment of psychogenic nonepileptic seizures. METHODS: Six hundred eight references were identified using a search strategy designed with the support of the Cochrane Review Epilepsy Group library. The search employed Medline and PsychInfo, and included hand searches of relevant journals (Seizure, Epilepsia, Epilepsy &Behavior, Epilepsy Research). RESULTS: Three studies were found that met the inclusion criteria; two used hypnosis and one used paradoxical therapy. None included detailed reports of improved seizure frequency or quality of life, although reduction in seizure frequency was mentioned. All three studies concluded that the intervention used was beneficial in the treatment of psychogenic nonepileptic seizures.

CONCLUSIONS: The limited number of studies and poor methodology preclude these results from being generalizable. There is a need for well-designed clinical trials to identify the most suitable treatments for this population.

[1407]
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Adult burn patients experience pain during wound care despite pharmacological interventions. Additional nursing interventions are needed to improve pain management. A systematic review was undertaken in order to examine the implications of previous research for evidence based decisions concerning the use of non-pharmacological nursing interventions and for future research. Twenty-six studies met the inclusion criteria and were discussed. The majority of the included studies concerned behavioural nursing interventions and focused on promotion of psychological comfort. Although 17 studies showed that the intervention had a positive effect on pain outcomes and no adverse effects of the reviewed interventions were reported, the best available evidence was found for active hypnosis, rapid induction analgesia and distraction relaxation. However, in order to reduce methodological limitations, further research is needed.
before well-founded evidence based decisions for nursing practice can be made. Aspects that seem important for future research, like the type of the intervention, theoretical framework, manner of giving instruction and guidance, cost, outcomes, measurement instruments and data collection points are considered.

[1408] [Irritable bowel syndrome: current treatment options]
[Article in French]
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Relieving abdominal pain is the principal treatment objective for patients with irritable bowel syndrome. No single drug stands out in the treatment strategy for this illness. Antispasmodics, magnesium aluminum silicates, and alverine citrate drugs all remain initial options for treatment, although their prescription is impeded by the fact that an increasing number are no longer approved for reimbursement. Increased dietary fibers often have a harmful effect on symptoms. Some patients are probably intolerant to some foods but there is no satisfactory proof on which to base a restrictive diet. Improved knowledge of the pathophysiology of irritable bowel syndrome has made it possible to diversify treatments that act first on one of the key pathophysiologic elements, visceral hypersensitivity. Antidepressants (especially tricyclics) can be used at low doses. Among the serotonergic drugs, serotonin 5-HT4 receptors agonists (tegaserod) may be available soon, but the development of 5-HT3 antagonists (alosetron, cilansetron) has been stopped for safety reasons (ischemic colitis and severe constipation). Non-drug options such as hypnosis, psychotherapy, relaxation, or yoga, may also be proposed to some patients. Probiotics are a possible treatment in the future.

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Functional dyspepsia (FD) is common in children, with as many as 80% of those being evaluated for chronic abdominal pain reporting symptoms of epigastric discomfort, nausea, or fullness. It is known that patients with persistent complaints have increased comorbidities such as depression and anxiety. The interaction with psychopathologic variables has been found to mediate the association between upper abdominal pain and gastric hypersensitivity. These observations suggest that abnormal central nervous system processing of gastric stimuli may be a relevant pathophysiologic mechanism in FD. Despite increased understanding, no specific therapy has emerged; however, recent nonpharmacological-based options such as hypnosis may be effective. Novel approaches, including dietary manipulation and use of nutraceuticals such as ginger and Iberogast (Medical Futures Inc., Ontario, Canada), may also be considered.

[1410] Hypnotizability-dependent modulation of the changes in heart rate control induced by upright stance.
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Subjects with high (Highs) and low (Lows) susceptibility to hypnosis show differences in the sensory-motor integration for postural control and in the cardiovascular response to stress and experimental pain. Aim of the experiment was to assess whether the cardiac response to gravity-related stimulation depending on changes in the body position were different in the two groups. Thus, heart rate (HR) and heart rate variability (HRV) were evaluated in sitting and upright position in Highs and Lows. Position-related HRV changes were studied in the time (statistical indexes, Poincaré Plot) and frequency (spectral analysis) domain. Results indicated that upright stance was associated with similar changes in heart rate and different modulation of HRV in the two groups. The association of time and frequency domain analyses allowed hypothesizing different control mechanisms as responsible for the cardiac response to upright stance in Highs and Lows, likely due to a different role of the Very Low Frequency (VLF) spectral component of HRV in the two groups. The results are in line with previous findings indicating a natural protection of Highs against cardiovascular events and suggest that the Highs' cardiac function might be less impaired by microgravity than the Lows' one.

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Two lines of evidence about the association between the experience of pain and brain state (measured via electroencephalogram or EEG) have recently come to light. First, research from a number of sources suggests a link between brain EEG activity and the experience of pain. Specifically, this research suggests that the subjective experience of pain is associated with relatively lower amplitudes of slower wave (delta, theta, and alpha) activity and relatively higher amplitudes of faster wave (beta) activity. Second, there has been a recent increase in interest in interventions that impact the cortical neuromodulation of pain, including behavioral treatments (such as self-hypnosis training and neurofeedback) and both invasive and noninvasive brain stimulation. Although a direct causal link between experience of pain and brain activity as measured by EEG has not been established, the targeting of pain treatment at a cortical level by trying to affect EEG rhythms directly is an intriguing possibility. PERSPECTIVE: Preliminary evidence suggests the possibility, which has not yet adequately tested or proven, that the experience of chronic pain is linked to cortical activity as assessed via an electroencephalogram. Support for this hypothesis would have important implications for understanding the mechanisms that underlie a number of pain treatments, and for developing new innovative treatments for chronic pain management.

[1412] An evidence-based approach to lifestyle interventions in urogynaecology. Menopause Int. 2007 Dec;13(4):154-8. Christofi N, Hextall A. Obstetrics and Gynaecology, North West London Hospitals NHS Trust, Northwick Park Hospital, Harrow, Middlesex, UK. Urinary incontinence, urgency, overactive bladder symptoms, cystitis and urinary tract infections are common conditions that collectively trouble over one-third of the female population around and beyond the time of menopause, with a detrimental effect on physical, social and mental wellbeing. Apart from pharmacological and surgical treatments, a long list of lifestyle, behavioural, physical and complementary interventions have been introduced over the years to relieve lower urinary tract symptoms. This review examines the effect on these symptoms of lifestyle factors (such as weight, smoking, dietary components, fluid intake, exercise and bowel habit), complementary therapies (such as herbal remedies, acupuncture and hypnotherapy), behavioural therapies (bladder training and timed and prompted voiding), pelvic floor muscle training and some over-counter preparations. The high prevalence of the above conditions in combination with the increasing publicity for and awareness of the subject has contributed to the popularity of the interventions considered in this review. Many of them, however, lack a solid evidence base with regard to their efficacy and few have been subjected to robust randomized trials. It is widely recognized that there is a need for further prospective interventional studies of all lifestyle interventions to evaluate the effects of modifying these factors on lower urinary tract symptoms.

[1413] Space and time in psychoanalytic listening. Int J Psychoanal. 2007 Dec;88(Pt 6):1473-90. Perelberg RJ. rperelberg@perelberg.com The analytic situation is by definition traumatic because it evokes hilflosigkeit, the state of helplessness of the newborn infant, which is the prototype of the traumatic situation, and at the origin of the experience of anxiety. The author addresses the chain of associations between the state of helplessness, repetition compulsion, trauma, infantile sexuality, pleasure and displeasure, which lie at the core of the transference experience, and which find their ultimate expression in the analyst's listening. The discovery of the compulsion to repeat instituted a paradigmatic shift in Freud's formulations, emphasizing the process of repetition of trauma, and instituting a link between the network of concepts indicated above. In the clinical example discussed, the author defines the psychoanalytic process by the primacy of sexuality, the erotic passivation in the transference that evokes the traumatic childhood sexual scene. Sexuality and sexual phantasies are at the centre of the elaboration of meaning. Furthermore, the author distinguishes between two types of interpretations, namely 'open' and 'closed'.

[1414] Hypnotic analgesia. Expert Rev Neurother. 2007 Dec;7(12):1675-83. Wiechman Askay S, Patterson DR. University of Washington School of Medicine, Department of Rehabilitation Medicine, 325 Ninth Avenue, Box 359740, Seattle, WA 98104, USA. wiechman@u.washington.edu Hypnosis has been used for centuries to treat various types of pain problems. Anecdotal reports of its efficacy have been around since the early 1800 s, but only recently has sophisticated research advanced the field. This paper will summarize the theoretical and clinical foundations of hypnotic analgesia, as well as offer recommendations for increasing its efficacy and improving future research to advance the field.

[1415] [Psychotherapy in somatic diseases--for example gastrointestinal disorders]
The functional gastrointestinal disorders (FGID) are the most frequent clinical conditions seen in practice. Up to 60% of these patients are also suffering from psychosocial problems. Therefore it is important to define the patient’s complaints in terms of a biopsychosocial disorder, to acknowledge the relevance of the psychosocial aspects and to provide an integrated psychosomatic treatment or a psychotherapy if indicated. Most of the research on psychotherapy in FGID to date has focused on the irritable bowel syndrome and different methods of treatments were studied (e.g., cognitive-behavioral therapy, dynamic psychotherapy, hypnotherapy, and relaxation). Randomised controlled studies have shown that psychotherapy is superior to conventional medical therapy. Hypnotherapy is successful not only for irritable bowel syndrome but also for functional dyspepsia. Predictors of a positive response to psychological treatment generally are: (1) awareness that stress exacerbates their bowel symptoms, (2) at least mild anxiety or depression, (3) the predominant bowel symptom is abdominal pain or diarrhea and not constipation, (4) the abdominal pain waxes and wanes in response to eating, defecation, or stress rather than being constant pain, and 5) the symptoms are of relatively short duration. Benefits persist over years, and in the long run, clinic visits and health care costs can be reduced.

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The Department of Maxillofacial Surgery of the University Hospital Schleswig-Holstein/Campus Lübeck offers intraoperative hypnosis since 2002. Besides clinical evaluation by controlled studies, patients’ attitudes should be included in the judgement on such adjuvant procedure not established in general. 70 patients of the department treated under combined local anaesthesia/hypnosis rated their individual postoperative patient satisfaction by standardised questionnaires. A control group of equal size and demographic/surgical features consisted of patients that were treated without hypnosis in the same interval. Results of the inquiry indicate that intraoperative hypnosis increases significantly postoperative satisfaction of oral and maxillofacial patients. Satisfaction is attributed decisively on the adjuvant procedure.


This article deals with non-pharmacological methods for the treatment of pain in children and adolescents: acupuncture, homeopathy, transcutaneous electrical nerve stimulation, massage, relaxation, heat therapy, and hypnosis. These specialized techniques are used separately, either alone or in association with pharmacological methods. They have the specificity of considering the patient as a whole, including the biological and psycho-affective aspects. These methods are being developed more often, increasingly used but are still far from being systematic.

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BACKGROUND: IBS affects 5-11% of the population of most countries. Prevalence peaks in the third and fourth decades, with a female predominance. AIM: To provide a guide for the assessment and management of adult patients with irritable bowel syndrome. METHODS: Members of the Clinical Services Committee of The British Society of Gastroenterology were allocated particular areas to produce review documents. Literature searching included systematic searches using electronic databases such as Pubmed, EMBASE, MEDLINE, Web of Science, and Cochrane databases and extensive personal reference databases. RESULTS: Patients can usefully be classified by predominant bowel habit. Few investigations are needed except when diarrhoea is a prominent feature. Alarm features may warrant further investigation. Adverse psychological features and somatisation are often present. Ascertaining the patients’ concerns and explaining symptoms in simple terms improves outcome. IBS is a heterogeneous condition with a range of treatments, each of which benefits a small proportion of patients. Treatment of associated anxiety and depression often improves bowel and other symptoms. Randomised placebo controlled trials show benefit as follows: cognitive behavioural therapy and
psychodynamic interpersonal therapy improve coping; hypnotherapy benefits global symptoms in otherwise refractory patients; antispasmodics and tricyclic antidepressants improve pain; ispaghula improves pain and bowel habit; 5-HT(3) antagonists improve global symptoms, diarrhoea, and pain but may rarely cause unexplained colitis; 5-HT(4) agonists improve global symptoms, constipation, and bloating; selective serotonin reuptake inhibitors improve global symptoms.

CONCLUSIONS: Better ways of identifying which patients will respond to specific treatments are urgently needed.

[1419]
Trauma-related and neutral false memories in war-induced Posttraumatic Stress Disorder.
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Recent models of cognition in Posttraumatic Stress Disorder (PTSD) predict that trauma-related, but not neutral, processing should be differentially affected in these patients, compared to trauma-exposed controls. This study compared a group of 50 patients with PTSD related to the war in Bosnia and a group of 50 controls without PTSD but exposed to trauma from the war, using the DRM method to induce false memories for war-related and neutral critical lures. While the groups were equally susceptible to neutral critical lures, the PTSD group mistakenly recalled more war-related lures. Both false and correct recall were related more to depression than to self-rated trauma. Implications for accounts of false memories in terms of source-monitoring are discussed.

[1420]
Ebrinc S, Semiz UB, Basoglu C, Cetin M, Agargun MY, Algul A, Ates A.
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BACKGROUND: Despite the fact that the assumption of a relationship between self-mutilation and dissociative disorders (DD) has a long history, there is little empirical evidence to support this premise. The present study examined this relationship and investigated whether this commonality is associated with innate hypnotic capacity. METHODS: Fifty patients diagnosed with DD and 50 control subjects with major depression were assessed by using a self-mutilation questionnaire, Dissociative Experiences Scale, Traumatic Experiences Checklist, and the Eye-Roll Sign for their self-mutilating behaviors, dissociative symptoms, early trauma, and innate hypnotic capacity, respectively. RESULTS: We have found that 82% of the present sample of patients with DD injured themselves. They had higher scores on trauma, dissociation and eye-roll measurements than controls. In addition, DD patients with self-mutilation were more likely to have high scores of trauma, dissociation and eye-roll than those without self-mutilation. Innate hypnotic capacity was a strong predictor of self-mutilating behavior in DD patients. CONCLUSIONS: This study strongly supports the assumption that patients with DD are at high risk for self-mutilating behavior and points to the necessity of routine screening for self-mutilating behavior as well as the hypnotic capacity which may constitute a high risk for self-injury in this patient group.

[1421]
[Mood induction procedures: a critical review]
[Article in French]
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Functional gastrointestinal disorders including functional dyspepsia are highly prevalent. Their clinical course is benign without disease-associated mortality. On the other hand, the impact can be substantial for the affected patients with regard to the decrease of quality of life, and for society with regard to the economical implications. Functional dyspepsia is a clinical syndrome with various underlying pathophysiology. Thus, it is understandable that there is no single cure available. Reassurance by ruling out relevant differential diagnoses, explanation, and general advice with regard to the underlying causes and dietary and lifestyle measures are important components of the management of these patients. Well-established medical treatments include Helicobacter pylori eradication, acid inhibitory agents, and prokinetics. The overall gain over placebo ranges from less than 5% for H. pylori eradication to 15% for antisecretory agents and prokinetics. Thus, even considering a substantial proportion of patients with spontaneous remission (usually addressed as placebo response in clinical trials), there are 20 to 40% of patients who do not respond properly to these measures. In these patients, other treatment modalities need to be considered. These second- or third-line measures include herbal medicines and psychotropic agents. Some of the herbal preparations have been well studied in controlled clinical trials with sufficient scientific evidence to assume efficacy. Psychotropic drugs on the other hand have, as yet, not been specifically tested in functional dyspepsia. Medications such as clonidine, buspirone, or octreotide can be helpful in few patients. However, a very careful assessment of potential risks and benefits needs to be undertaken on a case-by-case basis. Other evidence-based measures include psychological interventions such as psychotherapy and hypnotherapy. Copyright 2008 S. Karger AG, Basel.


Efficiency of autogenous training in medical rehabilitation of patients with irritable colon syndrome with constipation dominance


[Article in Russian]
Pakhomova IV, Aivazian TA, Zaitsev VP, Gusakova EV, Molina LP.

It was established that use of autogenous training makes possible to increase efficiency of the therapy, leading to considerable more evident improvement of somatic and psychotic state, decrease of pain syndrome. Predictors of efficiency of autogenous training were marked out. Indications for use the method in medical rehabilitation of patients with irritable colon syndrome with constipation dominance were elaborated.

Hypnosis and pain management


[Article in French]
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[abstract not found]

Nonpharmacologic management of common skin and psychocutaneous disorders.


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Data supporting the effectiveness of nonpharmacologic psychocutaneous techniques continues to accumulate. These interventions are used for the treatment of common and psychocutaneous skin conditions. They are most commonly used as adjuncts to traditional therapies. This article will review the data on the effectiveness of hypnosis, biofeedback, psychotherapy, meditation, support groups, guided imagery and progressive muscle relaxation, and psychotherapy.

Review of systematic reviews on acute procedural pain in children in the hospital setting.


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BACKGROUND: Acute pain is a common experience for hospitalized children. Despite mounting research on treatments for acute procedure-related pain, it remains inadequately treated. OBJECTIVE: To critically appraise all systematic reviews on the effectiveness of acute procedure-related pain management in hospitalized children. METHODS: Published systematic reviews and meta-analyses on pharmacological and nonpharmacological management of acute procedure-related pain in hospitalized children aged one to 18 years were evaluated. Electronic searches were conducted in the Cochrane Database of Systematic Reviews, Medline, EMBASE, the Cumulative Index to Nursing and Allied Health Literature and PsycINFO. Two reviewers independently selected articles for review and assessed their quality using a validated seven-point quality assessment measure. Any disagreements were resolved by a third reviewer. RESULTS: Of 1469 published articles on interventions for acute pain in hospitalized children, eight systematic reviews met the inclusion criteria and were included in the analysis. However, only five of these reviews were of high quality. Critical appraisal of pharmacological pain interventions indicated that amethocaine was superior to EMLA (AstraZeneca Canada Inc) for reducing needle pain. Distraction and hypnosis were nonpharmacological interventions effective for management of acute procedure-related pain in hospitalized children. CONCLUSIONS: There is growing evidence of rigorous evaluations of both pharmacological and nonpharmacological strategies for acute procedure-related pain in children; however, the evidence underlying some commonly used strategies is limited. The present review will enable the creation of a future research plan to facilitate clinical decision making and to develop clinical policy for managing acute procedure-related pain in children.

Hypnosis to alleviate perioperative anxiety and stress: a journey to challenge ideas.


Fern PA.
Mention the possibility of surgery to a patient and most will react with a feeling of apprehension at best. Some will be horrified at the mere thought of being "cut open". For others, it will be the suggestion of entering a hospital for anything longer than an out patient appointment. Newspaper reports of healthcare-acquired infections (HAIs) may spring to mind: "Will I leave with more than I came in for?"; "What if it goes wrong?"; "Who will look after the family?". All this worrying leads to increased anxiety and stress, and the patient has not even been put on the waiting list yet, let alone been admitted.

Hypnosis-provoked nonepileptic events in children.
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OBJECTIVE: The purpose of this study was to describe the use of hypnotic suggestion as a means of precipitating nonepileptic events in children while they are undergoing video electroencephalographic monitoring (VEEG) for differential diagnosis of seizurelike behavior. METHODS: Nine children aged 8-16 years were referred for VEEG to differentiate between epileptic seizures and nonepileptic events. All subjects underwent psychiatric consultation. Hypnosis was attempted in all subjects to try to provoke typical seizurelike events. RESULTS: In eight of nine patients, their typical seizurelike events were provoked by hypnosis. In all eight children, video and EEG analysis of the provoked events demonstrated them to be nonepileptic. No epileptiform abnormalities were present on interictal EEGs. No epileptic seizures occurred. CONCLUSION: Hypnosis is a useful and ethical means of provoking psychogenic nonepileptic events in children. Hypnotic suggestion should be considered as a provocative method when possibly psychogenic nonepileptic events have not occurred spontaneously during diagnostic evaluation.

Gender-related differences in hypnosis-based treatments for smoking: a follow-up meta-analysis.
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In an earlier meta-analysis of 12 studies using hypnosis-based treatments for smoking cessation, we provided preliminary evidence that males fare better than females when trying to quit smoking (Green, Lynn, & Montgomery, 2006). By excluding studies that reported no gender differences, but failed to report final outcome-statistics-by-gender, our previous conclusion may have overestimated the role of gender in hypnosis-based smoking cessation treatment. In the present analysis, we included 12 additional studies that reported no gender differences, but failed to report final outcome-by-gender statistics. Across each of these studies, we calculated identical success rates for male and female participants and then added these results to our database. Among all 24 groups of participants who completed hypnosis-based treatment for smoking, we found a small but significant effect for male participants being more successful in quitting smoking relative to females. Specific suggestions for tailoring hypnosis smoking cessation programs to take gender differences into account are discussed.

Men are grass: Bateson, Erickson, utilization and metaphor.
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The relationship between metaphor and the practice of utilization in therapy and hypnosis can be seen as dependent on metaphor's role in structuring experience. The work of Gregory Bateson and others is used to illustrate how metaphor functions. Bateson's comparison of two forms of syllogistic logic provides a background for distinguishing between the experiential effects of metaphor in contrast to the categorical thinking inherent in simile and analogy. Clinical examples are given to demonstrate how utilization is structured by metaphor, particularly as Bateson has described it in his analysis of the Syllogism in Grass.

Strategic eclecticism in hypnotherapy: effectiveness research considerations.
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Hypnosis is attempting to come to grips with the EST (Empirically Supported Therapy) revolution in mental health practice. However, there are ways to account for outcome outside of simple empirical validation of treatment models. In
this light, strategic eclecticism as a broader research-based consideration is used to illustrate empirical principles within 
Eriksonian hypnotherapeutic approaches.

[1433]
An exploratory outcome comparison between an Ericksonian approach to therapy and brief dynamic therapy.
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The purpose of this study was to determine whether an Ericksonian approach to therapy using hypnosis (ET) was as 
effective as brief dynamic therapy (BDT), a long-standing and well-researched form of psychotherapy. The study used a 
comparative pretest/posttest design with four paper and pencil tests [Clark Personal and Social Adjustment Scale 
(CPSAS), Hopkins Symptom Checklist (HSCL), Target Complaint (TC), and Global Improvement (GI)] and six therapy 
sessions. The investigators attempted to choose design features that would not interfere with the unique qualities of ET 
while maintaining empirical regularity. No statistically significant difference was found except on HSCL where ET was 
superior. An interesting finding was that without direct discussion of the target complaint, ET brought about the same 
improvement on targeted problems as BDT. ET subjects reported gaining understanding of their problems as much as 
BDT subjects, but from a different source. The results of this study are a step toward empirical confirmation of ET as an 
evidence-based treatment alternative for psychotherapy.

[1434]
Hypnosis and cognitive-behavioral therapy during breast cancer radiotherapy: a case report.
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This case report describes an effort to control two primary side-effects of breast cancer radiotherapy (fatigue and skin 
discomfort) that used a combination of cognitive-behavioral therapy with hypnosis (CBTH). Two patients, matched on 
demographic and medical variables (marital status, employment status, number of children, cancer diagnosis, surgical 
history, radiation dose), were compared: one who received a CBTH intervention and one who received standard care. 
Results were consistent with the view that CBTH was effective in managing fatigue and skin discomfort, and increasing 
relaxation.

[1435]
Pinch-induced behavioral inhibition ('clipnosis') in domestic cats.
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Research has documented immobilization of rodents, rabbits, guinea pigs and dogs by mechanical means, typically using 
neck clips or inversion ('animal hypnosis'). In contrast, only a few studies of mechanical immobilization of cats are 
available, although some success has been reported in the literature. Domestic cats may be effectively immobilized by 
clips placed along the animal's dorsum. We use the term 'pinch-induced behavioral inhibition' (PIBI) for this behavior 
because it describes both the method and the response, while avoiding the more anthropomorphic term 'hypnosis'. We 
investigated the effectiveness of PIBI and its neurological and habituation effects in healthy cats and cats with idiopathic 
cystitis (IC). Although not all cats were susceptible to PIBI and effectiveness varied among individuals, PIBI was useful for 
gentle restraint in most cats.

[1436]
True and false recall and dissociation among maltreated children: the role of self-schema.
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The current investigation addresses the manner through which trauma affects basic memory and self-system processes. 
True and false recall for self-referent stimuli were assessed in conjunction with dissociative symptomatology among 
abused (N=76), neglected (N=92), and nonmaltreated (N=116) school-aged children. Abused, neglected, and 
nonmaltreated children did not differ in the level of processing self-schema effect or in the occurrence and frequency of 
false recall. Rather, differences in the affective valence of false recall emerged as a function of maltreatment subtype and 
age. Regarding dissociation, the abused children displayed higher levels of dissociative symptomatology than did the 
nonmaltreated children. Although abused, neglected, and nonmaltreated children did not exhibit differences in the valence 
of their self-schemas, positive and negative self-schemas were related to self-integration differently among the subgroups 
of maltreatment. Negative self-schemas were associated with increased dissociation among the abused children,
whereas positive self-schemas were related to increased dissociation for the neglected children. Thus, positive self-schemas displayed by the younger neglected children were related to higher dissociation, suggestive of defensive self-processing. Implications for clinical intervention are underscored.

[1437]
Pain, dissociation and subliminal self-representations.
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According to recent evidence, neurophysiological processes coupled to pain are closely related to the mechanisms of consciousness. This evidence is in accordance with findings that changes in states of consciousness during hypnosis or traumatic dissociation strongly affect conscious perception and experience of pain, and markedly influence brain functions. Past research indicates that painful experience may induce dissociated state and information about the experience may be stored or processed unconsciously. Reported findings suggest common neurophysiological mechanisms of pain and dissociation and point to a hypothesis of dissociation as a defense mechanism against psychological and physical pain that substantially influences functions of consciousness. The hypothesis is also supported by findings that information can be represented in the mind/brain without the subject's awareness. The findings of unconsciously present information suggest possible binding between conscious contents and self-functions that constitute self-representational dimensions of consciousness. The self-representation means that certain inner states of own body are interpreted as mental and somatic identity, while other bodily signals, currently not accessible to the dominant interpreter's access are dissociated and may be defined as subliminal self-representations. In conclusion, the neurophysiological aspects of consciousness and its integrative role in the therapy of painful traumatic memories are discussed.

[1438]
[Non pharmacologic treatment of neuropathic pain]
[Article in French]
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Nondrug treatments of neuropathic pain should always begin at the same time as pharmacologic treatment. There are three types of nondrug treatment for neuropathic pain: physical, surgical, and "psychocorporal" and psychotherapeutic treatment. Transcutaneous electrical nerve stimulation (TENS) is a simple physical treatment that strengthens local inhibitory controls and is indicated in focal neuropathic pain when upstream stimulation is possible for a superficial sensitive nerve trunk. Destructive surgery is represented today by "DREZotomy", destruction of nociceptive fibers and their dorsal root entry zones. It is indicated essentially in intractable pain due to plexus avulsion. Functional surgery is implanted electric stimulation--either spinal or central (encephalic)--of structures that exert inhibitory control on the pain pathways. Spinal stimulation is performed at the level of the posterior spinal cord and is indicated essentially in segmental mononeuropathies refractory to drug treatment. Central stimulation is performed at the motor cortex and is indicated for refractory central pain. "Psychocorporal" techniques (relaxation, sophrology, hypnosis) are useful to reduce anxiety and neurovegetative hypertonicity, both factors that aggravate neuropathic pain.

[1439]
Message framing for smoking cessation: the interaction of risk perceptions and gender.
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Because quitting smoking is clearly linked to preventing health problems such as lung cancer, research on health message framing based on prospect theory suggests that gain-framed messages (i.e., emphasizing the benefits of quitting smoking) would be more persuasive in promoting cessation than loss-framed messages (i.e., emphasizing the costs of continuing to smoke). However, because women tend to anticipate greater perceived risk from quitting smoking than men, this may affect how receptive they are to specific message framing interventions. Data from 249 participants (129 females, 120 males) in a clinical trial of message framing for smoking cessation with bupropion were used to examine how gender differences in perceptions of the risks associated with quitting influence the effects of framed interventions using number of days to smoking relapse as the criterion. Perceived risk of quitting scores were dichotomized using a median split for the entire sample. Women reported a higher perceived risk of cessation than men. Participants who anticipated high risks associated with quitting smoking reported fewer days to relapse. Further, females in the gain-framed condition who reported low perceived risks of cessation had a greater number of days to relapse, as opposed to females in the loss-framed condition. These findings suggest that message framing interventions for smoking cessation should consider the influence of gender and risk perceptions associated with quitting on the effectiveness of framed interventions.
Two groups of participants, one susceptible to posthypnotic amnesia (PHA) and the other not, viewed a movie. A week later, they underwent hypnosis in the fMRI scanner and received a suggestion to forget the movie details after hypnosis until receiving a reversal cue. The participants were tested twice for memory for the movie and for the context in which it was shown, under the posthypnotic suggestion and after its reversal, while their brain was scanned. The PHA group showed reduced memory for movie but not for context while under suggestion. Activity in occipital, temporal, and prefrontal areas differed among the groups, and, in the PHA group, between suggestion and reversal conditions. We propose that whereas some of these regions subserve retrieval of long-term episodic memory, others are involved in inhibiting retrieval, possibly already in a preretrieval monitoring stage. Similar mechanisms may also underlie other forms of functional amnesia.
Clinical inquiries. What are the most effective nonpharmacologic therapies for irritable bowel syndrome?
Madigan Army Medical Center, Fort Lewis, WA, USA.

Familiarity breeds distortion: the effects of media exposure on false reports concerning media coverage of the terrorist attacks in London on 7 July 2005.
Memory. 2008 Jan;16(1):76-85.
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Familiarity breeds distortion: the effects of media exposure on false reports concerning media coverage of the terrorist attacks in London on 7 July 2005. The present experiment investigated whether increased media exposure could lead to an increase in memory distortions regarding a traumatic public event: the explosion of the No. 30 bus in Tavistock Square, London on 7 July 2005. A total of 150 Swedish and 150 UK participants completed a series of questionnaires about their memory of either (i) the aftermath of the explosion, (ii) a non-existent computerised reconstruction of the moment of the explosion, or (iii) non-existent closed circuit television footage of the moment of the explosion. In line with the availability heuristic, U.K. participants were more likely than Swedish participants to claim to have seen all three types of footage. Furthermore, a subsample of U.K. participants who appeared to have developed false "memories" of seeing the No. 30 bus explode scored significantly higher on measures of dissociation and fantasy proneness than participants who did not develop false "memories". This experiment provides further support for the role of imaginative processes in the development of false memories.

Effects of "animal hypnosis" on a rhythmic defensive dominant.
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A defensive dominant was created in rabbits using rhythmic electrocutaneous stimulation of the left forelimb at a frequency of 0.5 Hz. After stimulation ended, the latent excitation state was tested using sound stimuli. Animals responded either with increases in non-rhythmic paw muscle activity or with rhythmic twitching of the paw at a frequency close to that of the electrocutaneous stimulation. After hypnotization, the incidence of rhythmic responses to the stimulation testing the dominant focus increased, while the incidence of non-rhythmic responses decreased.

Genetics and neuroimaging of attention and hypnotizability may elucidate placebo.
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Attention binds psychology to the techniques of neuroscience and exemplifies the links between brain and behavior. Associated with attentional networks, at least 3 brain modules govern control processes by drawing on disparate functional neuroanatomy, neuromodulators, and psychological substrates. Guided by data-driven brain theories, researchers have related specific genetic polymorphisms to well-defined phenotypes, including those associated with different attentional efficiencies and hypnosis. Because attention can modulate both cognitive and affective processes, genetic assays together with neuroimaging data have begun to elucidate individual differences. Findings from genetic assays of both attention and hypnotizability pave the way to answering questions such as how high hypnotizable individuals may differ from less-hypnotizable persons. These exploratory findings may extend to the identification of placebo responders.

Responding and failing to respond to both hypnosis and a kinesthetic illusion, Chevreul's Pendulum.
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In this study, participants who failed to exhibit pendulum movement in response to Chevreul's Pendulum (CP) instructions had lower Stanford Hypnotic Susceptibility Scale, Form A (SHSS:A) scores and reported experiencing less subjective response to hypnosis than did their counterparts who exhibited CP movement. However, intensity scores on Shor's
Personal Experiences Questionnaire (PEQ) did not differ between pass- and fail-CP groups. Additionally, pass-CP participants showed positive correlations between PEQ intensity scores and hypnotizability scores, while fail-CP participants showed negative correlations among these measures. These findings are consistent with the notion that CP failure may reflect a situation-specific unwillingness to become imaginatively involved rather than a general inability to do so. Additional analyses revealed that 5 of 10 participants who had failed the CP task scored 0 or 1 on the SHSS.A, while only 3 of 65 pass-CP participants scored 0 or 1.


People attempting to communicate religious and mystical experiences tend to use the same language strategies employed in inducing hypnotic trance. Both incorporate vague language that provides receptive listeners the opportunity to insert their own content. This study examines whether people who have had mystical or religious experiences are also more likely to respond to the language of hypnosis. Eighty-one participants completed the Harvard Group Scale of Hypnotic Susceptibility, Form A and the Hood Mysticism Scale. Participants were divided into 3 equal groups based on "high," "ambiguous," and "low" mysticism scale scores. The high group scored significantly higher on hypnotizability compared to the low group. The relationship between openness to mystical and religious experience and susceptibility to hypnotic suggestion warrants further investigation.


Although diabetes is one of the most serious global health problems, there is no real cure yet for it. The conventional insulin treatment programs aimed at life quality improvement do not take into account the psychological aspects of the disease. Because diabetes has important psychological components, it seems reasonable to consider hypnosis as an adjunct therapy for diabetes. This paper examines the empirical literature on the effectiveness of hypnosis in the management of diabetes, including regulation of blood sugar, increased compliance, and improvement of peripheral blood circulation. Despite some methodological limitations, the literature shows promising results that merit further exploration. Multimodal treatments seem especially promising, with hypnosis as an adjunct to insulin treatments in the management of both Type 1 and Type 2 diabetes for stabilization of blood glucose and decreased peripheral vascular complications.


Hypnosis as a therapeutic technique bears potential risks when carried out inexpertly. Because of this, Israel was the first to legislate hypnosis. This study examines the current state of clinical hypnosis practice in Israel. A questionnaire was sent to 470 licensed hypnotists and 1250 unlicensed professionals; 478 (25.7%) of the 1720 potential respondents returned the questionnaires. Of these, 249 (51.8%) were licensed hypnotists, and 232 (48.2%) were unlicensed. Of the unlicensed professionals, 45% reported practicing hypnosis; 50% of them practice hypnosis with adolescents and 41.2% with children. Many of them practice hypnosis in public clinics (71.6%). Of the licensed professionals, 94.4% reported practicing hypnosis in the course of their clinical work. The authors conclude that great number of unlicensed hypnotists carry on clinical practice of hypnosis and suggest steps to increase the efficiency of the law as part of a regulatory system.

[1451] Hypnosis and thought suppression - more data: a brief communication. Int J Clin Exp Hypn. 2008 Jan;56(1):37-46. Bryant RA, Sindich N. University of New South Wales, Sydney, Australia. r.bryant@unsw.edu.au

This study hypothesized that hypnosis would enhance thought suppression by minimizing the effect of cognitive load. Twenty-eight high and 29 low hypnotizable hypnotized participants received the cognitive load of learning a 6-digit number. Participants then received either a suppression instruction or no instruction for a personal memory of a failure experience. Thought-suppression effectiveness was indexed by measures of self-report monitoring, competition of
scrambled sentences, and facial electromyography. Low hypnotizable participants who received the suppression instruction displayed postsuppression rebound on the sentence-unscrambling task. In contrast, high hypnotizable participants did not display any rebound effects. These findings support the proposition that hypnosis facilitates thought suppression.

[1452]
Heart-rate variability as a quantitative measure of hypnotic depth.
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The authors investigated whether heart-rate variability can serve as a device for real-time quantitative measurement of hypnotic depth. This study compared the continuous self-rated hypnotic depth (SRHD) of 10 volunteers with heart rate, amplitude, and frequency changes from a time-frequency analysis of heart-rate variability (HRV). The authors found significant linear relationships between SRHD and the high-frequency (HF) component of HRV. Specifically, SRHD was correlated negatively with the frequency of the HF component and positively with the amplitude of the HF component. Unexpectedly, the average temporal trend in SRHD fit well (R(2) = .99) to the step response of a first-order system with a 4-minute time constant. The findings suggest that the reactivity of the parasympathetic branch of the autonomic nervous system reflected in HRV could become part of a real-time, quantitative measure of hypnotic depth.

[1453]
Hypnosis and the analgesic effect of suggestions.
Rainville P.

[abstract not found]

[1454]
Focused analgesia in waking and hypnosis: effects on pain, memory, and somatosensory event-related potentials.
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Somatosensory event-related potentials (SERPs) to painful electric standard stimuli under an odd-ball paradigm were analyzed in 12 high hypnotizable (HH), 12 medium hypnotizable (MH), and 12 low hypnotizable (LH) subjects during waking, hypnosis, and a cued eyes-open posthypnotic condition. In each of these conditions subjects were suggested to produce an obstructive imagery of stimulus perception as a treatment for pain reduction. A No-Analgesia treatment served as a control in waking and hypnosis conditions. The subjects were required to count the number of delivered target stimuli. HH subjects experienced significant pain and distress reductions during posthypnotic analgesia as compared to hypnotic analgesia and between these two analgesic conditions as compared to the two control conditions. Outside of hypnosis, these subjects remembered less pain and distress levels than they reported during hypnotic and posthypnotic analgesia treatments. In contrast, for waking-analgesia treatment, HH subjects remembered similar pain and distress levels to those they reported concurrently with the stimulation. HH subjects, during hypnotic and posthypnotic analgesia treatments, detected a smaller number of target stimuli and displayed a significant amplitude reduction of the midline frontal and central N140 and P200 SERP components. No significant SERP differences were observed for these subjects between treatments in waking condition and between hypnotic and posthypnotic analgesic treatments. For the MH and LH subjects no significant N140 and P200 amplitude changes were observed among analgesic conditions as compared to control conditions. These amplitude findings are seen as indicating that hypnotic analgesia can affect earlier and later stages of stimulus processing.

[1455]
Complementary and alternative therapy use in adult survivors of childhood cancer: a report from the Childhood Cancer Survivor Study.
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BACKGROUND: Little information is available on the use of complementary and alternative medicine (CAM) in long-term survivors of childhood and adolescent cancer. PROCEDURE: The Childhood Cancer Survivor Study (CCSS) is a resource evaluating the long-term effects of cancer and associated therapies in 5-year survivors of childhood and adolescent cancer diagnosed between 1970 and 1986 before the age of 21 years. A survey of CAM use during the
previous year was distributed in 2000-2001 and completed by 9,984 survivors and 2,474 sibling controls. RESULTS: CAM use reporting was similar in cases (39.4%) and siblings (41.1%). Compared to female siblings, female survivors were more likely to use biofeedback (odds ratio (OR) = 3.3; 95% CI = 1.0-10.8) and hypnosis/guided imagery (OR = 3.2; 95% CI = 1.1-1.6). Male survivors were more likely than male siblings to use herbal remedies (OR = 1.3; 95% CI = 1.1-1.6). Factors associated with CAM use in survivors included elevated scores on the brief symptom inventory (BSI)-18 (OR = 1.6; 95% CI = 1.3-1.9), prolonged pain (OR = 1.5; 95% CI = 1.3-1.7), and having seen a physician in the past 2 years (OR = 1.6; 95% CI = 1.4-1.8). Survivors reporting low alcohol intake and excellent or good general health reported lower levels of CAM use (OR = 0.7; 95% CI = 0.7-0.8 and OR = 0.8; 95% CI = 0.7-0.9, respectively). CONCLUSIONS: Survivors have a similar reported use of CAM compared to a sibling cohort. However, our data suggest that survivors turn to CAM for specific symptoms related to previous diagnosis and treatment. Future research is needed to determine whether CAM use reflects unmet health needs in this population. (c) 2007 Wiley-Liss, Inc.

How to put hypnosis into a placebo pill?

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Many case studies and several controlled clinical trials have indicated the effectiveness of hypnotherapy for some medical conditions. However, because of methodological inadequacies hypnotherapy is still criticized for not having strong scientific evidence to support its claims. While randomized placebo-controlled clinical trial is generally accepted as the gold standard study design, creating a credible placebo control for hypnotherapy is a major challenge. This paper recommends "neutral hypnosis" as a credible placebo control for hypnotherapy trials.

Psychogenic and organic movement disorders in children.

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We report on 34 patients with abnormal body movements (AMs; 11 females, 23 males; mean age 10 y 1 mo, range 3 y 6 mo-15 y 11 mo). Twenty-three of the 34 patients had an organic movement disorder (OMD), five patients fulfilled the diagnostic criteria of documented psychogenic movement disorder (PMD), and six patients displayed probable or possible PMD. Diagnosis of children with OMD included essential tremor (n=7), Tourette syndrome (n=5), primary dystonia (n=2), chronic motor tics (n=2), viral cerebellar ataxia (n=2), drug-induced ataxia (n=1), thyrotoxicosis related tremor (n=1), autosomal inherited dystonia (n=1), poststreptococcal chorea (n=1), and benign head tremor (n=1). Consistent findings among patients with PMD included disappearance of AMs when the patients thought they were not being observed and satisfactory recovery from the AMs after psychotherapy or suggestion. Reduction of the movements when the patient was distracted and variability of AMs during full relaxation, sleep, and stress were reported among patients with both PMD and OMD.


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The aim of the present study was to assess the efficiency of conscious hypnosis on patient cooperation. The subjects were 30 patients (14 females and 16 males) with a skeletal Class II division 1 malocclusion, divided into two equal groups, a control and a study group. The mean age was 10.78 +/- 1.06 years for the hypnosis, and 10.07 +/- 1.09 years for the control group. Both groups were treated with cervical headgear containing a timer module. The patients were also asked to record their actual wear time on timetables. The hypnosis group patients were motivated with conscious hypnosis while the control group were given verbal motivation by their orthodontist. The timer modules were read at every visit and compared with the timetables. Analysis of variance was used to determine the differences in measurements at each time point. For comparison of the groups, an independent t-test was used. A statistically significant decrease (P < 0.05) in headgear wear was observed in the control group from the first to the sixth month; however, the difference in the hypnosis group was not significant. This result indicates that conscious hypnosis is an effective method for improving orthodontic patient cooperation. There was a low correlation between actual headgear wear indicated by the patient and that recorded by the timing modules, which showed that, timetables are not consistent tools for measuring patient cooperation.

Hypnosis and pain in children.


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The development of studies on neuroimaging applied to hypnosis and to the study of pain not only helps to validate the existence of a hypnotic state but also to ratify its therapeutic effects. These studies also enable us to understand how hypnosis is effective on the cortical level. It also helps us see, from another perspective, the mechanisms of pain leading perhaps to a different definition of pain. This article develops the latest knowledge in the domain of hypnosis and pain, and approaches the clinical practices and their applications in the management of pain in children.

[1460]
Hypnosis decreases presurgical distress in excisional breast biopsy patients.
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BACKGROUND: Excisional breast biopsy is associated with presurgical psychological distress. Such distress is emotionally taxing, and may have negative implications for postsurgical side effects and satisfaction with anesthesia. We investigated the ability of a brief hypnosis session to reduce presurgical psychological distress in excisional breast biopsy patients. METHODS: Ninety patients presenting for excisional breast biopsy were randomly assigned to receive either a 15-minute presurgery hypnosis session (n = 49, mean age: 46.4 (95% CI: 42.3-50.4)) or a 15-minute presurgery attention control session (n = 41, mean age: 45.0 (95% CI: 40.8-49.2)). The hypnosis session involved suggestions for increased relaxation and decreased distress. The attention control session involved nondirective empathic listening. Presurgery distress was measured using visual analog scales (VAS) and the short version of the Profile of Mood States (SV-POMS).

Data were analyzed using analysis of variance and chi2 procedures. RESULTS: Groups did not differ in terms of the following: demographics (age, education, ethnicity, marital status, all P’s > 0.28); medical variables (presurgery diagnosis, previous excisional biopsy, previous breast cancer, all P’s > 0.11); or preintervention distress (SV-POMS P > 0.74) assessed on the day of surgery. Postintervention, and before surgery, patients in the hypnosis group had significantly lower mean values for presurgery VAS emotional upset (16.5 vs 38.2, P < 0.0001, d = .85), VAS depressed mood (6.6 vs 19.9, P < 0.02, d = .67), and SV-POMS anxiety (10.0 vs 5.0, P < 0.0001, d = 0.85); and significantly higher levels for VAS relaxation (75.7 vs 54.2, P < 0.001, d = -0.76) than attention controls. CONCLUSIONS: The study results indicate that a brief presurgery hypnosis intervention can be an effective means of controlling presurgical distress in women awaiting diagnostic breast cancer surgery.

[1461]
I still think it was a banana: memorable 'lies' and forgettable 'truths'.
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Interpersonal influences on cognition can distort memory judgements. Two experiments examined the nature of these 'social' influences, and whether their persistence is independent of their accuracy. Experiment 1 found that a confederate's social proximity, as well as the content and the confidence of their utterances, interactively modulates participants' immediate conformity. Notably, errant confederate statements that 'lied' about encoded material had a particularly strong immediate distorting influence on memory judgements. Experiment 2 revealed that these 'lies' were also memorable, continuing a day later to impair memory accuracy, while accurate confederate statements failed to produce a corresponding and lasting beneficial effect on memory. These findings suggest that an individual's 'informational' social influence can be selectively heightened when they express misinformation to someone who suspects no deceptive intent. The methods newly introduced here thus allow multiple social and cognitive factors impinging on memory accuracy to be manipulated and examined during realistic, precisely controlled dyadic social interactions.

[1462]
Correlated activity of neurons in the sensorimotor cortex of rabbits in the state of defensive dominanta and "animal hypnosis"
[Article in Russian][No authors listed]

A hidden excitation focus (dominanta focus) was produced in the rabbit's CNS by threshold electrical stimulation of the left forelimb with the frequency of 0.5 Hz. As a rule, after the formation of the focus, pairs of neurons with prevailing two-second rhythm in their correlated activity were revealed both in the left and right sensorimotor cortices (with equal probabilities 29.3 and 32.4%, respectively). After "animal hypnosis" induction, the total percent of neuronal pairs with the prevalent dominanta-induced rhythm decreased significantly only in the right hemisphere (21%). After the termination of the "animal hypnosis" state, percent of neuronal pairs in the right cortex with prevailing two-second rhythm significantly
increasead if the neurons in a pair were neighboring and decreased if they were remote from each other. Similar changes after the hypnotization were not found in the left cortex. Analysis of correlated activity of neuronal pairs with regard to amplitude characteristics showed that for both the right and left hemispheres, the prevalence of the two-second rhythm was more frequently observed in crosscorrelation histograms constructed regarding discharges of neurons with the lowest spike amplitude (in the right hemisphere) or the lowest and mean amplitudes (in the left hemisphere) selected from multunit records.

[1463]
Clinical hypnosis for reduction of atrial fibrillation after coronary artery bypass graft surgery.
Novoa R, Hammonds T.
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The belief that postoperative atrial fibrillation (PAF) results from transient autonomic dysfunction suggests that interventions such as clinical hypnosis may reduce the incidence of PAF. To explore this hypothesis, we retrospectively compared outcomes between two groups of patients undergoing coronary artery bypass graft surgery: 50 consecutive patients who received preoperative hypnoidal explanation of the surgical procedure and 50 case-matched historical controls who received no clinical hypnosis. The patients who received hypnosis were significantly less likely to experience an episode of PAF (P = .003) and showed nonsignificant trends toward superior outcomes in terms of length of stay, narcotic use, and total hospital charges. Our findings indicate that prospective randomized trials are warranted to further delineate the potential benefit of clinical hypnosis for prevention of PAF.

[1464]
Helping children and adults with hypnosis and biofeedback.
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Hypnosis and biofeedback are cyberphysiologic strategies that enable subjects to develop voluntary control of certain physiologic processes for the purpose of improving health. Self-hypnosis has been used with and without biofeedback for a wide range of therapeutic applications, and both laboratory studies and clinical trials have shown it to be effective in improving symptoms and outcomes in various disorders. More formal Cochrane reviews of hypnotherapeutic interventions are currently under way. Thorough patient assessment should precede training in self-hypnosis in order to properly tailor training strategies to patient preferences and characteristics, especially for children. Workshops offered by various clinical societies are available to train health professionals in self-hypnosis.

[1465]
Beneficial effects of hypnosis and adverse effects of empathic attention during percutaneous tumor treatment: when being nice does not suffice.
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PURPOSE: To determine how hypnosis and empathic attention during percutaneous tumor treatments affect pain, anxiety, drug use, and adverse events. MATERIALS AND METHODS: For their tumor embolization or radiofrequency ablation, 201 patients were randomized to receive standard care, empathic attention with defined behaviors displayed by an additional provider, or self-hypnotic relaxation including the defined empathic attention behaviors. All had local anesthesia and access to intravenous medication. Main outcome measures were pain and anxiety assessed every 15 minutes by patient self-report, medication use (with 50 mug fentanyl or 1 mg midazolam counted as one unit), and adverse events, defined as occurrences requiring extra medical attention, including systolic blood pressure fluctuations (> or =50 mm Hg change to >180 mm Hg or <105 mm Hg), vasovagal episodes, cardiac events, and respiratory impairment. RESULTS: Patients treated with hypnosis experienced significantly less pain and anxiety than those in the standard care and empathy groups at several time intervals and received significantly fewer median drug units (mean, 2.0; interquartile range [IQR], 1-4) than patients in the standard (mean, 3.0; IQR, 1.5-5.0; P = .0147) and empathy groups (mean, 3.5; IQR, 2.0-5.9; P = .0026). Thirty-one of 65 patients (48%) in the empathy group had adverse events, which was significantly more than in the hypnosis group (eight of 66; 12%; P = .0001) and standard care group (18 of 70; 26%; P = .0118). CONCLUSIONS: Procedural hypnosis including empathic attention reduces pain, anxiety, and medication use. Conversely, empathic approaches without hypnosis that provide an external focus of attention and do not enhance patients' self-coping can result in more adverse events. These findings should have major implications in the education of procedural personnel.

[1466]
Hypnotic analgesia intervention during first-trimester pregnancy termination: an open randomized trial.
OBJECTIVE: The purpose of this study was to determine whether hypnotic analgesia can reduce the need for intravenous sedation analgesia without increasing pain and anxiety levels during abortion. STUDY DESIGN: A cohort of 350 women who were scheduled for surgical abortion (<14 weeks' gestation) were assigned randomly to a standard care group or a group that received a standardized hypnotic analgesia intervention 20 minutes before and throughout the surgical procedure. Primary outcome was the difference between the 2 groups: (1) the proportion who received sedation (yes/no) during the surgical procedure and (2) self-assessments of pain and anxiety during suction evacuation of uterus content. RESULTS: Women who underwent hypnosis required less intravenous sedation analgesia (108/172 women; 63%) than the control group (149/175 women; 85%; P < .0001) and self-reported no difference in pain, but not in anxiety, levels during suction evacuation. CONCLUSION: Hypnotic interventions can be effective as an adjunct to pharmacologic management of acute pain during abortion.

Potential applications for alternative medicine to treat obesity in an aging population.

Obesity is a growing problem causing significant morbidity and mortality. The efficacy of conventional therapies is limited. Numerous alternative therapies are advocated for weight loss, including dietary modifications, hypnotherapy, and acupuncture. Many herbal medications and dietary supplements such as conjugated linoleic acids, chitosan, Garcinia cambogia, and Citrus aurantium, are also being used. Most have been tested in very limited trials. None have been evaluated to the extent they can be definitively recommended, nor have they been studied to ascertain the extent of potential hazards. Given the scope of the problem, and the potential risk to a vulnerable population, further research should be conducted to define the efficacy of these treatments, particularly for the elderly.

The role of learning in nocebo and placebo effects.

The nocebo effect consists in delivering verbal suggestions of negative outcomes so that the subject expects clinical worsening. Here we show that nocebo suggestions, in which expectation of pain increase is induced, are capable of producing both hyperalgesic and allodynic responses. By extending previous findings on the placebo effect, we investigated the role of learning in the nocebo effect by means of a conditioning procedure. To do this, verbal suggestions of pain increase were given to healthy volunteers before administration of either tactile or low-intensity painful electrical stimuli. This nocebo procedure was also carried out after a pre-conditioning session in which two different conditioned visual stimuli were associated to either pain or no-pain. Pain perception was assessed by means of a Numerical Rating Scale ranging from 0=tactile to 10=maximum imaginable pain. We found that verbal suggestions alone, without prior conditioning, turned tactile stimuli into pain as well as low-intensity painful stimuli into high-intensity pain. A conditioning procedure produced similar effects, without significant differences. Therefore, in contrast to placebo analgesia, whereby a conditioning procedure elicits larger effects compared to verbal suggestions alone, learning seems to be less important in nocebo hyperalgesia. Overall, these findings indicate that, by defining hyperalgesia as an increase in pain sensitivity and allodynia as the perception of pain in response to innocuous stimulation, nocebos can indeed produce both hyperalgesic and allodynic effects. These results also suggest that learning is not important in nocebo hyperalgesia compared to placebo analgesia.

Psychotherapy malpractice: new pitfalls.

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Currently, the goal of treatment for those with irritable bowel syndrome (IBS) is to improve the quality of life through a reduction in symptoms. While the majority of treatment approaches involve the use of traditional medicine, more and more patients seek out a non-drug approach to managing their symptoms. Current forms of non-drug psychologic or mind/body treatment for IBS include hypnotherapy, cognitive behavioral therapy and brief psychodynamic psychotherapy, all of which have been proven efficacious in clinical trials. We propose that incorporating the constructs of mindfulness and acceptance into a mind/body psychologic treatment of IBS may be of added benefit due to the focus on changing awareness and acceptance of one's own state which is a strong component of traditional and Eastern healing philosophies.


Negative reactions to placebo medications -- sometimes called "nocebo effects" -- are well documented. Similar responses can be induced in suggestible patients when providers use language that tends to increase patients' stress and negative expectations. Several common "language traps" are examined and alternative ways to communicate with patients are suggested.


AIM OF THE STUDY: Increasing demand of herbal products acquired in stores and markets, as well as medicinal plants collected for personal consume are a known modern tendency. In this study, the ethnomedicinal use of Tilia americana var. mexicana inflorescences as sedative and anxiolytic is reinforced by examining inflorescences used by communities of the State of Michoacan, Mexico. MATERIALS AND METHODS: Experimental mouse models were used to evaluate the sodium pentobarbital (SP)-induced hypnosis potentiation, ambulatory activity, as well as sedative and anti-anxiety responses via oral administration of the aqueous extracts (10, 30 and/or 100 and 300mg/kg). RESULTS: All samples tested produced a lengthening in the time of SP. Moreover, a significant attenuation in the anxiety-response in the plus-maze test and a diminution in both the head dipping response and ambulatory activity were observed resembling the response to diazepam (0.3mg/kg, i.p.). TLC profiles of the samples showed similar pattern of flavonoids; HPLC-DAD exhibited peaks identified as derived of quercetin and kaempferol that may be responsible for the plant activity. CONCLUSIONS: Our results demonstrate that inflorescences of stored specimens obtained from popular local markets show the same effectiveness with regard to sedative and anxiolytic-like actions than freshly collected samples. Since no toxicity was observed through this route of administration (up to 5000mg/kg); therefore, it suggests that this plant is secure when used as tranquilizer in folk medicine.


OBJECTIVE: Provide an orientation to psychoneuroimmunology, a rationale for including assessments of immune function in intervention studies of pediatric chronic illness, review the current literature, and provide recommendations for future research. METHODS: Using electronic searches and previous reviews, selected and reviewed published studies in which immunological changes related to psychological interventions were assessed in pediatric samples. RESULTS: Eight studies were identified and included in the review. These utilized a range of interventions (e.g., disclosure and hypnosis) and included a variety of pediatric samples (e.g., those with asthma, HIV infection, or lupus). CONCLUSIONS: Results suggest that psychological intervention can influence immune function in pediatric samples. Recommendations for advancing our knowledge by studying populations for whom the immune system plays an active role in disease
pathophysiology, measuring disease-relevant immune mediators, studying pediatric patients under times of stress, and focusing on interventions aimed at altering the stress system are provided.

[1474]
The future orientation of constructive memory: an evolutionary perspective on therapeutic hypnosis and brief psychotherapy.
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We explore a new distinction between the future, prospective memory system being investigated in current neuroscience and the past, retrospective memory system, which was the original theoretical foundation of therapeutic hypnosis, classical psychoanalysis, and psychotherapy. We then generalize a current evolutionary theory of sleep and dreaming, which focuses on the future, prospective memory system, to conceptualize a new evolutionary perspective on therapeutic hypnosis and brief psychotherapy. The implication of current neuroscience research is that activity-dependent gene expression and brain plasticity are the psychobiological basis of adaptive behavior, consciousness, and creativity in everyday life as well as psychotherapy. We summarize a case illustrating how this evolutionary perspective can be used to quickly resolve problems with past obstructive procrastination in school to facilitate current and future academic success.

[1475]
Relationship of headache-associated stressors and hypnosis therapy outcome in children: a retrospective chart review.
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This study examined potential psychosocial stressors of 30 children with headaches (mean age, 15 years), and the role of insight generation in the outcome of hypnosis therapy. The mean duration of headache occurrence was 3 years. All of the patients were instructed in how to use hypnosis-induced relaxation and headache-related imagery to improve their symptoms. Thirty-seven percent reported their headaches were associated with fixed stressors, defined as caused by events over which patients had no control, while 63% reported variable stressors, defined as modifiable by the patients' actions. Four patients were lost to follow-up. Overall, 96% (25/26) reported a decrease in headache frequency and/or intensity following use of hypnosis. However, prior to insight generation patients reporting fixed stressors were significantly less likely to improve than those reporting variable stressors (p = 0.018). Thus, insight generation may be more important for achievement of improvement in children whose headaches are associated with fixed stressors.

[1476]
Subconscious guided therapy with hypnosis.
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Two adolescents were hospitalized with incapacitating symptoms: one with headache, back pain, and an inability to walk, while the other had headache, musculoskeletal pain, nausea, and emesis. Medical evaluation did not reveal an etiology for the symptoms of either patient. Consultation with child psychiatry services yielded recommendations that both patients might benefit from counseling. Both demonstrated an immediate improvement of their symptoms with instruction in self-hypnosis-induced relaxation techniques that included favorite place imagery and progressive relaxation. The patients were told that while in hypnosis their “subconscious” might be able to characterize psychological issues that underlay their symptoms through the medium of automatic word processing (AWP). The information identified through AWP helped guide their subsequent therapy. Thus, instruction in self-hypnosis, as well as helping adolescents develop awareness about the cause of their debilitating symptoms can be associated with rapid improvement of their symptoms.

[1477]
Hypnotic treatment synergizes the psychological treatment of fibromyalgia: a pilot study.
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Centro de Aplicaciones Psicológicas, Valencia, Spain.

In this pilot study, we compare the efficacy for fibromyalgia of multimodal cognitive behavioral treatments, with and without hypnosis, with that of a purely pharmacological approach, with a multiple baseline N = 1 design. We randomly assigned six hospital patients to the three experimental conditions. The results suggest that psychological treatment produces greater symptom benefits than the conventional medical treatment only, especially when hypnosis is added. We
conclude that hypnosis may be a useful tool to help people with fibromyalgia manage their symptomatology.

[1478]
Hypnotic alteration of body image in the eating disordered.
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A driving force in an eating disorder like anorexia nervosa has been a distorted body image. The psychobiological dynamics of eating disorders have demonstrated significant hypnotic phenomena such as forms of dissociation, hallucination, time distortion and catalepsy, and therefore, pose hypnosis as a good fit for particular parts of treatment. Presented here are four hypnotic approaches designed to inspire the establishment of a reality based body image in the eating disordered individual. Conditional prerequisites for application of these interventions are described and case examples illustrate each approach. A discussion on some of the rationale for formulating these strategies is offered.

[1479]
Hypnotherapy for irritable bowel syndrome: the response of colonic and noncolonic symptoms.
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There is now good evidence that hypnotherapy benefits a substantial proportion of patients with irritable bowel syndrome and that improvement is maintained for many years. Most patients seen in secondary care with this condition also suffer from a wide range of noncolonic symptoms such as backache and lethargy, as well as a number of musculoskeletal, urological, and gynaecological problems. These features do not typically respond well to conventional medical treatment approaches, but fortunately, their intensity is often reduced by hypnosis. The mechanisms by which hypnosis mediates its benefit are not entirely clear, but there is evidence that, in addition to its psychological effects, it can modulate gastrointestinal physiology, alter the central processing of noxious stimuli, and even influence immune function.

[1480]
Psychological approaches in the treatment of chronic pain patients--when pills, scalpels, and needles are not enough.
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BACKGROUND: Chronic pain is a prevalent and costly problem that eludes adequate treatment. Persistent pain affects all domains of people's lives and in the absence of cure, success will greatly depend on adaptation to symptoms and self-management. METHOD: We reviewed the psychological models that have been used to conceptualize chronic pain- psychodynamic, behavioural (respondent and operant), and cognitive-behavioural. Treatments based on these models, including insight, external reinforcement, motivational interviewing, relaxation, meditation, biofeedback, guided imagery, and hypnosis are described. RESULTS: The cognitive-behavioural perspective has the greatest amount of research supports the effectiveness of this approach with chronic pain patients. Importantly, we differentiate the cognitive-behavioural perspective from cognitive and behavioural techniques and suggest that the perspective on the role of patients' beliefs, attitudes, and expectations in the maintenance and exacerbation of symptoms are more important than the specific techniques. The techniques are all geared to fostering self-control and self-management that will encourage a patient to replace their feelings of passivity, dependence, and hopelessness with activity, independence, and resourcefulness. CONCLUSIONS: Psychosocial and behavioural factors play a significant role in the experience, maintenance, and exacerbation of pain. Self-management is an important complement to biomedical approaches. Cognitive-behavioural therapy alone or within the context of an interdisciplinary pain rehabilitation program has the greatest empirical evidence for success. As none of the most commonly prescribed treatment regimens are sufficient to eliminate pain, a more realistic approach will likely combine pharmacological, physical, and psychological components tailored to each patient's needs.

[1481]
Chronic pain and the psychiatrist.
Tunks ER.
[abstract not found]

[1482]
Is high hypnotic suggestibility necessary for successful hypnotic pain intervention?
Hypnotic suggestibility is a trait-like, individual difference variable reflecting the general tendency to respond to hypnosis and hypnotic suggestions. Research with standardized measures of hypnotic suggestibility has demonstrated that there are substantial individual differences in this variable. Higher suggestibility has been found to be associated with greater relief from hypnotic pain interventions. Although individuals in the high suggestibility range show the strongest response to hypnotic analgesia, people of medium suggestibility, who represent approximately one-third of the population, also have been found to obtain significant relief from hypnosis. Thus, high hypnotic suggestibility is not necessary for successful hypnotic pain intervention. However, the available evidence does not support the efficacy of hypnotic pain interventions for people who fall in the low hypnotic suggestibility range. However, some studies suggest that these individuals may benefit from imaginative analgesia suggestions, or suggestions for pain reduction that are delivered while the person is not in hypnosis.

[1483]
Evaluation of dentists' perceived needs regarding treatment of the anxious patient.
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BACKGROUND: With regard to the management of dental anxiety in general dental practice, it has been considered that general dental practitioners (GDPs) are well placed to treat adults with mild forms of dental anxiety. However, little is known about the specific anxiety management techniques being used by GDPs in the UK. AIM: To determine the views and experiences of dental practitioners in their current use of anxiety management techniques, their undergraduate and post-graduation training in these techniques and future training needs. METHODS: A postal questionnaire was sent to a sample of GDPs working in the Midlands region (n = 750) in the UK. Dentists were randomly selected using lists provided by the primary care trusts for each locality. RESULTS: The response rate was 73% (n = 550). Of these, 90 were not included in the final analysis due to exclusion criteria set prior to questionnaire release. This left 460 questionnaires for analysis. Eighty-five percent of respondents agreed that dentists had a responsibility to help dentally anxious patients (n = 391). Dentists were asked their reasons for not using anxiety management techniques in practice. Psychological techniques, sedation (oral, inhalation, or intravenous) and hypnosis were reported as not having been used due to the paucity of time available in practice, a shortage of confidence in using these techniques and the lack of fees available under the NHS regulations. Also, 91% reported feeling stressed when treating anxious patients. When asked about the quality of teaching they had received (undergraduate and postgraduate), 65% considered that the teaching was less than adequate in the use of psychological methods, whereas 44% indicated that they would be interested in further training in psychological methods if financial support was available. CONCLUSION: The need for further training in managing the dentally anxious patient is supported by dentists' lack of confidence and inadequate training in treating such patients, as determined from the results of a postal questionnaire to UK GDPs.

[1484]
Is hypnotherapy effective for pediatric functional abdominal pain or IBS?
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[abstract not found]

[1485]
A systematic review of randomized controlled trials examining psychological interventions for needle-related procedural pain and distress in children and adolescents: an abbreviated cochrane review.
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OBJECTIVE: To report the results of a systematic review of randomized controlled trials (RCTs) of psychological interventions for children and adolescents undergoing needle-related procedures. METHODS: A variety of cognitive-behavioral psychological interventions for managing procedural pain and distress in children and adolescents between 2 and 19 years of age were examined. Outcome measures included pain and distress as assessed by self-report, observer report, behavioral/observational measures, and physiological correlates. RESULTS: Twenty-eight trials met the criteria for inclusion in the review and provided the data necessary for pooling the results. Together, the trials included 1,039 participants in treatment conditions and 951 in control conditions. The largest effect sizes for treatment improvement over control conditions were found for distraction, combined cognitive-behavioral interventions, and hypnosis, with promising but limited evidence for several other psychological interventions. CONCLUSIONS: Recommendations for conducting future RCTs are provided, and particular attention to the quality of trial design and reporting is highlighted.
Therapeutic management of psychodermatological disorders.
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BACKGROUND: The skin and the brain interact through psychoneuroimmunoendocrine mechanisms and through behaviors that can strongly influence the initiation or flaring of skin disorders. OBJECTIVE: To obtain knowledge of these factors to assist in designing treatment plans for specific skin disorders. METHODS: Psychocutaneous disease literature for the past 80 years was reviewed. RESULTS/CONCLUSION: Therapeutic options include standard psychotropic drugs and alternative herbs and supplements, the placebo effect, suggestion, cognitive-behavioral methods, biofeedback, and hypnosis. When simple measures fail to produce the desired results, combinations of drugs or addition of nonpharmacological therapies may produce better results. Psychophysiological skin disorders may respond well to nonpharmacological therapies that counteract stress, supplemented when indicated by anxiolytic or antidepressant drugs. Treatment of primary psychiatric disorders that affect the skin often results in improvement of the associated skin disorders. Psychiatric disorders secondary to skin disorders may also require treatment.

Clarification of the memory artefact in the assessment of suggestibility.
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AIM: The Gudjonsson Suggestibility Scale (GSS) assesses suggestibility by asking respondents to recall a short story, followed by exposure to leading questions and pressure to change their responses. Suggestibility, as assessed by the GSS, appears to be elevated in people with intellectual disabilities (ID). This has been shown to reflect to some extent the fact that people with ID have poor recall of the story; however, there are discrepancies in this relationship. The aim of the present study was to investigate whether a closer match between memory and suggestibility would be found using a measure of recognition memory rather than free recall. METHOD: Three modifications to the procedure were presented to users of a learning disabilities day service. In all three experiments, a measure of forced-choice recognition memory was built into the suggestibility test. In experiments 1 and 2, the GSS was presented using either divided presentation (splitting the story into two halves, with memory and suggestibility tests after each half) or multiple presentation (the story was presented three times before presentation of the memory and suggestibility tests). Participants were tested twice, once with the standard version of the test and once with one of the modified versions. In experiment 3, an alternative suggestibility scale (ASS3) was created, based on real events in a learning disabilities day service. The ASS3 was presented to one group of participants who had been present at the events, and a second group who attended a different day service, to whom the events were unfamiliar. RESULTS: As observed previously, suggestibility was not closely related to free recall performance: recall was increased equally by all three manipulations, but they produced, respectively, no effect, a modest effect and a large effect on suggestibility. However, the effects on suggestibility were closely related to performance on the forced-choice recognition memory task: divided presentation of the GSS2 had no effect on either of these measures; multiple presentation of the GSS2 produced a modest increase in recognition memory and a modest decrease in suggestibility; and replacing the GSS with the ASS3 produced a large increase in recognition memory and a large decrease in suggestibility. IMPLICATIONS: The results support earlier findings that the GSS is likely to overestimate how suggestible a person will be in relation to a personally significant event. This reflects poor recognition memory for the material being tested, rather than increased suggestibility per se. People with ID may in fact be relatively non-suggestible for well-remembered events, which would include personally significant events, particularly those witnessed recently.

Secondary diurnal enuresis treated with hypnosis: a time-series design.
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A case of secondary diurnal enuresis (SDE) after a car accident was treated with hypnosis by means of the Hypnotic Trauma Narrative, an instrument created by the authors for use with children who have been exposed to traumatic events and develop either classic symptoms of posttraumatic stress disorder or manifest other psychosomatic symptoms. An ABAB time-series design with multiple replications was employed to measure the relationship of the hypnotic treatment to the dependent measure: episodes of diurnal incontinence. The findings indicated a statistically significant relationship between the degree of change from phase to phase and the treatment. Hypnosis with the Hypnotic Trauma Narrative was deemed efficacious as a method for the treatment of secondary diurnal enuresis. The patient was symptom-free at follow-up 6 months later.
Several papers of interest for researchers and clinicians have recently appeared in scientific medical literature evaluating hypnosis’ efficacy in managing patients' distress and pain during surgical procedures. In this article, following a pilot study, the authors describe the context and standardized induction procedures that they are using in an ongoing clinical trial evaluating the effect of hypnosis on acute pain and anxiety during termination of pregnancy.

Participants were administered a standard tape-recorded version of the Harvard Group Scale of Hypnotic Susceptibility, Form A (HGSHS:A) and then a modified version of the HGSHS:A response booklet that asked each participant to report which suggested behaviors they performed during the procedures. These response booklets were altered to include 3 additional suggestions not offered during the hypnotic procedures. Half the participants were administered the questions in the response booklet in the standard format ("I performed the suggested behavior" versus "I did not perform the suggested behavior"). The remaining participants were offered a third alternative to each question ("I do not remember this occurring"). As predicted, participants offered the 3rd alternative were significantly less likely to report performing actions that were never suggested during the procedures. Further, these participants reported performing fewer suggested behaviors (i.e., reported passing fewer of the true Harvard items) than participants in the standard 2-alternative condition.

This study examined the effects of hypnosis on both pain and reexperiencing of trauma in burn patients. Forty-four patients hospitalized for burn care were randomly assigned to either hypnotherapy or a control group. Direct and indirect hypnotic suggestions were used to reduce pain and reexperiencing of trauma. All patients received routine burn care. Pain reports were quantified by using a self-report numeric rating scale ranging from 0 to 5. The number of recalled vivid, troubling events of the trauma in 24-hour intervals was used for rating the reexperiencing of trauma. The hypnotherapy group showed significantly lower pain ratings than the control group and reported a significant reduction in pain from baseline. There was a significant reduction in trauma reexperience scores in the hypnotherapy group but not the control group. The findings support the efficacy of hypnotherapy in the management of both pain and reexperiencing of trauma in burn patients.

Previous studies on the role of hypnotizability in postural control indicate that the body sway of subjects with high or low hypnotizability to hypnosis is differentially modulated by eye closure. The aim of this study was to investigate whether hypnotizability also modulates the postural response to electrical vestibular stimulation and to head rotation in nonhypnotized individuals. The center of pressure (CoP) displacements were monitored in highs and lows standing on a stabilometric platform with closed eyes during basal conditions and electrical vestibular stimulation in 3 different positions of the head. Results showed that the CoP stimulus-locked displacements as well as the CoP mean position, area, and mean velocity were similar in highs and lows, but only in lows did the head position modulate the mean velocity. This finding might reflect a difference in sensory-motor integration between the 2 groups.

The findings support the efficacy of hypnotherapy in the management of both pain and reexperiencing of trauma in burn patients.
Data from 26 participants in a case series of hypnotic analgesia for chronic pain were examined to determine the long-term effects of hypnosis treatment. Statistically significant decreases in average daily pain intensity, relative to pretreatment values, were observed at posttreatment and at 3- and 9-month follow-up but not at 6- or 12-month follow-up. The percent of participants who reported clinically meaningful decreases in pain were 27%, 19%, 19%, and 23%, at the 3-, 6-, 9-, and 12-month follow-up points, respectively. Moreover, at 12-months posttreatment, 81% of the sample reported that they still used the self-hypnosis skills learned in treatment. Overall, the results indicate that about 20% of the sample obtained substantial and lasting long-term reductions in average daily pain following hypnosis treatment and that many more continue to use self-hypnosis up to 12 months following treatment.


The effects of implementation intentions and posthypnotic suggestion were investigated in 2 studies. In Experiment 1, participants with high levels of hypnotic suggestibility were instructed to take placebo pills as part of an investigation of how to best enhance compliance with medical instruction. In Experiment 2, participants with high, medium, and low levels of hypnotic suggestibility were asked to run in place, take their pulse rate before, and send an e-mail report to the experimenter each day. Experiment 1 revealed enhanced adherence as a function of both implementation intentions and posthypnotic suggestion. Experiment 2 failed to find any significant main effects but found a significant interaction between suggestibility and the effects of posthypnotic suggestion. Posthypnotic suggestion enhanced adherence among high suggestible participants but lowered it among low suggestibles.


Conventional suggestion-based tests of hypnotizability have been criticized because they confound hypnotic and nonhypnotic suggestibility. One way around this might be to measure hypnotizability in terms of differences in suggestibility before and after hypnotic induction. However, analysis of data from a 1966 classic study by Hilgard and Tart confirms that difference scores are subject to statistical and methodological problems. Simple verbal hypnotic depth scales are presented as a useful alternative. They correlate well with conventional suggestion-based measures and enable the presence of hypnosis to be indexed independently of formal hypnotic induction procedures. Criticisms of depth scales are addressed, and normative data for the Long Stanford Scale of hypnotic depth are presented, along with data lending empirical support for the construct validity of depth reports.


Improvement in functional neuroimaging allows researchers to disentangle the brain mechanisms involved in the pain modulation encountered during hypnosis. It has been shown that the anterior cingulate and prefrontal cortices are important in the modulation of incoming sensory and noxious input. Moreover, clinical studies in certain types of surgery (e.g., thyroidectomy, mastectomy, and plastic surgery) have demonstrated that hypnosis may avoid general anesthesia.


The purpose of this study was to determine whether hypnosis would be more effective in helping smokers quit than...
standard behavioral counseling when both interventions are combined with nicotine patches (NP). A total of 286 current smokers were enrolled in a randomized controlled smoking cessation trial at the San Francisco Veterans Affairs Medical Center. Participants in both treatment conditions were seen for two 60-min sessions, and received three follow-up phone calls and 2 months of NP. At 6 months, 29% of the hypnosis group reported 7-day point-prevalence abstinence compared with 23% of the behavioral counseling group (relative risk [RR] = 1.27; 95% confidence interval, CI 0.84-1.92). Based on biochemical or proxy confirmation, 26% of the participants in the hypnosis group were abstinent at 6 months compared with 18% of the behavioral group (RR = 1.44; 95% CI 0.91-2.30). At 12 months, the self-reported 7-day point-prevalence quit rate was 24% for the hypnosis group and 16% for the behavioral group (RR = 1.47; 95% CI 0.90-2.40). Based on biochemical or proxy confirmation, 20% of the participants in the hypnosis group were abstinent at 12 months compared with 14% of the behavioral group (RR = 1.40; 95% CI 0.81-2.42). Among participants with a history of depression, hypnosis yielded significantly higher validated point-prevalence quit rates at 6 and 12 months than standard treatment. It was concluded that hypnosis combined with NP compares favorably with standard behavioral counseling in generating long-term quit rates.

[1498]
[The ABC of smoking cessation]
[Article in German]
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The professional support increased chances of success for smoking cessation and is an important goal in health politics. A short advice by pharmacists can make a significant contribution to this. This article describes tobacco dependence and the "stages of change-model". Afterwards we explain possible therapies: besides cognitive-behavioral intervention, different forms of medical treatment, e.g. nicotin replacement therapy, bupropion and varenicline, will be discussed.

[1499]
Use of complementary and alternative medical therapy by patients with primary brain tumors.
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The use of complementary and alternative medicine (CAM) is increasing. CAM includes mind-body interventions, biologically based therapies, energy therapies, and body-based methods. Primary brain tumors arise within the brain and have a poor prognosis when malignant. Even patients with benign tumors suffer neurologic and systemic symptoms as a result of the tumor or its treatment. CAM is used by 30% of brain tumor patients, who often do not report its use to their physician. Herbal medicines may affect the metabolism of prescribed medications or produce adverse effects that may be attributed to other causes. In patients with systemic cancer, mind-body modalities such as meditation and relaxation therapy have been shown to be helpful in reducing anxiety and pain; acupuncture and hypnotherapy may also reduce both pain and nausea. Recent preclinical studies have reported that ginseng, Scutellaria baicalensis, and Angelica sinensis may promote apoptosis of tumor cells or exercise antiangiogenic effects. Further studies are needed to evaluate the impact of CAM on symptom control or tumor growth in this vulnerable patient population.

[1500]
The effect of hypnosis on systemic and rectal mucosal measures of inflammation in ulcerative colitis.
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OBJECTIVES: Hypnotherapy is effective in several diseases with a psychosomatic component. Our aim was to study the effects of one session of hypnosis on the systemic and rectal mucosal inflammatory responses in patients with active ulcerative colitis (UC). METHODS: In total, 17 patients with active UC underwent a 50-min session of gut-focused hypnotherapy. Before and after each procedure, the systemic inflammatory response was assessed by serum interleukin (IL)-6 and IL-13 concentrations, tumor necrosis factor-alpha (TNF-alpha) and IL-6 production by lipopolysaccharide (LPS)-stimulated whole blood, leukocyte count, natural killer (NK) cell number, platelet activation, and platelet-leukocyte aggregate formation. Rectal inflammation was assessed by mucosal release of substance P (SP), histamine, IL-13 and TNF-alpha, reactive oxygen metabolite production, and mucosal blood flow. Eight patients with active UC underwent a control protocol. RESULTS: Hypnosis decreased pulse by a median 7 beats per minute (bpm) (P= 0.0008); it also reduced the median serum IL-6 concentration by 53% (P= 0.001), but had no effect on the other systemic variables assessed. Hypnosis reduced rectal mucosal release of SP by a median 81% (P= 0.001), histamine by 35% (P= 0.002) and IL-13 by 53% (P= 0.003), and also, blood flow by 18% (P= 0.0004). The control protocol had no effect on any of the variables assessed. CONCLUSIONS: Hypnosis reduced several components of the systemic and mucosal inflammatory response in active ulcerative colitis toward levels found previously in the inactive disease. Some of these effects may
contribute to the anecdotally reported benefits of hypnotherapy and provide a rationale for controlled trials of hypnotherapy in UC.


Two experiments investigated the effects of sadness, anger, and happiness on 4- to 6-year-old children's memory and suggestibility concerning story events. In Experiment 1, children were presented with 3 interactive stories on a video monitor. The stories included protagonists who wanted to give the child a prize. After each story, the child completed a task to try to win the prize. The outcome of the child's effort was manipulated in order to elicit sadness, anger, or happiness. Children's emotions did not affect story recall, but children were more vulnerable to misleading questions about the stories when sad than when angry or happy. In Experiment 2, a story was presented and emotions were elicited using an autobiographical recall task. Children responded to misleading questions and then recalled the story for a different interviewer. Again, children's emotions did not affect the amount of story information recalled correctly, but sad children incorporated more information from misleading questions during recall than did angry or happy children. Sad children's greater suggestibility is discussed in terms of the differing problem-solving strategies associated with discrete emotions. (PsycINFO Database Record (c) 2008 APA, all rights reserved).


Functional gastrointestinal disorders including functional dyspepsia are highly prevalent. Their clinical course is benign without disease-associated mortality. On the other hand, the impact can be substantial for the affected patients with regard to the decrease of quality of life, and for society with regard to the economical implications. Functional dyspepsia is a clinical syndrome with various underlying pathophysiology. Thus, it is understandable that there is no single cure available. Reassurance by ruling out relevant differential diagnoses, explanation, and general advice with regard to the underlying causes and dietary and life-style measures are important components of the management of these patients. Well established medical treatments include Helicobacter pylori eradication, acid inhibitory agents and prokinetics. The overall gain over placebo ranges from less than 5% for H. pylori eradication to 15% for antisecretory agents and prokinetics. Thus, even considering a substantial proportion of patients with spontaneous remissions (usually addressed as placebo response in clinical trials), there are 20 to 40% of patients who do not respond properly to these measures. In these patients, other treatment modalities need to be considered. These second- or third-line measures include herbal medicines and psychotropic agents. Some of the herbal preparations have been well studied in controlled clinical trials with sufficient scientific evidence to assume efficacy. Psychotropic drugs on the other hand have, as yet, not been specifically tested in functional dyspepsia. Medications such as clonidine, buspirone or octreotide can be helpful in few selected patients. However, a very careful assessment of potential risks and benefits needs to be undertaken on a case-by-case basis. Other evidence-based measures include psychological interventions such as psychotherapy and hypnotherapy. Copyright 2008 S. Karger AG, Basel.


Pain is a complex phenomenon, influenced by many individual and external factors, and may be experienced differently with age. The detrimental health and social effects of chronic pain are well known. Age-related disorders, such as dementia, may interfere with the communication of pain. Health care provider bias and cultural expectations also may be barriers to the recognition and management of pain in the elderly. A multidisciplinary and multimodal approach in older adults is essential to effective assessment and management. Behavioral approaches to pain should be considered and incorporated into treatment where appropriate.

This controlled and patient blinded study tested the effect of hypnosis on persistent idiopathic orofacial pain (PIOP) in terms of clinical and psychosocial findings. Forty-one PIOP were randomized to active hypnotic intervention or simple relaxation as control for five individual 1-h sessions. Primary outcome was average pain intensity scored three times daily in a pain diary using visual analogue scale (VAS). Secondary outcome measures were pain quality assessed by McGill pain questionnaire (MPQ), psychological symptoms assessed by symptom check list (SCL), quality of life assessed by SF36, sleep quality, and consumption of analgesics. Data were compared between groups before and after treatment using ANOVA models and paired t-tests. The change in VAS pain scores from baseline to the last treatment (t4) was (33.1±7.4%) in the hypnosis group and (3.2±5.4%) in the control group (P<0.03). In the hypnosis group, highly hypnotic susceptible patients had greater decreases in VAS pain scores (55.0±12.3%) when compared to less susceptible patients (17.9±6.7%) (P<0.02). After the last treatment there were also statistically significant differences between groups in perceived pain area (MPQ) and the use of weak analgesics (P<0.03). There were no statistically significant changes in SCL or SF36 scores from baseline to t4. In conclusion, hypnosis seems to offer clinically relevant pain relief in PIOP, particularly in highly susceptible patients. However, stress coping skills and unresolved psychological problems need to be included in a comprehensive management plan in order also to address psychological symptoms and quality of life.

[1505]
Behavioral and complementary approaches for the treatment of irritable bowel syndrome.
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Irritable bowel syndrome (IBS) is one of the most common conditions seen in primary care settings. Despite this, there is no consensus as to the pathogenesis of this disorder or a consistently effective therapeutic regimen for many patients. This has encouraged the use of various alternative therapies from behavioral or complementary medicine. This review will address the evidence for alternative therapies, including the following: cognitive behavior therapy, hypnosis, elimination diets based on food antibody testing, nutrition supplements (such as fiber, probiotics, and prebiotics), and, finally, peppermint, l-glutamine, zinc, and cromolyn sodium. The review also explores the evidence for and the therapeutic ramifications of the hypothesis that increased intestinal permeability underlies the symptoms of IBS in many patients, and how a therapeutic plan that addresses nutrition, elimination diets, and nutrition supplements may be useful in restoring the integrity of the gut immune barrier.

[1506]
[Pain management]
[Article in French]
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Analgesia and hypnosis are two separate entities and should result in distinct assessment and management for patients admitted to an intensive care unit (ICU). Those patients are exposed to moderate-severe pain and they are likely to remember pain as one bothersome experience. Any cause of patient discomfort is sought with the priority given to pain and adequate analgesia. Assessing pain must rely upon the use of clinical scoring systems, although these instruments are still underused in ICU. Satisfactory levels of analgesia by continuous infusion of opioids during times without stimulation do not guarantee against pain reactions during procedures (endotracheal suctioning, mobilization, wound care and dressing change, removal of chest tube). The concept of multimodal analgesia should be extended to the ICU since it may reduce the opioids requirements. In order to facilitate systematic pain and sedation assessment and to adjust daily drug dosages accordingly, it appears crucial to promote educational programs and elaboration of protocols/guidelines in ICU. Protocols/guidelines may help caregivers to rationally use sedatives and opioids and possibly reduce mechanical ventilation and ICU length of stay.

[1507]
Mind-body interventions: applications in neurology.
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OBJECTIVE: Half of the adults in the United States use complementary and alternative medicine with mind-body therapy being the most commonly used form. Neurology patients often turn to their physicians for insight into the effectiveness of the therapies and resources to integrate them into their care. The objective of this article is to give a clinical overview of...
mind-body interventions and their applications in neurology. METHODS: Medline and PsychInfo were searched on mind-body therapies and neurologic disease search terms for clinical trials and reviews and published evidence was graded. RESULTS: Meditation, relaxation, and breathing techniques, yoga, tai chi, and qigong, hypnosis, and biofeedback are described. Mind-body therapy application to general pain, back and neck pain, carpal tunnel syndrome, headaches, fibromyalgia, multiple sclerosis, epilepsy, muscular dysfunction, stroke, aging, Parkinson disease, stroke, and attention deficit-hyperactivity disorder are reviewed. CONCLUSIONS: There are several conditions where the evidence for mind-body therapies is quite strong such as migraine headache. Mind-body therapies for other neurology applications have limited evidence due mostly to small clinical trials and inadequate control groups.

[1508]
Psychotherapy in patients with fibromyalgia syndrome
[Article in German]
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BACKGROUND: A guideline for the treatment and diagnostic procedures in fibromyalgia syndrome (FMS) was developed in cooperation with 10 German medical and psychological associations and 2 patient self-help groups. METHODS: A systematic literature search including all controlled studies of evaluated multicomponent therapy was performed in the Cochrane Collaboration Reviews (1993-12/2006), Medline (1980-12/2006), PsychInfo (1966-12/2006) and Scopus (1980-12/2006). Levels of evidence were assigned according to the classification system of the Oxford Centre for Evidence-Based Medicine. Grading of the strengths of recommendations was done according to the German program for disease management guidelines. Standardized procedures to reach a consensus on recommendations were used. RESULTS: Cognitive and operant behavioral therapy is strongly recommended (grade A). Guided imagery/hypnotherapy and written emotional disclosure are recommended (grade B). CONCLUSIONS: Psychotherapeutic programs tailored to FMS subgroups should be developed and tested.

[1509]
Potential role of mind-body therapies in cancer survivorship.
Cancer. 2008 Jun 1;112(11 Suppl):2607-16.
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The use of complementary and alternative medicine (CAM) by cancer survivors is high, particularly among those with psychosocial distress, poor quality of life, culturally based health beliefs, and those who experience health disparities in the mainstream healthcare system. As the number of cancer survivors continues to increase, so does the diversity of the survivorship population, making it increasingly important to understand and address the CAM culture in different survivor groups. Given the known communication barriers between cancer patients and their physicians regarding CAM, it would be useful for oncology providers to have a platform from which to discuss CAM-related issues. It is proposed that mind-body therapies with some basis in evidence could provide such a platform and also serve as a possible means of connecting cancer survivors to psychosocial supportive services. This article reviews a few mind-body therapies that may have particular relevance to cancer survivors, such as hypnosis and meditation practices. A theoretical foundation by which such therapies provide benefit is presented, with particular emphasis on self-regulation.

[1510]
Methods of reducing discomfort during colonoscopy.
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In the United States sedation for colonoscopy is usual practice. Unsedated colonoscopy is limited to a small proportion of unescorted patients and those with a personal preference for no sedation. Over 80% of patients who accept the option of as-needed sedation can complete colonoscopy without sedation. Colonoscopy in these unsedated patients is performed with techniques similar to those used in the sedated patients. Uncontrolled observations indicate willingness to repeat colonoscopy amongst these patients was correlated significantly with low discomfort score during the examination. Methods reported to minimize patient discomfort or enhance cecal intubation during sedated or unsedated colonoscopy included use of pediatric colonoscope, variable stiffness colonoscope, gastroscope, and inhalation of nitrous oxide or insufflation of carbon dioxide, hypnosis, music, audio distraction, or simply allowing the patients to participate in administration of the medication. Research focusing on confirming the efficacy of a simple inexpensive nonmedication dependent method for minimizing discomfort will likely improve the outcome of care and more importantly will ensure compliance with future surveillance in patients accepting the unsedated option.
Death and hypnosis: two remarkable cases.
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The Journal of the American Medical Association reported The First Recorded Death in Hypnosis in its issue of October 27, 1894. Ninety-nine years later, on September 23, 1993 a healthy 24-year old mother of two was found dead at home, fully clothed and draped across the foot of one of her children's bed, 5 hours after volunteering as a subject for a stage hypnosis show. The suggestion given to terminate the trance had been that when the hypnotist said, "Goodnight", several subjects would feel 10,000 volts of electricity through the seat of their chairs. Unknown to the hypnotist, she had been phobic about electricity ever since a childhood shock, and would not even change a light bulb or plug in a cord. The coroner's verdict was death by natural causes.

Hypnosis, hypnotizability and treatment.
Sutcher H.

There is broad agreement that a phenomenon we call "hypnosis" exists. However, there is no generally accepted definition of hypnosis. A brief historical overview of the use of hypnosis in healing practices demonstrates how it evolved willy-nilly, and like Topsy, "just growed" into its current status in medicine, psychiatry, psychology and dentistry. The mechanisms underlying hypnosis and how hypnosis differs from other cognitive states are almost totally unknown. With the exceptions of suggestions for pain control, current concepts of high, medium, low or non-hypnotizability do not reliably predict clinical outcomes for most medical, psychiatric or dental disorders. We do know that it is relatively easy to reliably evaluate hypnotizability, but other than choosing volunteers or subjects who will or will not exhibit traditional hypnotic phenomena, we rarely know what to do with that evaluation with actual clinical patients. Four case studies, representative of many others, chosen retrospectively from a practice that spans 45 years, illustrate how traditional or modern hypnotizability assessment is irrelevant in the clinical setting. Although the four patients differed obviously and vastly in hypnotizability, they all benefited from the use of hypnosis.

The (dramatic) process of psychotherapy.
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Psychotherapy can be conceived as a symbolic drama in which patients can experientially realize their capacity to change. Methods derived from hypnosis can empower therapy without the use of formal trance. A case conducted by Milton Erickson is presented and deconstructed in order to illuminate Erickson's therapeutic patterns. A model is offered for adding drama to therapy, and the model is placed into a larger model of choice points in psychotherapy.

What we can do with hypnosis: a brief note.
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This article summarizes the search for efficacious hypnotic treatments. Eighteen major meta analyses were reviewed and the results evaluated using the criteria of Chambless & Hollon, (1998). The analysis identified 32 disorders for which hypnosis can be considered a possible treatment, 5 for which it seems effective, and 2 for which it appears specific. If clinicians use hypnosis in the situations where it seems to be efficacious, and systematically expand the list of conditions where it will be helpful, the results will be even more impressive for the 100th anniversary of this Journal.

50 years of hypnosis in medicine and clinical health psychology: a synthesis of cultural crosscurrents.
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In 2008, the 50th anniversary of ASCH, hypnosis is used increasingly for healthcare applications in hospitals, clinics, and psychotherapy practice. A substantial body of research demonstrates the efficacy of hypnosis as part of the integrative treatment of many conditions that traditional medicine has found difficult to treat (e.g., Pinnell & Covino, 2000; Elkins,
Jensen, & Patterson, 2007). The practice of hypnosis in healthcare has been altered and centrally influenced by the rapid growth of technological medicine in the 1950's, the AIDS epidemic and development of psychoneuroimmunology, revolutionary developments in genetics and neuroimaging technology, and the progression from alternative to integrative medicine. We have come to develop more detailed expectations about the beneficial effects of hypnotic interventions for health problems. We have also come to know that in these populations hypnosis can lead not only to reduced anxiety but also specifically altered physiological parameters.

[1516]
50th anniversary of the American Journal of Clinical Hypnosis.
Lankton S.

[abstract not found]

[1517]
Fibromyalgia pain and its modulation by hypnotic and non-hypnotic suggestion: An fMRI analysis.
Derbyshire SW, Whalley MG, Oakley DA.
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The neuropsychological status of pain conditions such as fibromyalgia, commonly categorized as 'psychosomatic' or 'functional' disorders, remains controversial. Activation of brain structures dependent upon subjective alterations of fibromyalgia pain experience could provide an insight into the underlying neuropsychological processes. Suggestion following a hypnotic induction can readily modulate the subjective experience of pain. It is unclear whether suggestion without hypnosis is equally effective. To explore these and related questions, suggestions following a hypnotic induction and the same suggestions without a hypnotic induction were used during functional magnetic resonance imaging to increase and decrease the subjective experience of fibromyalgia pain. Suggestion in both conditions resulted in significant changes in reported pain experience, although patients claimed significantly more control over their pain and reported greater pain reduction when hypnotised. Activation of the midbrain, cerebellum, thalamus, and midcingulate, primary and secondary sensory, inferior parietal, insula and prefrontal cortices correlated with reported changes in pain with hypnotic and non-hypnotic suggestion. These activations were of greater magnitude, however, when suggestions followed a hypnotic induction in the cerebellum, anterior midcingulate cortex, anterior and posterior insula and the inferior parietal cortex. Our results thus provide evidence for the greater efficacy of suggestion following a hypnotic induction. They also indicate direct involvement of a network of areas widely associated with the pain 'neuromatrix' in fibromyalgia pain experience. These findings extend beyond the general proposal of a neural network for pain by providing direct evidence that regions involved in pain experience are actively involved in the generation of fibromyalgia pain.

[1518]
Rehabilitation for ankle fractures in adults.
Lin CW, Moseley AM, Refshauge KM.
Discipline of Physiotherapy, University of Sydney, PO Box 170, Lidcombe, New South Wales, Australia, 1825.

BACKGROUND: Rehabilitation after ankle fracture can begin soon after the fracture has been treated by the use of different types of immobilisation which allow early commencement of weight-bearing or exercise. Alternatively, rehabilitation may start following the period of immobilisation, with physical or manual therapies. OBJECTIVES: To compare the effectiveness of rehabilitation interventions following ankle fracture in adults. SEARCH STRATEGY: We searched two Specialised Registers of The Cochrane Collaboration, electronic databases (including MEDLINE, EMBASE and CINAHL), reference lists of included studies and relevant systematic reviews, and clinical trials registers to September 2007. SELECTION CRITERIA: Randomised and quasi-randomised controlled trials with adults undergoing any interventions for rehabilitation after ankle fracture were considered. The primary outcome was activity limitation. Secondary outcomes included impairments and adverse events. DATA COLLECTION AND ANALYSIS: Two reviewers independently screened search results, assessed methodological quality, and extracted data. Relative risk and 95% confidence intervals (95% CI) were calculated for dichotomous variables, and weighted or standardised mean difference and 95% CI were calculated for continuous variables. A meta-analysis was performed where appropriate. MAIN RESULTS: Thirty-one studies were included. Clinical and statistical heterogeneity prevented meta-analyses in most instances. After surgical fixation, commencing exercise in a removable brace or splint significantly improved activity limitation, pain and ankle range of motion, but also led to a higher rate of adverse events. Early commencement of weight-bearing during the immobilisation period improved ankle range of motion after surgical fixation. Where it was possible to avoid ankle range of motion after surgical fixation, the use of no immobilisation compared to cast immobilisation also improved ankle range of motion. After the immobilisation period, manual therapy was beneficial in increasing ankle range of motion. There was no evidence of effect for electrotherapy, hypnosis, or stretching. AUTHORS' CONCLUSIONS: There is limited evidence supporting the use of a removable type of immobilisation and exercise during the immobilisation period, early commencement of weight-bearing during the immobilisation period, and no immobilisation after surgical fixation of ankle fracture. There is also limited evidence for manual therapy after the immobilisation period.
Because of the potential increased risk, the patient's ability to comply with the use of a removable type of immobilisation and exercise is essential. More clinical trials that are well-designed and adequately-powered are required to strengthen current evidence.

[1519]
[What Do we Really Know About How Lance-Corporal Adolf Hitler Was Treated by German Military Psychiatry?]
[Article in German]
Theiss-Abendroth P.

OBJECTIVE This paper inquires the hypothesis that Hitler's rise to power was in part due to a hypnotic therapy he had undergone when being treated for hysterical blindness at an army hospital in the town of Pasewalk in October 1918 - as recent contributions have argued. Edmund Forster, his psychiatrist at that time, is supposed to have suggested to Hitler that he would be ordained as Germany's redeemer in times of defeat, thus causing a profound change in his patient's personality. METHODS Following three lines of argument, this paper examines if such an assumption can be made plausible. Firstly, it takes a close look at the main historical source which is the novel THE EYEWITNESS, written in German language by the Czech-Jewish author Ernst Weiss. Then it asks if Forster is likely to have chosen hypnosis as a method of treatment. Finally, it exploits the work of the even lesser known author Alexander Moritz Frey who happened to serve close to Hitler as a medical orderly in WW I, thus trying to validate whether or not Hitler really underwent a change of personality in autumn 1918. RESULTS Although the eventualities of such a hypnotic treatment or a profound change in Hitler's behaviour in that time cannot be disproved, both seem highly unlikely. CONCLUSIONS One should altogether abandon the notion of Hitler having suffered a permanent change of personality in 1918, be it due to psychiatric treatment or to psychological trauma itself.

[1520]
Book review: yapko, Michael d. Hypnosis and treating depression: applications in clinical practice.
Wickramasekera I 2nd.
Jesse Brown VA Medical Center & University of Illinois Medical School Chicago, IL, USA.
[abstract not found]

[1521]
Hypnotic approaches for alopecia areata.
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Alopecia areata (AA) is an autoimmune disease leading to loss of scalp hairs. The disease seems triggered by stress. Data on the possibility of using hypnotherapy in the treatment of AA are very limited. Twenty-eight patients with extensive AA, all refractory to previous conventional treatment, were treated with hypnosis at the Academic Hospital UZ Brussel, Brussels, Belgium. This paper describes in detail the authors' hypnotherapeutic approach combining symptom-oriented suggestions with suggestions to improve self-esteem. Twelve out of 21 patients, including 4 with total loss of scalp hair, presented a significant hair growth. All patients presented a significant decrease in scores for anxiety and depression. Although the exact mechanism of hypnotic interventions has not been elucidated, the authors' results demonstrate that hypnotic interventions may ameliorate the clinical outcome of patients with AA and may improve their psychological well-being.

[1522]
Treatment of inflammatory bowel disease: a role for hypnotherapy?
Miller V, Whorwell PJ.
University of Manchester, United Kingdom.

Fifteen patients with severe or very severe inflammatory bowel disease on corticosteroids but not responding to medication received 12 sessions of "gut-focused hypnotherapy" and were followed up for a mean duration of 5.4 years with disease severity being graded as remission, mild, moderate, severe, or very severe. Two patients (13.4%) failed to respond and required surgery. At follow-up for the remaining 13 patients, 4 (26.6%) were in complete remission, 8 (53.3%) had mild severity, and 1 (6.7%) was moderately severe. Quality of life became good or excellent in 12 (79.9%). Corticosteroid requirements dramatically declined with 60% of patients stopping them completely and not requiring any during follow-up. Hypnotherapy appears to be a promising adjunctive treatment for inflammatory bowel disease and has steroid sparing effects. Controlled trials to clearly define its role in this disease area are justified.
Health professionals' beliefs and attitudes toward hypnosis may make them reluctant to use it or even to foster misapplications and iatrogenic uses of hypnosis. The Valencia Scale on Attitudes and Beliefs toward Hypnosis-Therapist version (VSABH-T) is a specific instrument to evaluate therapists' attitudes and beliefs. The aims of this study are to evaluate the 8-factor structure of the VSABH-T proposed from a confirmatory perspective. The sample comprised 1,661 licensed psychologists who are members of the Spanish Psychological Association for the initial test and 787 for the retest. Results confirmed the 8-factor structure obtained in a previous exploratory study, namely: Fear, Memory, Help, Control, Collaboration, Interest, Magic, and Marginal. The scale also showed adequate psychometric properties, including good internal consistency and test-retest reliability.

Hypnotherapy in the treatment of chronic combat-related PTSD patients suffering from insomnia: a randomized, zolpidem-controlled clinical trial.
Abramowitz EG, Barak Y, Ben-Avi I, Knobler HY.
Israel Defense Forces, Mental Health Department, Israel. eitanmd@zahav.net.il

This study evaluated the benefits of add-on hypnotherapy in patients with chronic PTSD. Thirty-two PTSD patients treated by SSRI antidepressants and supportive psychotherapy were randomized to 2 groups: 15 patients in the first group received Zolpidem 10 mg nightly for 14 nights, and 17 patients in the hypnotherapy group were treated by symptom-oriented hypnotherapy, twice-a-week 1.5-hour sessions for 2 weeks. All patients completed the Stanford Hypnotic Susceptibility Scale, Form C, Beck Depression Inventory, Impact of Event Scale, and Visual Subjective Sleep Quality Questionnaire before and after treatment. There was a significant main effect of the hypnotherapy treatment with PTSD symptoms as measured by the Posttraumatic Disorder Scale. This effect was preserved at follow-up 1 month later. Additional benefits for the hypnotherapy group were decreases in intrusion and avoidance reactions and improvement in all sleep variables assessed.

Heart-rate control during pain and suggestions of analgesia without deliberate induction of hypnosis.
Santarcangelo EL, Carli G, Migliorini S, Fontani G, Varanini M, Balocchi R.
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Heart rate and heart-rate variability (HRV) were studied through a set of different methods in high (highs) and low hypnotizable subjects (lows) not receiving any deliberate hypnotic induction in basal conditions (simple relaxation) and during nociceptive-pressor stimulation with and without suggestions of analgesia. ANOVA did not reveal any difference between highs and lows for heart rate and for the HRV indexes extracted from the series of the interbeat intervals (RR) of the ECG in the frequency (spectral analysis) and time domain (standard deviation, Poincare plot) in both basal and stimulation conditions. Factors possibly accounting for the results and likely responsible for an underestimation of group differences are discussed.

Early drug distribution: a generally neglected aspect of pharmacokinetics of particular relevance to intravenously administered anesthetic agents.
Henthorn TK, Krejcie TC, Avram MJ.
Department of Anesthesiology, University of Colorado Health Sciences Center, Denver, Colorado, USA.

There is considerable variability in response to intravenously administered anesthetic drugs (e.g., hypnotics, benzodiazepines, and narcotics) that have a rapid onset of effect (such as hypnosis, anxiolysis, and analgesia) and a low margin of safety (because of cardiovascular or respiratory depression, etc.). Although the onset of effect for these drugs occurs seconds to minutes after injection, traditional pharmacokinetic models are based on blood samples that are first obtained after drug effects have peaked. As a result, many studies have failed to provide a pharmacokinetic rationale for dosage adjustments of these drugs.

Meditation with yoga, group therapy with hypnosis, and psychoeducation for long-term depressed mood: a randomized pilot trial.
This randomized pilot study investigated the effects of meditation with yoga (and psychoeducation) versus group therapy with hypnosis (and psychoeducation) versus psychoeducation alone on diagnostic status and symptom levels among 46 individuals with long-term depressive disorders. Results indicate that significantly more meditation group participants experienced a remission than did controls at 9-month follow-up. Eight hypnosis group participants also experienced a remission, but the difference from controls was not statistically significant. Three control participants, but no meditation or hypnosis participants, developed a new depressive episode during the study, though this difference did not reach statistical significance in any case. Although all groups reported some reduction in symptom levels, they did not differ significantly in that outcome. Overall, these results suggest that these two interventions show promise for treating low- to moderate-level depression. Copyright 2008 Wiley Periodicals, Inc.

[1528]
Adjuvant auricular electroacupuncture and autogenic training in rheumatoid arthritis: a randomized controlled trial. Auricular acupuncture and autogenic training in rheumatoid arthritis
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BACKGROUND: In contrast to psychological interventions the usefulness of acupuncture as an adjuvant therapy in rheumatoid arthritis (RA) has not yet been demonstrated. OBJECTIVE: The efficacy of auricular electroacupuncture (EA) was directly compared with autogenic training (AT). METHODS: Patients with RA (n = 44) were randomized into EA or AT groups. EA and lessons in AT were performed once weekly for 6 weeks. Primary outcome measures were the mean weekly pain intensity and the disease activity score 28 (DAS 28); secondary outcome measures were the use of pain medication, the pain disability index (PDI), the clinical global impression (CGI) and pro-inflammatory cytokine levels, which were assessed during the study period and 3 months after the end of treatment. RESULTS: At the end of the treatment and at 3-month follow-up a clinically meaningful and statistically significant improvement (p < 0.05) could be observed in all outcome parameters and both groups. In contrast to the AT group, the onset of these effects in the EA group could already be observed after the 2nd treatment week. In the 4th treatment week the EA group reported significantly less pain than the AT group (p = 0.040). After the end of treatment (7th week) the EA group assessed their outcome as significantly more improved than the AT group (p = 0.035). The erythrocyte sedimentation rate in the EA group was significantly reduced (p = 0.010), and the serum concentration of tumor necrosis factor-alpha was significantly increased compared to the AT group (p = 0.020). CONCLUSIONS: The adjuvant use of both EA and AT in the treatment of RA resulted in significant short- and long-term treatment effects. The treatment effects of auricular EA were more pronounced. Copyright (c) 2008 S. Karger AG, Basel.

[1529]
[Group hypnosis treatment of drug addicts][Article in Hebrew]
Kaminsky D, Rosca P, Budowski D, Korin Y, Yakhnich L.
Department for the Treatment of Substance Abuse, Israel Ministry of Health.

BACKGROUND: Approximately 10% of opiate drug addicts on methadone maintenance treatment (MMT) continue using heroin and additional street drugs simultaneously. They constitute the most difficult to treat population in MMT centers as they present extremely difficult and negative behaviors as well as medical problems. Medical hypnosis is a proven effective medical intervention to alleviate pain, lessen anxieties, as well as being partially effective in treating nicotine addiction. One of its advantages is the ability to bypass the critical conscious drug addict's reluctance to the treatment process. AIMS: This article aims to describe a group hypnosis treatment of drug addicts and to present a clinical description of its outcomes and effectiveness in lessening simultaneous use of heroin and other street drugs among addicts on an MMT program. METHODS: The article describes the group hypnosis therapy for 10 methadone patients who continued street drug use, in two 5 patient groups consisting of 10 weekly sessions. Urine drug tests were checked at 3 points of time, before intervention, half a year after termination of hypnosis, and two years after. Follow-up also consisted of a semi-structured interview immediately after treatment termination to evaluate changes in emotional and functional status. RESULTS: One patient did not complete treatment due to a major operation, the remaining 9 (90%) completed treatment. All patients (100%) completely stopped use of any street drugs and results remained stable for 6 months after end of treatment. Two years after end of intervention, 7 out of the 9 (78%) remained clean of use of heroin, but 2 (22%) returned to partial use; 6 (67%) of the patients returned to partial use of benzodiazepines, none (0%) showed permanent use of marijuana or cocaine. CONCLUSIONS: As this article is a clinical description of an intervention on a small selected group of patients, the initial and partial results point to the possible potential of group hypnosis in the reduction of street drug use. Additional controlled research is needed in order to check the effectiveness of such an intervention on this specific group of patients.
Practical hypnotic interventions during invasive cancer diagnosis and treatment
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Novel advances in biotechnology and medical imaging techniques have enabled an evolution toward earlier diagnosis and treatment by way of "minimally invasive" surgical techniques performed on the conscious patient without the use of general anesthesia. Although the risks of diagnostic and therapeutic interventions have been reduced with these approaches, patients still face many physical and psychologic challenges. Several randomized controlled trials have shown that hypnotic techniques are effective in reducing pain, anxiety, and other symptoms: in reducing procedure time; and in stabilizing vital signs. The benefits of adjunctive hypnotic treatments come at no additional cost. Patients, health care providers, hospitals, and insurance companies are advised to take advantage of hypnotic techniques.

William Gregory was descended from a long line of academics. Although he graduated in medicine, he had earlier determined on a career in Chemistry but more particularly to succeed Professor Thomas Charles Hope in the Edinburgh Chair in that discipline. At various times during the 1830s and 1840s he studied Chemistry at Giessen in Germany under Professor Justus Liebig and was closely associated with him over the succeeding years, translating and editing in all seven of his books. Gregory taught initially in London, at the Edinburgh Extra-mural School, in Dublin, at the Andersonian University, Glasgow and as Mediciner and Professor of Chemistry in Aberdeen. In 1844 he was appointed to the Chair of Chemistry in Edinburgh and remained in this post until his death in 1858. Shortly after he graduated he joined the Edinburgh Phrenological Society (he was initially its Secretary and later President) and took a particularly active role in the meetings of this Society and in the Aberdeen Phrenological Society. He was also interested in the phenomena of Mesmerism and Mesmero-Phrenology, despite the agitation and scorn of many of his academic colleagues both in Aberdeen and in Edinburgh.

Hypnosis as a treatment of chronic widespread pain in general practice: a randomized controlled pilot trial.
BMC Musculoskelet Disord. 2008 Sep 18;9:124.
Grøndahl JR, Rosvold EO.
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BACKGROUND: Hypnosis treatment in general practice is a rather new concept. This pilot study was performed to evaluate the effect of a standardized hypnosis treatment used in general practice for patients with chronic widespread pain (CWP). METHODS: The study was designed as a randomized control group-controlled study. Sixteen patients were randomized into a treatment group or a control group, each constituting eight patients. Seven patients in the treatment group completed the schedule. After the control period, five of the patients in the control group also received treatment, making a total of 12 patients having completed the treatment sessions. The intervention group went through a standardized hypnosis treatment with ten consecutive therapeutic sessions once a week, each lasting for about 30 minutes, focusing on ego-strengthening, relaxation, releasing muscular tension and increasing self-efficacy. A questionnaire was developed in order to calibrate the symptoms before and after the 10 weeks period, and the results were interpreted into a scale from 0 to 100, increasing numbers representing increasing suffering. Data were analyzed by means of T-tests. RESULTS: The treatment group improved from their symptoms, (change from 62.5 to 55.4), while the control group deteriorated, (change from 37.2 to 45.1), (p = 0.045). The 12 patients who completed the treatment showed a mean improvement from 51.5 to 41.6. (p = 0.046). One year later the corresponding result was 41.3, indicating a persisting improvement. CONCLUSION: The study indicates that hypnosis treatment may have a positive effect on pain and quality of life for patients with chronic muscular pain. Considering the limited number of patients, more studies should be conducted to confirm the results. TRIAL REGISTRATION: The study was registered in ClinicalTrials.gov and released 27.08.07 Reg nr NCT00521807 Approval Number: 05032001.

Evans S, Tsao JC, Zeltzer LK.
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Pain may cause physical and emotional distress in children experiencing medical procedures. Complementary and alternative medical (CAM) therapies have become increasingly important in treating children's painful conditions, yet it is still unclear whether CAM has a place in acute pediatric pain analgesia. This review aims to present an overview of the available published evidence. Most research has examined the efficacy of hypnosis, which has emerged as useful in alleviating acute pain associated with a number of medical procedures. Music therapy also has gained some attention and for the most part shows promise in the pediatric acute pain setting. Acupuncture, laughter therapy, and massage also may prove beneficial. Despite the promise of many of these modalities, we conclude that further empirical research into safety and efficacy using well-designed studies and large samples is required before guidelines can be established. In addition, further work is needed in standardizing interventions, creating treatment manuals, and determining treatment efficacy as a function of the child's development, his or her individual characteristics, and the type of procedure the child is undergoing.

[1534]
A population-based study of prevalence of complementary methods use by cancer survivors: a report from the American Cancer Society's studies of cancer survivors.
Cancer. 2008 Sep 1;113(5):1048-57.
Gansler T, Kaw C, Crammer C, Smith T.
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BACKGROUND: The use of complementary methods (CMs) is widespread and increasing in the United States. Most literature on CM use among cancer survivors focuses on the treatment period, whereas only a few studies address use further along the cancer continuum. METHODS: This study analyzed the prevalence and the medical and demographic associations of CM use among cancer survivors surveyed 10 to 24 months after diagnosis. The study's sample-4139 survivors of 1 of 10 adult cancers was selected from stratified random samples provided by statewide cancer registries and surveyed by mail and telephone. Three logistic regression models examined associations between medical and demographic factors and CM use among survivors of sex-specific and non-sex-specific cancers. RESULTS: Of the 19 CMs included in the survey, the CMs most frequently reported were prayer/spiritual practice (61.4%), relaxation (44.3%), faith/spiritual healing (42.4%), nutritional supplements/vitamins (40.1%), meditation (15%), religious counseling (11.3%), massage (11.2%), and support groups (9.7%). Among these 19 CMs, the least prevalent were hypnosis (0.4%), biofeedback therapy (1.0%), and acupuncture/acupressure (1.2%). Survivors more likely to use CMs were female, younger, white, higher income, and more educated. CONCLUSIONS: This study provides information regarding prevalence and medical-demographic determinants of CM use reported by a large, population-based sample of survivors of 10 cancers surveyed 10 to 24 months after diagnosis. These findings may be used by clinicians and researchers to inform their decisions regarding which CMs to address in practice and research. (c) 2008 American Cancer Society.

[1535]
Functional dyspepsia: At least recommend hypnotherapy.
Sharma RL.
[abstract not found]

[1536]
Hemihypnosis, hypnosis, and the importance of knowing right from trend.
Raz A, Schwartzman D, Guindi D.
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The hypnosis community may be buying into a neuroscience fad concerning brain laterality. Accustomed to deflating folkloric claims about hypnosis, researchers and practitioners of hypnosis have come to appreciate the danger of lingering myths and the importance of dispelling legends. Tales are ubiquitous, however, and claims relating to the left or right hemispheres require both context and substantive data. Here we sketch the gist of brain laterality findings and their relevance to the hypnosis community.

[1537]
Novel activity-dependent approaches to therapeutic hypnosis and psychotherapy: the general waking trance.
Rossi E, Erickson-Klein R, Rossi K.
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This paper presents a highly edited version of a videotape made in 1980 by Marion Moore, M.D., showing Milton H. Erickson and Moore demonstrating novel, activity-dependent approaches to hand-levitation and therapeutic hypnosis on their subject, Ernest Rossi. Erickson's naturalistic and utilization approach is described in his very direct and surprising
induction in a trance challenged patient. These novel, and surprising inductions are examples of how Erickson was prescient in developing activity-dependent approaches to therapeutic hypnosis and psychotherapy several generations before modern neuroscience documented the activity-dependent molecular-genomic mechanisms of memory, learning, and behavior change. Erickson describes a case where he utilized what he called, "The General Waking Trance" when he "dared" not use an obvious hypnotic induction. It is proposed that the states of intense mental absorption and response attentiveness that are facilitated by the general waking trance are functionally related to the three conditions neuroscientists have identified as novelty, enrichment, and exercise (both mental and physical), which can turn on activity-dependent gene expression and activity-dependent brain plasticity, that are the molecular-genomic and neural basis of memory, learning, consciousness, and behavior change. We recommend that the next step in investigating the efficacy of therapeutic hypnosis will be in partnering with neuroscientists to explore the possibilities and limitations of utilizing the activity-dependent approaches to hypnotic induction and the general waking trance in facilitating activity-dependent gene expression and brain plasticity.

[1538]
The neurophysiology of pain perception and hypnotic analgesia: implications for clinical practice.
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Although there remains much to be learned, a great deal is now known about the neurophysiological processes involved in the experience of pain. Research confirms that there is no single focal "center" in the brain responsible for the experience of pain. Rather, pain is the end product of a number of integrated networks that involve activity at multiple cortical and subcortical sites. Our current knowledge about the neurophysiological mechanisms of pain has important implications for understanding the mechanisms underlying the effects of hypnotic analgesia treatments, as well as for improving clinical practice. This article is written for the clinician who uses hypnotic interventions for pain management. It begins with an overview of what is known about the neurophysiological basis of pain and hypnotic analgesia, and then discusses how clinicians can use this knowledge for (1) organizing the types of suggestions that can be used when providing hypnotic treatment, and (2) maximizing the efficacy of hypnotic interventions in clients presenting with pain problems.

[1539]
Hypnosis as sole anesthesia for major surgeries: historical & contemporary perspectives.
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Hypnosis is a well validated treatment for acute and chronic pain (Montgomery, DuHamel, & Redd, 2000). It has been found capable of reducing inflammation, altering blood flow, and producing beneficial effects when hypnotic suggestions are provided during and prior to surgery (Frederick, 2001) and other painful medical procedures. This paper quotes extensively from historical examples of the use of hypnosis (mesmerism) as the sole anesthesia for major surgeries in the 1800's. These historic examples by themselves provide powerful documentation of the ability of the mind to influence the body, but they are then followed by a review of contemporary literature and controlled research on the use in hypnosis in relation to surgery and prior to medical procedures.

[1540]
Hypnotizability-related integration of perception and action.
Carli G, Manzoni D, Santarcangelo EL.
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Hypnotizability is a cognitive trait able to modulate many behavioural/physiological processes and associated with peculiar functional characteristics of the frontal executive system. This review summarizes experimental results on hypnotizability-related differences in sensorimotor integration at a reflex and an integrated level (postural control) and suggests possible interpretations based on morpho-functional considerations. In particular, hypnotizability-related differences in spinal motoneurones excitability are described, and the role of attention and imagery in maintaining a stable upright stance when sensory information is reduced or altered and when attention is absorbed in cognitive tasks is discussed as a function of hypnotic susceptibility. The projections from prefrontal cortex to spinal motoneurones and the balance between the activation of the right and left cortical hemisphere are considered responsible for the hypnotizability-related modulation of reflex responses, while the differences in postural control between subjects with high (highs) and low (lows) hypnotic susceptibility are considered a possible consequence of the activity of the locus coeruleus, which is also involved in attention, and of the cerebellum, which might be responsible for different internal models of postural control. We suggest a highly pervasive role of hypnotic susceptibility in human behaviour through the modulation of the integration of perception and action, which could be relevant for neurorehabilitative treatments and for the adaptation to
PURPOSE OF REVIEW: This review will highlight the recent functional magnetic resonance imaging, positron emission tomogram scan and connectivity studies in anesthesia and analgesia. RECENT FINDINGS: In regional cerebral blood flow (rCBF) studies with isoflurane and sevoflurane, there is a consistent pattern of rise in rCBF in the anterior cingulate cortex and insula while the thalamus, lingual cortex and cerebellum show a decrease in rCBF, in a dose range of 0.2-1 minimum alveolar concentration. Even 0.25 minimum alveolar concentration causes a predominant decrease of rCBF in the cortical regions and increase of rCBF in the subcortical regions. This minimum alveolar concentration level primarily affects the association cortices. Thalamus and thalamo-cortical pathways seem to be linked to the hypnotic effects of anesthesia and deep sedation. Connectivity studies also confirm this. The electroencephalogram equivalent of this appears to be a transition from 'alpha' wave activity to 'delta' wave activity. Anterior cingulate cortex, S1 and S2 are the regions consistently activated in acute pain. Remifentanil infusion in acute pain decreases the activation in pain perception regions while activating the pain modulation regions. In chronic pain states, prefrontal cortex and insula are activated whereas there is a decrease in activity in the thalamus. SUMMARY: Slowly, a pattern of neuronal activity reflecting hypnosis, analgesia, amnesia and reflex suppression seems to be emerging giving us a better insight into the central nervous system effects of anesthesia.

PURPOSE OF REVIEW: The purpose of this article is to provide an empirically informed but clinically oriented review of conventional, alternative, and rehabilitation therapies for chronic or recurrent abdominal pain in children. RECENT FINDINGS: Cognitive-behavioral procedures, including contingency management training for parents and self-regulation training for children, emerge as a probably efficacious treatment. Symptom-based pharmacological therapies can be helpful, but may be best reserved for children with severe symptoms that have not responded to simple management. Biofeedback therapy, hypnotherapy, and peppermint oil are among the most promising alternative therapies. For patients with severe functional disability, an interdisciplinary rehabilitation approach may be warranted. SUMMARY: As more is learned about different therapies for recurrent abdominal pain, an integrative approach that blends these interventions may become increasingly common.

Three articles of special interest to the hypnosis community recently appeared in the general scientific and medical literatures. The first paper is a thoughtful review of the clinical applications of hypnosis in pediatric medicine and burn care. The second article reports the findings of a randomized, controlled trial of hypnosis for burn-wound care, carried out at the University of Washington Medical School. The third article describes an innovative EEG laboratory case study tracking the cortex functional connectivity of a highly hypnotizable subject across various baseline and experimental conditions. These three articles are sturdy examples of how hypnosis illuminates (and is illuminated by) medical and psychological science.
This case report evaluates virtual reality hypnosis (VRH) in treating chronic neuropathic pain in a patient with a 5-year history of failed treatments. The patient participated in a 6-month trial of VRH, and her pain ratings of intensity and unpleasantness dropped on average 36% and 33%, respectively, over the course of 33 sessions. In addition, she reported both no pain and a reduction of pain for an average of 3.86 and 12.21 hours, respectively, after treatment sessions throughout the course of the VRH treatment. These reductions and the duration of treatment effects following VRH treatment were superior to those following a trial of standard hypnosis (non-VR) treatment. However, the pain reductions with VRH did not persist over long periods of time. The findings support the potential of VRH treatment for helping individuals with refractory chronic pain conditions.

[1546]
Deja-vu in the laboratory: a behavioral and experiential comparison of posthypnotic amnesia and posthypnotic familiarity.
O'Connor AR, Barnier AJ, Cox RE.
University of Leeds, United Kingdom. aoconnor@wustl.edu

This experiment aimed to create a laboratory analogue of déjâ vu. During hypnosis, 1 group of high hypnotizables completed a puzzle game and then received a posthypnotic amnesia suggestion to forget the game (PHA condition). Another group of highs were not given the game but received a posthypnotic familiarity suggestion that it would feel familiar (PHF condition). After hypnosis, all participants were given the game and described their reactions to it. Whereas 83% of participants in both conditions passed their respective suggestions, more in the PHF condition felt a sense of déjâ vu. An EAT inquiry revealed that they experienced sensory fascination and confusion about the source of familiarity, akin to everyday déjâ vu. These findings highlight the value of using hypnosis as a laboratory analogue of déjâ vu and provide a framework for investigating clinical manifestations of this phenomenon.

[1547]
The hypnotist in the hypnosis interaction: the impact of first impressions on perceptions of hypnotizability.
Whitehead S, Noller P, Sheehan PW.
University of Queensland, Brisbane, Australia. prgordon@bigpond.net.au

Hypnotist perceptions of participant cues and behaviors were investigated in an in-depth phenomenological study focusing on the influence of participant hypnotizability and hypnotist style. Two hypnotists and 124 participants (63 hypnotizable and 61 nonhypnotizable) took part. Two modifications of the Experiential Analysis Technique (EAT) were employed. One version involved a new modification where both hypnotist and participant took part together in the EAT session. The second version involved the EAT with the hypnotist alone as per an existing modification of the technique. Results extend earlier work pointing to the active, sentient nature of hypnotist involvement and highlight the particular importance of first impressions in shaping hypnotists' perceptions of participant hypnotizability. Results point to difficulties inherent in the hypnotist role. Findings overall support devoting increased attention to the nature of hypnotists' involvement and its implications for understanding relational processes in hypnosis.

[1548]
Israeli norms for the Harvard Group Scale of Hypnotic Susceptibility, Form A.
Lichtenberg P.
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A Hebrew version of the Harvard Group Scale of Hypnotic Susceptibility, Form A (HGSHS:A) was administered to 283 subjects. Results were compared with those obtained for the English original administered in the United States, Canada, and Australia, as well as with versions translated into Swedish, Romanian, Italian, Finnish, Danish, Spanish, and German. Mean scores were similar to the Canadian and Australian, though lower than the others. No differences were found between males and females. Pass rates for individual items were similar or lower than elsewhere. Item reliability was similar to the other non-English versions. The author speculates that the slightly lower scores obtained may be due to the larger group of subjects present in each session. Overall, the Israeli data are congruent with the reference samples.

[1549]
Paradoxical hypnotic experiences in escaping constraining dilemmas: a clinical example.
Tschugguel W, Hunter ME.
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Deciding how to choose from opposing options often seriously impacts people's final selections. Such constraining
options are frequently associated with feelings of hopelessness, depression, or chronic pain. As an example of such situations, a model is presented with material from a single case that utilized previous contradictory experiences in the treatment of a woman patient who suffers from chronic pelvic pain. The case summarizes how previous experiences, which have been paradoxical, can serve as substrates of behavioral change, which in turn can emerge in a way that allows the patient to integrate these experiences, personally and slowly, without conscious effort.

[1550]
The contributions of Ramon y Cajal and other Spanish authors to hypnosis.
Sala J, CardeÁEa E, Holgado MC, AÁªez C, PÁ©rez P, PeriÁªan R, Capafons A.
Joan XXIII University Hospital, Tarragona, Spain.

The authors review the most important Spanish contributions to hypnosis during the 19th and 20th centuries, with emphasis on the work of Santiago Ramon y Cajal, winner of the 1906 Nobel Prize in medicine. It is widely accepted that he provided a basic foundation for modern neurosciences with his work on neuronal staining and synaptic transmission. What is missing in most accounts of his work is his longstanding interest and work on hypnosis and anomalous phenomena. This article summarizes that lost legacy, discusses other Spanish hypnosis pioneers and gives a brief overview of current hypnosis activities in Spain.

[1551]
Hypnotizability-dependent modulation of postural control: effects of alteration of the visual and leg proprioceptive inputs.
San{	extsuperscript{t}aracangelo EL, Scattina E, Carli G, Macerata A, Manzoni D.
Department of Human Physiology, University of Pisa, Via San Zeno 31, 56127 Pisa, Italy. enricals@dfb.unipi.it

The aim of the experiment was to investigate whether the peculiar attentional/imagery abilities associated with susceptibility to hypnosis might make postural control in highly hypnotizable subjects (Highs) that are less vulnerable to sensory alteration than in individuals with low hypnotic susceptibility (Lows). The movement of the centre of pression (CoP) was monitored in Highs and Lows during alteration of the visual and leg proprioceptive input. The two groups responded differently to eyes closure and to an unstable support and the CoP movement was generally larger and faster in Highs. The stabilogram diffusion analysis indicated a different set point in Highs and Lows and suggested that the former are more independent of specific sensory information than the latter, likely due to different abilities in sensory re-weighting and/or peculiar internal models of postural control. The results are discussed within the general perspective of high pervasiveness of the hypnotizability trait, which modulates cognitive, autonomic and somatic functions.

[1552]
Applications of virtual reality for pain management in burn-injured patients.
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The pain associated with burn injuries is intense, unremitting and often exacerbated by anxiety, depression and other complicating patient factors. On top of this, modern burn care involves the repetitive performance - often on a daily basis for weeks to months - of painful and anxiety-provoking procedures that create additional treatment-related pain, such as wound care, dressing changes and rehabilitation activities. Pain management in burn patients is primarily achieved by potent pharmacologic analgesics (e.g., opioids), but is necessarily complemented by nonpharmacologic techniques, including distraction or hypnosis. Immersive virtual reality provides a particularly intense form of cognitive distraction during such brief, painful procedures, and has undergone preliminary study by several research groups treating burn patients over the past decade. Initial reports from these groups are consistent in suggesting that immersive virtual reality is logistically feasible, safe and effective in ameliorating the pain and anxiety experienced in various settings of post-burn pain. Furthermore, the technique appears applicable to a wide age range of patients and may be particularly well-adapted for use in children, one of the most challenging populations of burn victims to treat. However, confirmation and extension of these results in larger numbers of patients in various types of burn-related pain is necessary to more clearly define the specific benefits and limitations of virtual reality analgesia in the burn care setting.

[1553]
Randomized trial of a hypnosis intervention for treatment of hot flashes among breast cancer survivors.
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PURPOSE: Hot flashes are a significant problem for many breast cancer survivors. Hot flashes can cause discomfort, disrupted sleep, anxiety, and decreased quality of life. A well-tolerated and effective mind-body treatment for hot flashes would be of great value. On the basis of previous case studies, this study was developed to evaluate the effect of a
hypnosis intervention for hot flashes. PATIENTS AND METHODS: Sixty female breast cancer survivors with hot flashes were randomly assigned to receive hypnosis intervention (five weekly sessions) or no treatment. Eligible patients had to have a history of primary breast cancer without evidence of detectable disease and 14 or more weekly hot flashes for at least 1 month. The major outcome measure was a bivariate construct that represented hot flash frequency and hot flash score, which was analyzed by a classic sums and differences comparison. Secondary outcome measures were self-reports of interference of hot flashes on daily activities. RESULTS: Fifty-one randomly assigned women completed the study. By the end of the treatment period, hot flash scores (frequency x average severity) decreased 68% from baseline to end point in the hypnosis arm (P < .001). Significant improvements in self-reported anxiety, depression, interference of hot flashes on daily activities, and sleep were observed for patients who received the hypnosis intervention (P < .005) in comparison to the no treatment control group. CONCLUSION: Hypnosis appears to reduce perceived hot flashes in breast cancer survivors and may have additional benefits such as reduced anxiety and depression, and improved sleep.

[1554]
Breast cancer survivors and hot flashes: the search for nonhormonal treatments.
Avis NE.
[abstract not found]

[1555]
Complementary and alternative medicine for IBS in adults: mind-body interventions.
Kearney DJ, Brown-Chang J.
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Standard treatment for IBS focuses on the management or alleviation of the predominant gastrointestinal presenting symptoms, such as diarrhea or constipation, often using pharmacological therapy. For many patients, this approach is unsatisfactory, and patients frequently seek the advice of complementary and alternative medicine (CAM) practitioners in order to explore other treatment options. CAM practices include a broad range of modalities, and mind-body interventions hold particular promise as treatment modalities for IBS because psychological factors could have an important role in IBS symptomatology and quality of life. Psychological stressors are postulated to result in gastrointestinal symptoms through alteration of intestinal function mediated by the autonomic nervous system, hypothalamic-pituitary-adrenal axis and immune system. Hypnotherapy has the strongest supportive evidence as a beneficial mind-body intervention for IBS. Clinical studies of hypnotherapy have uniformly shown improvement of gastrointestinal symptoms, anxiety, depression and quality of life in patients with IBS. Mindfulness meditation remains unstudied for IBS, but is theoretically attractive as a stress-reduction technique. There is a suggestion that relaxation therapy or multimodal therapy (a combination of relaxation therapy, education and psychotherapy) is beneficial for IBS. The most generally accepted psychological mind-body intervention is cognitive behavioral therapy, and clinical trials support the beneficial effects of cognitive behavioral therapy in patients with IBS.

[1556]
Successful weight-loss maintenance in relation to method of weight loss.
Marinilli Pinto A, Gorin AA, Raynor HA, Tate DF, Fava JL, Wing RR.
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This study examined the relation between method of weight loss and long-term maintenance among successful weight losers enrolled in a weight-loss maintenance trial. Participants were 186 adults (mean age = 51.6 +/- 10.7 years, mean BMI = 28.6 +/- 4.7 kg/m^2) enrolled in the STOP Regain trial who had lost at least 10% of their body weight in the past 2 years using a very low-calorie diet (VLCD; n = 24), commercial program (n = 95), or self-guided approach (n = 67). Participants were randomized to a weight-maintenance intervention delivered face to face or over the internet or to a newsletter control condition, and followed for 18 months. At study entry, individuals who had used a VLCD had achieved a weight loss of 24% of their maximum weight within the past 2 years compared to 17% achieved by those who had used a commercial program or self-guided approach (P < 0.001). However, individuals who had used a VLCD regained significantly more weight than the other two groups and by 6 months, there were no significant differences in overall percent weight loss (i.e., initial weight loss and maintenance) between VLCD, commercial, and self-guided methods. In contrast, individuals who had used a self-guided approach maintained their weight losses from baseline through 18 months. The large initial weight losses achieved by individuals who had used a VLCD were not maintained over time, whereas individuals who had used a self-guided approach maintained their initial weight losses with the greatest success. The generalizability of these findings is limited by the sizeable weight losses achieved by study participants.

[1557]
Hypnosis in surgery.
Newman BY.

[abstract not found]

[1558]
[Comparative efficacy of non-medicamentous methods for the treatment of patients with neurotic anxiety disorders][Article in Russian]
Bozhko SA, Tiuvina NA.

The objective of this work was to compare effectiveness of non-medicamentous methods for the treatment of patients with neurotic anxiety disorders. The study included 193 patients at the age from 18 to 40 years. They were offered the following methods of non-medicamentous therapy: psychotherapy, phytotherapy, and reflexotherapy (acupuncture). Psychotherapy was the first-line treatment while phytotherapy and reflexotherapy were used as adjuvant modalities. Patients of the control group received psychotherapy alone. The study has demonstrated relatively high efficiency of non-medicamentous therapies in the patients with neurotic anxiety disorders. It was shown that psychotherapy not only provides a solid basis for application of the second treatment modality but can also be used as a self-contained method. The best results were obtained by combined treatment based on cognitive and behavioural psychotherapy, hypnosis, and autogenic training as its major components. Their most important outcomes were modification of basic skills, habit patterns, and mode of thinking as well as self-care education of the patients.

[1559]
Management of fibromyalgia syndrome--an interdisciplinary evidence-based guideline.
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The prevalence of fibromyalgia syndrome (FMS) of 1-2% in the general population associated with high disease-related costs and the conflicting data on treatment effectiveness had led to the development of evidence-based guidelines designed to provide patients and physicians guidance in selecting among the alternatives. Until now no evidence-based interdisciplinary (including patients) guideline for the management of FMS was available in Europe. Therefore a guideline for the management of fibromyalgia syndrome (FMS) was developed by 13 German medical and psychological associations and two patient self-help organisations. The task was coordinated by two German scientific umbrella organisations, the Association of the Scientific Medical Societies in Germany AWMF and the German Interdisciplinary Association of Pain Therapy DIVS. A systematic search of the literature including all controlled studies, systematic reviews and meta-analyses of pharmacological and non-pharmacological treatments of FMS was performed in the Cochrane Library (1993-12/2006), Medline (1980-12/2006), PsychInfo (1966-12/2006) and Scopus (1980-12/2006). Levels of evidence were assigned according to the classification system of the Oxford-Centre for Evidence Based Medicine. Grading of the strengths of recommendations was done according to the German program for disease management guidelines. Standardized procedures were used to reach a consensus on recommendations. The guideline was reviewed and finally approved by the boards of the societies involved and published online by the AWMF on april 25, 2008: http://www.uni-duesseldorf.de/AWMF/ll/041-004.htm. A short version of the guideline for patients is available as well: http://www.uni-duesseldorf.de/AWMF/ll/041-004p.htm. The following procedures in the management of fms were strongly recommended: information on diagnosis and therapeutic options and patient-centered communication, aerobic exercise, cognitive and operant behavioural therapy, multicomponent treatment and amitriptyline. Based on expert opinion, a stepwise FMS-management was proposed. Step 1 comprises confirming the diagnosis and patient education and treatment of physical or mental comorbidities or aerobic exercise or cognitive behavioural therapy or amitriptyline. Step 2 includes multicomponent treatment. Step 3 comprises no further treatment or self-management (aerobic exercise, stress management) and/or booster multicomponent therapy and/or pharmacological therapy ( duloxetine or fluoxetine or paroxetine or pregabalin or tramadol/aminocetophen) and/or psychotherapy (hypnotherapy or written emotional disclosure) and/or physical therapy (balneotherapy or whole body heat therapy) and/or complementary therapies (homeopathy or vegetarian diet). The choice of treatment options should be based on informed decision-making and respect of the patients' preferences.

[1560]
Use of complementary and alternative medicine (CAM) by Washington State hospices.
Bastyr University Research Center, 14500 Juanita Drive NE, Kenmore, WA 98028, USA. leilak@bastyr.edu

PURPOSE: To assess the use of complementary and alternative medicine in hospice care in the state of Washington. METHODS: Hospices offering inpatient and outpatient care in Washington State were surveyed by phone interview.
RESULTS: Response rate was 100%. Results indicated that 86% of Washington State hospices offered complementary and alternative services to their patients, most frequently massage (87%), music therapy (74%), energy healing (65%), aromatherapy (45%), guided imagery (45%), compassionate touch (42%), acupuncture (32%), pet therapy (22%), meditation (22%), reflexology (19%), and hypnotherapy (16%). Most hospices relied on volunteers with or without small donations to offer such services. CONCLUSIONS: Complementary and alternative therapies are widely used by Washington State hospices but not covered under hospice benefits. Extensive use of these therapies seems to warrant the inclusion of complementary and alternative providers as part of hospice staff, and reimbursement schedules need to be integrated into hospice care.

[1561]
Nonpharmacologic strategies for managing common chemotherapy adverse effects: a systematic review.
Lotfi-Jam K, Carey M, Jefford M, Schofield P, Charleson C, Aranda S.
Department of Nursing and Supportive Care Research, Peter MacCallum Cancer Centre, the University of Melbourne, Melbourne, Victoria 8006, Australia.

PURPOSE: Adverse effects of chemotherapy can be severe and can have a significant impact on a person's quality of life. With chemotherapy treatment increasingly administered in the ambulatory setting, there is a need for patients to be informed about effective self-care strategies to manage treatment adverse effects. Advice for patients needs to be based on evidence. This systematic review provides an overview of the intervention research in this area as well as an effectiveness review of nonpharmacologic (self-care) strategies evaluated in high-quality randomized controlled trials (RCTs). METHODS: An extensive literature search was conducted to identify RCTs relating to self-care strategies for reducing nausea/vomiting, constipation, diarrhea, fatigue, hair loss, or mucositis. Relevant studies published in peer-reviewed journals between 1980 and August 2007 were included. Study characteristics, results and methodologic quality were examined. High-quality RCTs were further analyzed to establish the effectiveness of specific self-care strategies.

RESULTS: The search identified 77 RCTs. Findings from RCTs of reasonable quality provide limited support for cognitive distraction, exercise, hypnosis, relaxation, and systematic desensitization to reduce nausea and vomiting, psycho-education for fatigue, and scalp cooling to reduce hair loss. CONCLUSION: Although some strategies seem promising, the quality of the RCTs was generally quite low, making it difficult to draw conclusions about the effectiveness of self-care strategies. Future studies require better design and reporting of methodologic issues to establish evidence-based self-care recommendations for people receiving chemotherapy.

[1562]
Reduced heart rate variability and vagal tone in anxiety: trait versus state, and the effects of autogenic training.
Miu AC, Heilman RM, Miclea M.
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This study investigated heart rate variability (HRV) in healthy volunteers that were selected for extreme scores of trait anxiety (TA), during two opposite psychophysiological conditions of mental stress, and relaxation induced by autogenic training. R-R intervals, HF and LF powers, and LF/HF ratios were derived from short-term electrocardiographic recordings made during mental stress and relaxation by autogenic training, with respiratory rate and skin conductance being controlled for in all the analyses. The main finding was that high TA was associated with reduced R-R intervals and HF power across conditions. In comparison to mental stress, autogenic training increased HRV and facilitated the vagal control of the heart. There were no significant effects of TA or the psychophysiological conditions on LF power, or LF/HF ratio. These results support the view that TA, which is an important risk factor for anxiety disorders and predictor of cardiovascular morbidity and mortality, is associated with autonomic dysfunction that seems likely to play a pathogenetic role in the long term.

[1563]
Study looks at laughing gas and dental patients.
[No authors listed]
[abstract not found]

[1564]
Cough. 2009 Jan 21;5:2.
Childhood habit cough treated with consultation by telephone: a case report.
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BACKGROUND: Childhood habit cough has been treated successfully by making suggestions that it can be stopped, desensitization techniques, use of distractors, provision of rewards, and self-hypnosis. All of these techniques have involved personal contact between a health care provider and a patient. CASE PRESENTATION: A 5-year-old with cystic fibrosis was diagnosed with habit cough following evaluation by a pediatric pulmonologist and otolaryngologist. An expert in the treatment of habit cough provided instruction by telephone to the patient's mother regarding use of hypnotic techniques in this setting, which was associated with resolution of the cough within a week. CONCLUSION: As this report describes a single patient, it is possible that his improvement was unrelated to the given advice. Therefore, it remains to be seen whether therapy by telephone for habit cough is applicable widely.

Psychogenic tremor: long-term prognosis in patients with electrophysiologically confirmed disease.
McKeon A, Ahlskog JE, Bower JH, Josephs KA, Matsumoto JY.
Department of Neurology, Mayo Clinic College of Medicine, Rochester, Minnesota, USA. mckean.andrew@mayo.edu

We describe the presenting features and long-term outcomes of patients with electrophysiologically-confirmed psychogenic tremor. Clinical information for all patients with psychogenic tremor confirmed by our Movement Disorders Neurophysiology Laboratory (2003-2004) was reviewed. A follow-up questionnaire was administered to all included patients in 2007. Psychogenic tremor was documented in 62 patients; 33 responded to the questionnaire (53%). Median onset-age was 50 years (range, 15-71); 23 were female (70%). Clinical certainty of psychogenic etiology was: definite, 8 (24%); probable, 16 (49%), and possible, 9 (27%). Characteristic electrodiagnostic features of psychogenic tremor were documented in all. All but two patients were ultimately given a definite diagnosis of psychogenic tremor; recommended psychiatric consultation was only done by 12 (36%). Twenty-one patients (64%) rated tremor disability as moderate or severe after a median follow-up of 5.1 years (range, 3.3-19). Improvement occurred spontaneously in 5 (15%), and after a specific intervention in 4 (12%), whereas 3 (9%) had mild but unchanged symptoms. The mean duration of symptoms, prior to diagnosis with psychogenic tremor, was significantly shorter for patients with mild or no tremor at follow-up (P = 0.037). Physiologically-confirmed psychogenic tremor carries a poor prognosis, with unremitting or worse tremor persisting 3-years after diagnosis in most.

Irritable bowel syndrome. Why pills more than skills?
Plotnikoff GA, Weisberg MB.
[abstract not found]

Patient-controlled intravenous analgesia as an alternative to epidural analgesia during labor: questioning the use of the short-acting opioid remifentanil. Survey in the French part of Belgium (Wallonia and Brussels).
Lavand'homme P, Roelants F.
Department of Anesthesiology, Cliniques Universitaires Saint Luc, Université Catholique de Louvain, Brussels, Belgium. Patricia.Lavandhomme@uclouvain.be

Childbirth ranks among the most intense experiences of acute pain. Neuraxial analgesia (i.e. epidural or combined spinal-epidural technique) is the most effective way to relieve that pain but it is contraindicated or impossible to perform for some parturients. We designed a survey of the current use of analgesic alternatives to epidural analgesia (EA) for labor pain, specifically the use of opioid patient-controlled intravenous analgesia (PCIA), in the French part of Belgium (Wallonia and Brussels). A questionnaire was mailed to the departmental chair of the hospitals with an obstetric unit, both in university and non-university centers (total of 53 centers). The questionnaire evaluated the availability of EA, the alternatives used in the treatment of habit cough provided instruction by telephone to the patient's mother regarding use of hypnotic techniques in this setting, which was associated with resolution of the cough within a week. CONCLUSION: As this report describes a single patient, it is possible that his improvement was unrelated to the given advice. Therefore, it remains to be seen whether therapy by telephone for habit cough is applicable widely.

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Asthma is one of the leading chronic diseases of our times, with millions of sufferers worldwide and can be defined as a chronic inflammatory disease of the airways that is temporarily reversible either spontaneously or by treatment. Although there are many allopathic treatments including bronchodilators and corticosteroids, which either focuses on long-term control or immediate relief, there is no single medication that is effective against both the inflammatory and bronchoconstrictive components of asthma. Therefore, many sufferers turn to alternative or complementary therapies, typically in conjunction with their regular allopathic medications. The current short communication briefly reviews the disease and investigates the types of alternative and complementary treatments available to asthma sufferers. It is concluded that therapies like acupuncture, yoga, Tai Chi Chuan and hypnosis are used by many asthma patients but it seems as if many patients do not communicate the use of such therapies to their medical practitioners. Results from documented research, however, show alternative therapies for the treatment of asthma have a role to play and are effective to alleviate symptoms. However, well-organized clinical trials are needed to document efficacy and delineate the specific types of interventions most appropriate for particular asthmatic populations.

This case study demonstrates the efficacy of hypnotic analgesia treatment for U.S. military veterans who are experiencing pain problems due to traumatic or combat-related SCIs.

This report described a phased-oriented treatment of complex trauma in four Chinese women. Two women were survivors of childhood sexual abuse, one was a rape victim, and the other was a battered spouse. A phased-oriented treatment that tailored to the needs of the clients was used. The treatment framework consisted of three phases: stabilization, trauma processing, and integration. Hypnotic techniques had been used in these phases as means for grounding and stabilization, for accessing the traumatic memories, and for consolidating the gains. Data from self-reports, observation and objective measures indicates a significant reduction in the trauma symptoms after treatment.
Idiopathic inflammatory bowel diseases (IBDs) significantly affect the quality of life of sufferers. Improved quality of life and patient symptom management may be achieved through integrating psychological/behavioral interventions with pharmacologic treatments. Here is our experience with hypnotherapy as an adjuvant management for an 18-year-old female with Crohn's Disease (CD) in remission (patient I) and a 24-year-old female with CD in active phase (patient II). The patients participated in 12 weekly one-hour sessions of hypnotherapy. Gut-directed, ego-strengthening, and post-hypnotic suggestions and immune-directed imaginations were used. After the hypnotherapy course, symptoms, psychological state, and quality of life improved in patient I, but not patient II (according to questionnaires). After a 6 month follow-up, symptoms and quality of life were the same as at the end of hypnotherapy sessions in both patients. The patients reported the greatest benefit of hypnotherapy was in helping them to cope better with their disease and also in improving their psychological state. Hypnotherapy may improve quality of life of IBD patients in remission and help them to cope better with their disease. Well-designed controlled clinical trials are needed in this field.

Experimental (Price & Barber, 1987) and neuroimaging studies (Rainville, Carrier, Hofbauer, Bushnell, & Duncan, 1999), suggest that it is the affective dimension of pain as processed in the anterior cingulate cortex (ACC) that is most associated with suffering and autonomic arousal. Conversely, pain related emotions (Rainville, Bao, & Chretien, 2005) and expectations (Koyama, McHaffie, Laurenti, & Coghill, 2005) modulate pain perception and associated pain affect. This paper presents both the scientific background and the general clinical steps involved in a practical hypnotic approach that uses emotion specific wording and the elicitation of prior positive experience to intervene at both the affective and sensory dimensions of pain. Such an approach enables patients to therapeutically use hypnosis to reduce their subjective distress even if they are not able to greatly reduce the sensation of pain. The utilization of positive state dependent learning (Rossi, 1986), following the advice of Milton Erickson to "discover their patterns of happiness" (Parsons-Fein, 2005) is emphasized.

OBJECTIVE: Our hypothesis was that hypnotic analgesia reduces pain and anxiety during electromyography (EMG). DESIGN: We performed a prospective randomized, controlled clinical trial at outpatient electrodiagnostic clinics in teaching hospitals. Just before EMG, 26 subjects were randomized to one of three 20-min audio programs: education about EMG (EDU) (n = 8); hypnotic induction without analgesic suggestion (n = 10); or hypnotic induction with analgesic suggestion (n = 8). The blinded electromyographer provided a posthypnotic suggestion at the start of EMG. After EMG, subjects rated worst and average pain and anxiety using visual analog scales. RESULTS: Mean values for the EDU, hypnotic induction without analgesic suggestion, and hypnotic induction with analgesic suggestion groups were not significantly different (mean +/- SD): worst pain 67 +/- 25, 42 +/- 18, and 49 +/- 30; average pain 35 +/- 26, 27 +/- 14, and 25 +/- 22; and anxiety 44 +/- 41, 42 +/- 23, and 22 +/- 24. When hypnosis groups were merged (n = 18) and compared with the EDU condition (n = 8), average and worst pain and anxiety were less for the hypnosis group than EDU, but this was statistically significant only for worst pain (hypothesis, 46 +/- 24 vs. EDU, 67 +/- 35; P = 0.049) with a 31% average reduction. CONCLUSIONS: A short hypnotic induction seems to reduce worst pain during electromyography.
Out-of-illness experience: hypnotically induced dissociation as a therapeutic resource in treating people with obstinate mental disorders.
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Israeli Society of Hypnosis. meyersoj@netvision.net.il

Psychological dissociation is commonly perceived by mental health professionals as the pathological splitting of consciences or as an impairment in adaptive integration. In hypnotherapy dissociation is considered one of the most significant features of hypnosis, constituting a major therapeutic resource. In the present article, we use hypnotically induced dissociation (HID) to treat patients with obstinate mental disorders (OMD). These disorders are characterized by persistent, problematic behaviors, thoughts, and feelings that become organizing principals of identity and form enduring psychopathologies. To promote psychological change in patients with OMD, we use HID to enhance dissociative processes that enable the differentiation of health from pathology and allow the emergence of experiences previously overshadowed by pathological personality patterns. Three clinical cases of OMD (chronic depression, obsessive-compulsive disorder, and a personality disorder) illustrate the effects of HID as an effective therapeutic tool that facilitates emotional processing, consolidates therapeutic achievements, and secures therapeutic results.

[1577]
Hypnosis and nursing: the perfect combination.
Eslinger MR.
Healthy Visions Hypnosis and Wellness Center, USA.
[abstract not found]

[1578]
[Post-traumatic stress disorders in medical practice: diagnostic and therapeutic guidelines in primary care][Article in French]
Miller N, Lazignac C, Jecker F, Zürcher M, Damsa C.
Espace Psychothã©rapeutique Hogan, 86 Grand Rue, Montreux.

Posttraumatic stress disorder (PTSD) is a prevalent and disabling condition. The patients suffering from PTSD often consult primary care clinician for non-specific symptoms. The aim of this work is to find out useful clinical guidelines for diagnosis and therapy in primary care, starting from a literature review (1981-2009) and a preliminary observational study. 20 patients with PTSD had a specific trauma-focused psychotherapy, called "Trauma and Reintegration Psychotherapy (TRP)". This is a psychodynamic eclectic treatment combining Ericksonian Hypnosis and EMDR techniques. The results show a more important decrease of PTSD symptoms in patient's beneficiating of the TRP, than the average of the usual clinical studies. This could be linked to an early diagnosis made by the primary care general practitioners.

[1579]
Anbar RD.
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[abstract not found]

[1580]
Parapsychology on the couch: the psychology of occult belief in Germany.
Wolffram H.
[abstract not found]

[1581]
Hypnotism, lay medicine and psychical research at the Fin de Siècle.
Wolffram H.
[abstract not found]
Crime, hysteria and belle époque hypnotism: the path traced by Jean-Martin Charcot and Georges Gilles de la Tourette.

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Hysteria and hypnotism became a favorite topic of studies in the fin de siècle neurology that emerged from the school organized at La Salpêtrière by Jean-Martin Charcot, where he had arrived in 1861. Georges Gilles de la Tourette started working with Charcot in 1884 and probably remained his most faithful student, even after his mentor's death in 1893. This collaboration was particularly intense on 'criminal hypnotism', an issue on which Hippolyte Bernheim and his colleagues from the Nancy School challenged the positions taken by the Salpêtrière School. Bernheim claimed that hypnotism was not a diagnostic feature of hysteria and that there were real-life examples of murders suggested under hypnosis, while hypnosis susceptibility was identified with hysteria by Charcot and Gilles de la Tourette, who saw rape as the only crime associated with hypnotism. The quarrel was particularly virulent during a series of famous criminal cases which took place between 1888 and 1890. At the time, it was considered that La Salpêtrière had succeeded over Nancy, since the role of hypnotism was discarded during these famous trials. However, the theories of Charcot and Gilles de la Tourette were also damaged by the fight, which probably triggered the conceptual evolution leading to Joseph Babinski's revision of hysteria in 1901. Gilles de la Tourette's strong and public interest in hypnotism nearly cost him his life, when a young woman who claimed to have been hypnotized against her will shot him in the head at his own home in 1893. It was subsequently shown that hypnotism had nothing to do with it. The delusional woman was interned at Sainte-Anne for mental disturbance, thus escaping trial. Ironically, Gilles de la Tourette may have been partly responsible, since he had been one of the strongest proponents of placing mentally-ill criminals in asylums instead of prisons. 2009 S. Karger AG, Basel

[abstract no found]
Positive affect, negative affect, and negative effects during a phenomenological hypnotic assessment within a substance abuse population.

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Positive and negative affect generated while using the Phenomenology of Consciousness—Hypnotic Assessment Procedure (PCI-HAP) on a sample of drug and alcohol users were predicted using several variables. The results were then cross-validated on a second, smaller sample. The results suggest that, although some negative affect was reported, the PCI-HAP was more likely to generate positive, rather than negative, affect. Positive affect was related to the vividness of a suggested hypnotic dream during hypnosis and also hypnotic depth; these findings were replicated upon cross-validation. Although negative affect correlated with the Dissociative Experiences Scale scores and falling asleep, these results did not replicate upon cross-validation. Mild transient negative effects (e.g., headache) were reported by about 10% of the participants in a smaller, second sample. Implications of the results are discussed.

[1587]
The therapeutic release of anger: Helen Watkins's silent abreaction and subsequent elaborations of the anger rock.
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This paper summarizes Helen Watkins's (1980) silent abreaction technique for releasing anger and the subsequent elaborations it has inspired. Discussion of Watkins's seminal article incorporates her verbatim account of the technique, 2 clinical applications, and her encouragement of further adaptations. Other scholars' subsequent contributions include an adaptation for dissociative identity disorder, brief treatment of constant pain syndrome, and inpatient treatment of a suicidally depressed, dissociative survivor of sexual abuse. Commonalities and distinctions among Watkins's work and these modifications are discussed. New case material from the author's practice illustrate further elaborations, with emphasis on the role of releasing anger in the resolution of dissociative defenses and internal fragmentation in dissociative clients. To enhance the clinical utility of this paper, verbatim passages are included for all case illustrations in H. H. Watkins (1980), the 3 published elaborations, and the new case material.

[1588]
Hypnotic experience is related to emotional contagion.
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The authors conducted 2 studies to evaluate whether emotional contagion, the propensity to automatically imitate the emotional expressions of others and experience the corresponding emotions, is related to behavioral and experiential indices of hypnotizability and whether such a relationship is influenced by administration context. In Study 1, behavioral and subjective measures of hypnotizability were measured alongside emotional contagion in the same context. In Study 2, different measures of hypnotizability and hypnotic depth were administered, whereas emotional contagion was independently measured in a different (nonhypnotic) context. Emotional contagion correlated with behavioral and experiential indices of hypnotizability in Study 1 but only with the latter in Study 2. The authors interpret the results as reflecting a positive relationship between emotional contagion and, at least, experiential features of hypnotizability and strengthening the case for the importance of affectivity in hypnotic responsiveness.

[1589]
Hypnotic illusions and clinical delusions: a hypnotic paradigm for investigating delusions of misidentification.
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In 2 experiments, the authors created a hypnotic analogue of delusions of misidentification and explored their impact on autobiographical memory. In Experiment 1, to establish the paradigm, high and low hypnotizable participants were given a suggestion to become someone similar or dissimilar to themselves. In Experiment 2, to further test the paradigm and to examine autobiographical remembering, highs were given a suggestion to become a same-sex sibling, administered 2 challenges to the temporary delusion, and asked to generate autobiographical memories. For high hypnotizable participants, the suggested delusions of misidentification were compelling and resistant to challenge. During these temporary delusions, participants generated specific autobiographical memories that reflected previously experienced events viewed from the perspective of the suggested identity. These findings highlight the instrumental value of hypnosis to the investigation and understanding of delusions and autobiographical memory.
Chaotic neural dynamics likely emerge in cognitive processes and may present time periods that are extremely sensitive to influences affecting the neural system. Recent findings suggest that this sensitivity may increase during retrieval of stressful emotional experiences reflecting the consolidation of traumatic memories. In this context, hypnotic recall of anxiety memories in 10 patients, simultaneously with ECG measurement, was performed. The same measurement was performed during control cognitive tasks in 8 anxiety patients and 22 healthy controls. Nonlinear data analysis of ECG records indicates significant increase in the degree of chaos during retrieval of stressful memory in all the patients. The results suggest a role of chaotic neural dynamics during processing of anxiety-related stressful memories.

In the past two decades, hundreds of convicted prisoners have been exonerated by DNA and non-DNA evidence, revealing that police-induced false confessions are a leading cause of wrongful conviction of the innocent. In this article, empirical research on the causes and correlates of false confessions is reviewed. After a description of the three sequential processes that are responsible for the elicitation of false confessions--misclassification, coercion, and contamination--the three psychologically distinct types of false confession (voluntary, compliant, and persuaded) are discussed along with the consequences of introducing false-confession evidence in the criminal justice system. The article concludes with a brief discussion of the implications of empirical research for reducing the number of false confessions and improving the accuracy of confession evidence that is introduced against a defendant at trial.

A total of 14 women meeting criteria for dissociative identity disorder (DID) based on the Diagnostic and Statistical Manual of Mental Disorders (4th ed. [DSM-IV]) were compared to a group of women (n = 10) with other dissociative diagnoses and a group of normal controls (n = 14) with regard to dissociativity, absorption, trauma related symptoms and hypnotizability. Both of the clinical groups reported high PTSD scores. The DID group differed significantly from the group with other dissociative diagnoses and the non-diagnosed comparison group with regard to hypnotizability, the variety of dissociative symptomatology, and the magnitude of dissociative symptomatology. However, no significant differences between the two clinical groups were detected with regard to absorption, general dissociative level, or symptoms related to traumatic stress. Results support the notion that DID can be regarded as a clinical entity which is separable from other dissociative disorders. Results also indicated that hypnotizability is the most important clinical feature of DID.

OBJECTIVES: To explore autogenic training (AT) as a treatment for psychological morbidity, symptomology, and physiological markers of stress among women with chest pain, a positive exercise test for myocardial ischemia, and normal coronary arteries (cardiac syndrome X). DESIGN: Fifty-three women with cardiac syndrome X (mean +/- SD age, 57.1 +/- 8 years) were randomized to an 8-week AT program or symptom diary control. Symptom severity and frequency, Hospital Anxiety and Depression Scale, Spielberger State-Trait Anxiety Inventory, Cardiac Anxiety Questionnaire (CAQ), and Ferrans and Powers Quality of Life Index (QLI), blood pressure, heart rate, electrocardiogram, and plasma catecholamines were measured before and after intervention and at the 8-week follow-up. RESULTS: Women who underwent AT had improved symptom frequency (8.04 +/- 10.08 vs 1.66 +/- 2.19, P < 0.001) compared with control women and reduced symptom severity (2.08 +/- 1.03 vs 1.23 +/- 1.36, P = 0.02) and frequency (6.11 +/- 3.17 vs 1.66 +/- 3.17).
or to psychological trauma itself. To abandon the notion of Hitler having suffered a permanent change of personality in 1918, be it due to psychiatric treatment in Hitler's behaviour in that time cannot be disproved, both seem highly unlikely. CONCLUSION: One should altogether serve close to Hitler as a medical orderly in WW I, thus trying to validate whether or not Hitler really underwent a change of personality. METHODS: Following three lines of argument, this paper examines if such an assumption can be made of personality. RESULTS: Although the eventualities of such a hypnotic treatment or a profound change of personality in autumn 1918.

OBJECTIVE: This paper inquires the hypothesis that Hitler's rise to power was in part due to a hypnotic therapy he had undergone when being treated for hysterical blindness at an army hospital in Pasewalk. METHODS: Following three lines of argument, this paper examines if such an assumption can be made plausible. Firstly, it takes a close look at the main historical source which is the novel THE EYEWITNESS, written in German language by the Czech-Jewish author Ernst Weiss. Then it asks if Forster is likely to have chosen hypnosis as a method of treatment. Finally, it exploits the work of the even lesser known author Alexander Moritz Frey who happened to be close to Hitler as a medical orderly in WW I, thus trying to validate whether or not Hitler really underwent a change of personality in autumn 1918. RESULTS: Although the eventualities of such a hypnotic treatment or a profound change in Hitler's behaviour in that time cannot be disproved, both seem highly unlikely. CONCLUSION: One should altogether abandon the notion of Hitler suffering a permanent change of personality in 1918, be it due to psychiatric treatment or to psychological trauma itself.

Introduction: Tobacco promotion increases the likelihood that adolescents will start smoking. Much of the tobacco industry's promotional budget is spent on point of sale (PoS) promotion in many jurisdictions. Consequently, tobacco is an eye-catching feature at the PoS in many places. METHODS: We reviewed the evidence that PoS tobacco promotion influences key smoking-related behaviors and beliefs, increases susceptibility to smoking in youth, undermines smokers' quit attempts, and promotes relapse among ex-smokers. RESULTS: We found 12 peer-reviewed studies, 10 of which were focused on children. Seven of 8 observational studies found statistically significant associations between exposure to tobacco promotion at the PoS and smoking initiation or susceptibility to smoking. Two experimental studies of children found statistically significant associations between exposure to PoS tobacco promotions and beliefs about ease of getting tobacco and smoking prevalence among their peers. An experimental study with adults found that a picture of collected tobacco pack elicited cravings for cigarettes among smokers. A cross-sectional study found that 25% of adult smokers reported impulse purchasing and a third of recent ex-smokers reported urges to start smoking after seeing tobacco displayed. DISCUSSION: More prospective studies are needed to clarify the temporal relationship between exposure to PoS tobacco and outcome. However, given the addictiveness of tobacco, the severity of the health hazards posed by smoking, the evidence that tobacco promotion encourages children to start smoking, and the consistency of the evidence that PoS promotion influences children's smoking, we believe that ample justification exists for banning PoS advertising and displays of smoked tobacco products.

Dreams and Imaginations in the Therapy of Eating Disordered Patients. [Article in Hungarian]

Recently the integrative approach has been applied in the treatment of eating disorders with multicausal origin. In order to achieve long-term therapeutic effect, the psychodynamic interpretation is often needed and favoured as a part of the personal, multimodal therapeutic strategy. The present paper focuses on body image distortion as one of the most decisive and least influenceable symptom of the disorder. The symptom is interpreted along the body image distortion-body boundaries-self boundaries-autonomy line. With illustrative therapy details of dreams, imaginations, the authors aim to demonstrate the therapeutic use of dynamically oriented therapy and dynamically oriented hypnotherapy.

[1598] Spec Care Dentist. 2009 Jan;29(1):51-7. Psychological treatment of fearful and phobic special needs patients. Peltier B. University of the Pacific, San Francisco, California, USA. bpeltier@pacific.edu

Dental fears and phobias trouble patients with and without special needs, and they are a problem for dentists, as well. This article reviews current research and literature related to methods used to alleviate dental fear and concludes that while some important psychological methods are available, much work is left to be done in this area. It is clear that there is an important role for psychological and behavioral input to the dentist-patient interaction. While dental phobia represents a class of special needs itself, patients with other important disabilities (e.g., physical or cognitive impairments) are sometimes comorbidly phobic, a condition often missed or misdiagnosed by treating practitioners. Office-based techniques that focus on relaxation, breathing, imagery, hypnosis, and effective use of operatory language are described. The methods advocated here can be used with patients having mild or moderate cognitive impairments. Readings are recommended for the dentist or auxiliary practitioner interested in learning these techniques.


OBJECTIVE: To review the evidence supporting selected complementary and alternative medicine approaches used in the treatment of irritable bowel syndrome (IBS). QUALITY OF EVIDENCE: MEDLINE (from January 1966), EMBASE (from January 1980), and the Cochrane Database of Systematic Reviews were searched until March 2008, combining the terms irritable bowel syndrome or irritable colon with complementary therapies, alternative medicine, acupuncture, fiber, peppermint oil, herbal, traditional, yoga, massage, meditation, mind, relaxation, probiotic, hypnotherapy, psychotherapy, cognitive therapy, or behavior therapy. Results were screened to include only clinical trials, systematic reviews, and meta-analyses. Level I evidence was available for most interventions. MAIN MESSAGE: Soluble fibre improves constipation and global IBS symptoms. Peppermint oil alleviates IBS symptoms, including abdominal pain. Probiotic trials show overall benefit for IBS but there is little evidence supporting the use of any specific strain. Hypnotherapy and cognitive-behavioural therapy are also effective therapeutic options for appropriate patients. Certain herbal formulas are supported by limited evidence, but safety is a potential concern. All interventions are supported by systematic reviews or meta-analyses. CONCLUSION: Several complementary and alternative therapies can be recommended as part of an evidence-based approach to the treatment of IBS; these might provide patients with satisfactory relief and improve the therapeutic alliance.

[1601] Harv Womens Health Watch. 2009 Feb;16(6):3. Hypnosis helps reduce hot flashes in breast cancer survivors. [No authors listed] [abstract not found]

TOPIC: Dissociation is believed to be one of the most common underlying psychological processes among children and adolescents receiving mental health treatment, but most of the dissemination of information about dissociation has occurred among psychiatrists and psychologists. PURPOSE: Modes of treatment for dissociation as it affects children and adolescents are described. SOURCES USED: Current research and practice scholarly articles on treatment of children and adolescents for dissociation and dissociative symptom disorders were accessed and critically reviewed.

CONCLUSIONS: Prognosis in children and adolescents can vary widely among patients and between the specific types of dissociation disorder; however, expert clinicians and researchers agree that early, intense treatment offers the greatest possibility of full recovery.

[1603]
Treatment of chronic recurrent abdominal pain: laparoscopy or hypnosis?
Galili O, Shaoul R, Mogilner J.
Department of General Surgery, Bnei-Zion Medical Center, Haifa, Israel.

OBJECTIVE: Functional chronic recurrent abdominal pain (FCRAP) is long lasting, intermittent, or constant pain affecting 15-30% of children ages 4-18 and presents a diagnostic and treatment challenge to the physician. The predictive value of diagnostic tests is questionable, and studies of the treatment of chronic abdominal pain show inconclusive evidence regarding diet regimens as well as medical and surgical treatments. However, there is evidence that cognitive-behavioral therapy may be useful in improving pain and disability outcome. Increasing the understanding of the neural-pain pathways and research in cognitive modulation of pain led to the application of behavioral strategies in children with FCRAP with variable success. However, the use of hypnotherapy in children with recurrent abdominal pain is not common. During the last 3 years, we have implemented hypnosis as the preferred treatment for patients with FCRAP. In the current study, we aimed to summarize our experience with hypnosis for the treatment of FCRAP in children. PATIENTS AND METHODS: Twenty patients who met the criteria for FCRAP were candidates for hypnosis. Hypnosis or imagery was offered to the families, of whom 3 refused. Seventeen patients underwent just one single session of hypnosis. RESULTS: A possible nonorganic etiology for the abdominal pain was revealed in all cases. In 14 adolescents, all clinical symptoms resolved. Hypnosis was not effective in 3 cases, in whom secondary gain was probably responsible for their symptoms. No side effects have been noted during and after the study. Follow-up was available for a period of 4-24 months. CONCLUSIONS: Although effective in the management of acute pain and distress in pediatric cancer patients, the use of hypnotherapy in children with FCRAP is not a common practice. The current study highly supports the use of hypnosis as a part of the biobehavioral approach for this dilemma.

[1604]
Hypnosis as an alternative to avoid general anesthesia in a child with severe pulmonary arterial hypertension. von Ungern-Stenberq BS, Habre W.

[abstract not found]

[1605]
[Changes in resistance of the umbilical artery, foetal movements and short time variation through clinical hypnosis--preliminary results][Article in German]
Reinhard J, Häkken-Janssen H, Hatzmann H, Schiermeier S.
Universität Witten/Herdecke, Frauenheilkunde, Marien Hospital Witten. J.Reinhard@Marien-Hospital-Witten.de

BACKGROUND: The aim of this study was to determine whether there are any changes in short time variation (STV), foetal movements, and blood flow in the umbilical artery in the trance state. METHODS: Six pregnant patients who had already attended two hypnoreflexogenous birth preparation course units had a standardised hypnosis intervention under cardiotocography (CTG). Using the CTG-Player ((R)) STVs and foetal movements were calculated from the electronically saved CTG traces and evaluated against control CTGs recorded before and after hypnosis. Before and after the induction of hypnosis, blood flow in the umbilical artery was measured. RESULTS: Using the Wilcoxon test there is a significant lowering of blood flow resistance in the umbilical artery after hypnosis (p=0.042). There was a trend that the foetal movements increase at the beginning of the trance (Wilcoxon test, p=0.075). There was no significant difference in the STVs before, during and after trance. CONCLUSIONS: Preliminary results showed that blood flow of the umbilical artery can be improved by hypnosis. Further clinical studies are required to verify this hypothesis. The subjective impression of participants that foetal movements increase at the beginning of the trance seems to be correct.

[1606]
BACKGROUND: Individual counselling, pharmacotherapy, and group therapy are evidence-based interventions that help patients stop smoking. Acupuncture, hypnosis, and relaxation have no demonstrated efficacy on smoking cessation, whereas self-help material may only have a small benefit. The purpose of this study is to assess physicians’ current clinical practice regarding smokers motivated to stop smoking. METHODS: The survey included 3385 Swiss primary care physicians. Self-reported use of nine smoking cessation interventions was scored. One point was given for each positive answer about practicing interventions with demonstrated efficacy, i.e. nicotine replacement therapy, bupropion, counselling, group therapy, and smoking cessation specialist. No points were given for the recommendation of acupuncture, hypnosis, relaxation, and self-help material. Multivariable logistic analysis was performed to identify factors associated with a good practice score, defined as >or= 2. RESULTS: The response rate was 55%. Respondents were predominately over the age of 40 years (88%), male (79%), and resided in urban areas (74%). Seventeen percent reported being smokers. Most of the physicians prescribed nicotine replacement therapy (84%), bupropion (65%), or provided counselling (70%). A minority of physicians recommended acupuncture (26%), hypnosis (8%), relaxation (7%), or self-help material (24%). A good practice score was obtained by 85% of respondents. Having attended a smoking cessation-training program was the only significant predictor of a good practice score (odds ratio: 6.24, 95% CI 1.95-20.04). CONCLUSION: The majority of respondents practice recommended smoking cessation interventions. However, there is room for improvement and implementing an evidence-based smoking cessation-training program could provide additional benefit.

Not all group hypnotic suggestibility scales are created equal: individual differences in behavioral and subjective responses.
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To examine the influence of hypnotic suggestibility testing as a source of individual differences in hypnotic responsiveness, we compared behavioral and subjective responses on three scales of hypnotic suggestibility: The Harvard Group Scale of Hypnotic Susceptibility, Form A (HGS: A; Shor, R. E., Orne, E. C. (1962). Harvard Group Scale of Hypnotic Susceptibility. Berlin: Consulting Psychologists Press); the Carleton University Responsiveness to Suggestion Scale (CURSS; Spanos, N. P., Radtke, H. L., Hodgins, D. C., Stam, H. J., Bertrand, L. D. (1983b). The Carleton University Responsiveness to Suggestion Scale: Normative data and psychometric properties. Psychological Reports, 53, 523-535); and the Group Scale of Hypnotic Ability (GSHA; Hawkins, R., Wenzel, L. (1999). The Group Scale of Hypnotic Ability and response booklet. Australian Journal of Clinical and Experimental Hypnosis, 27, 20-31). Behavioral and subjective responses to the CURSS were significantly different than those on the HGS: A and GSHA. More participants were classified as "low suggestible" on the CURSS and they reported subjective experiences more similar to everyday mentation. Attitudes and expectancies of participants who received the GSHA were less predictive of responding, but rates of responding and subjective experiences were similar on the GSHA and the HGSHS: A. Discussion focuses on implications for the use of group hypnotic suggestibility scales.

The efficacy of hypnotic analgesia in adults: a review of the literature.
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This article both summarizes the previous reviews of randomized, controlled trials of hypnotic analgesia for the treatment of chronic and acute pain in adults, and reviews similar trials which have recently been published in the scientific literature. The results indicate that for both chronic and acute pain conditions: (1) hypnotic analgesia consistently results in greater decreases in a variety of pain outcomes compared to no treatment/standard care; (2) hypnosis frequently outperforms non-hypnotic interventions (e.g. education, supportive therapy) in terms of reductions in pain-related outcomes; and (3) hypnosis performs similarly to treatments that contain hypnotic elements (such as progressive muscle relaxation), but is not surpassed in efficacy by these alternative treatments. Factors that may influence the efficacy of hypnotic analgesia interventions are discussed, including, but not limited to, the patient's level of suggestibility, treatment outcome expectancy, and provider expertise. Based upon this body of literature, suggestions are offered for practitioners who are using, or would like to use, hypnosis for the amelioration of pain problems in their patients or clients.

Pain control in first trimester surgical abortion.
BACKGROUND: First trimester abortions especially cervical dilation and suction aspiration are associated with pain, despite various methods of pain control. OBJECTIVES: Compare different methods of pain control during first trimester surgical abortion. SEARCH STRATEGY: We searched multiple electronic databases with the appropriate key words, as well as reference lists of articles, and contacted professionals to seek other trials. SELECTION CRITERIA: Randomized controlled trials comparing methods of pain control in first trimester surgical abortion at less than 14 weeks gestational age using electric or manual suction aspiration. Outcomes included intra- and postoperative pain, side effects, recovery measures and satisfaction. DATA COLLECTION AND ANALYSIS: Two reviewers independently extracted data. Meta-analysis results are expressed as weighted mean difference (WMD) or Peto Odds ratio with 95% confidence interval (CI). MAIN RESULTS: We included forty studies with 5131 participants. Due to heterogeneity we divided studies into 7 groups:Local anesthesia: Data was insufficient to show a clear benefit of a paracervical block (PCB) compared to no PCB or a PCB with bacteriostatic saline. Pain scores during dilation and aspiration were improved with deep injection (WMD -1.64 95% CI -3.21 to -0.08; WMD 1.00 95% CI 1.09 to 0.91), and with adding a 4% intrauterine lidocaine infusion (WMD -2.0 95% CI -3.29 to -0.71, WMD -2.8 95% CI -3.95 to -1.65 with dilation and aspiration respectively).PCB with premedication: Ibuprofen and naproxen resulted in small reduction of intra- and post-operative pain. Analgesia: Diclofenac-sodium did not reduce pain. Conscious sedation: The addition of conscious intravenous sedation using diazepam and fentanyl to PCB decreased procedural pain. General anesthesia (GA): Conscious sedation increased intraoperative but decreased postoperative pain compared to GA (Peto OR 14.77 95% CI 4.91 to 44.38, and Peto OR 7.47 95% CI 2.2 to 25.36 for dilation and aspiration respectively, and WMD 1.00 95% CI 1.77 to 0.23 postoperatively). Inhalation anesthetics are associated with increased blood loss (p<0.001).GA with premedication: The COX 2 inhibitor etoricoxib, the non-selective COX inhibitors lornoxicam, diclofenac and ketorolac IM, and the opioid nalbuphine were improved postoperative pain. Non-pharmacological intervention: Listening to music decreased procedural pain. No major complication was observed. AUTHORS' CONCLUSIONS: Conscious sedation, GA and some non-pharmacological interventions decreased procedural and postoperative pain, while being safe and satisfactory to patients. Data on the widely used PCB is inadequate to support its use, and it needs to be further studied to determine any benefit.

[1610]
The tribute of the pioneer of hypnotherapy- Franz Anton Mesmer, MD, PhD in the history of psychoteraphy and medicine.
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Modern hypnosis started with the Austrian physician Franz Anton Mesmer (1734-1815), who believed that the phenomenon known as mesmerism, or animal magnetism, or fluidum was related to an invisible substance - a fluid that runs within the subject or between the subject and the therapist, that is, the hypnotist, or the “magnetizer”. The term hypnosis was introduced in the 1840s by a Scottish surgeon James Braid (1795-1860), who believed the subject to be in a particular state of sleep - a trance. In the late 19th century, a French neurologist Jean Martin Charcot (1825-1893) thought hypnnotism to be a special physiological state, and his contemporary Hyppotite-Marie Bernheim (1840-1919) believed it to be a psychological state of heightened suggestibility. Sigmund Freud, who studied with Charcot, used hypnosis early in his career to help patients recover repressed memories. He noted that patients would relive traumatic events while under hypnosis, a process know as abreaction. Freud later replaced hypnosis with the technique of free associations. Today, hypnosis is used as a form of therapy (hypnotherapy), a method of investigation to recover lost memories, and research tool. According to Caplan & Sadock, F.A. Mesmer is generally thought of as the fons et origo of modern psychotherapy; and from the early techniques of mesmerism, it is said, have evolved the more elaborate and sophisticated therapeutic measures of the analyst and his colleagues. Although Mesmer was certainly dealing with individuals suffering from a variety of neurotic disorders, and though the clinical successes he achieved were the result of psychological processes that his procedures induced in his patients, Mesmer's theoretical formulations, his understanding of the nature of the treatment he developed, and his specific procedures were all totally different from those of the 20th-century analyst. He was one of the cornerstones in the development of psychoanalysis through hypnosis mainly of hysterical patients.

[1611]
Removal of subconscious resistance to hypnosis using ideomotor questioning techniques.
Cheek DB.
[abstract not found]

[1612]
The obstetrician and hypnosis.
August RV.
Twenty-two patients with multiple sclerosis (MS) and chronic pain were recruited into a quasi-experimental trial comparing the effects of self-hypnosis training (HYP) with progressive muscle relaxation (PMR) on pain intensity and pain interference; 8 received HYP and the remaining 14 participants were randomly assigned to receive either HYP or PMR. HYP-condition participants reported significantly greater pre- to postsession as well as pre- to posttreatment decreases in pain and pain interference than PMR-condition participants, and gains were maintained at 3-month follow-up. Most of the participants in both conditions reported that they continued to use the skills they learned in treatment and experienced pain relief when they did so. General hypnotizability was not significantly related to treatment outcome, but treatment-outcome expectancy assessed before and after the first session was. The results support the efficacy of self-hypnosis training for the management of chronic pain in persons with MS.

The authors developed a technique, which they call hypnotherapeutic olfactory conditioning (HOC), for exploiting the ability of scents to arouse potent emotional reactions. During hypnosis, the patient learns to associate pleasant scents with a sense of security and self-control. The patient can subsequently use this newfound association to overcome phobias and prevent panic attacks. This may be especially effective for posttraumatic stress disorder (PTSD) with episodes of anxiety, flashbacks, and dissociation triggered by smells. The authors present 3 cases, patients with needle phobia, panic disorder, and combat-induced PTSD who were successfully treated with the HOC technique.

This study describes the effect of hypnosis on pain relief during labor and childbirth. Using a qualitative approach, 6 pregnant women were trained to use self-hypnosis for labor. Outcomes were analyzed using Colaizzi's procedure. Women described their feelings about hypnosis during labor as: a sense of relief and consolation, self-confidence, satisfaction, lack of suffering labor pain, changing the feeling of pain into one of pressure, a decrease in fear of natural childbirth, lack of tiredness, and lack of anxiety. They expressed increased concentration on the uterus and cervical muscle, awareness of all the stages of labor, and having "positive thoughts." Births were perceived as being very satisfactory compared to their previous experiences.
Using art to help understand the imagery of irritable bowel syndrome and its response to hypnotherapy.
Carruthers HR, Miller V, Morris J, Evans R, Tarrier N, Whorwell PJ.
University of Manchester, United Kingdom.

A medical artist asked 109 patients if they had an image of their IBS pre- and posthypnotherapy, making precise watercolor paintings of any images described. Results were related to treatment outcome, symptoms, anxiety, depression, and absorption (hypnotizability); 49% of patients had an image, and a wide variety were recorded and painted. Imagery was significantly associated with gender (p < .05), anxiety (p < .05), noncolonic symptomatology (p < .05), and absorption (p = .001); 57.8% of responders compared with 35.5% of nonresponders to hypnotherapy had an image of their disease (p < .05) before treatment, and color images were associated with better outcomes (p = .05) than monochrome ones. All images changed in responders, often becoming more nonspecific in nature. Inquiring about IBS imagery helps to identify potential responders and nonresponders to hypnotherapy and may also provide insights into how patients think about their illness.

[1619]
"On hypnotism" (1860) De l'hypnotisme.
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James Braid's last essay on hypnotism, the culmination of his work, summarized in a French translation for the Academy of Sciences, is published in English with comments. According to Braid, hypnotism is a psychological ("subjective") approach, fundamentally opposed to the paranormal claims and magnetic ("objective") theories of mesmerism. Hypnotism operates primarily by means of dominant ideas that the attention of the subject is fixated upon. The reversibility of hypnotic amnesia is taken as evidence of "double consciousness." However, over 90% of Braid's subjects did not exhibit this state of dissociation or any sleep-like responses but merely a sense of "reverie." Good subjects are as suggestible in the "waking" state as others are in hypnotism.

[1620]
The discovery of hypnosis--Braid's lost manuscript, "On hypnotism" (1860): a brief communication.
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James Braid's last manuscript on hypnotism, summarizing his mature views and lost since his death, existed only in French and German translations. The author discusses the history and importance of this document, "On Hypnotism" (1860), as well as his new English version, translated back from the French and German editions. Braid's manuscript constitutes an important, missing jigsaw piece in the early history of psychological therapy and helps to explain the origin of hypnotherapy and correct certain historical misconceptions that have developed concerning the meaning of the term hypnotism. The rediscovery of this text provides additional evidence that hypnotism originated as an explicitly empirical and "common sense" reaction against the pseudo-scientific excesses of mesmerism. Although drawing heavily on excerpts from his previous writings, some of Braid's observations and techniques may renew interest among contemporary researchers and clinicians.

[1621]
A randomized clinical trial of a brief hypnosis intervention to control venepuncture-related pain of paediatric cancer patients.
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Venepuncture for blood sampling can be a distressing experience for a considerable number of children. A prospective controlled trial was conducted to compare the efficacy of a local anaesthetic (EMLA) with a combination of EMLA with self-hypnosis in the relief of venepuncture-induced pain and anxiety in 45 paediatric cancer outpatients (age 6-16years). A secondary aim of the trial was to test whether the intervention will have a beneficial effect on parents' anxiety levels during their child's procedure. Patients were randomized to one of three groups: local anaesthetic, local anaesthetic plus hypnosis, and local anaesthetic plus attention. Results confirmed that patients in the local anaesthetic plus hypnosis group reported less anticipatory anxiety, and less procedure-related pain and anxiety, and were rated as demonstrating less behavioural distress during the procedure than patients in the other two groups. Parents whose children were randomized to the local anaesthetic plus hypnosis condition experienced less anxiety during their child's procedure than parents whose children had been randomized to the other two conditions. The therapeutic benefit of the brief hypnotic intervention was maintained in the follow-up. The present findings are particularly important in that this study was a randomized, controlled trial conducted in a naturalistic medical setting. In this context, convergence of subjective and objective outcomes was reached with large effect sizes that were consistently supportive of the beneficial effects of self-
hypnosis, an intervention that can be easily taught to children, is noninvasive and poses minimal risk to young patients and their parents.

[1622]
Hypnosis in a GP obstetric unit.
Browne SE.

[abstract not found]

[1623]
Prescrire Int. 2009 Apr;18(100):75-9.
Irritable bowel syndrome: a mild disorder; purely symptomatic treatment.
[No authors listed]

(1) Patients frequently complain of occasional bowel movement disorders, associated with abdominal pain or discomfort, but they are rarely due to an underlying organ involvement. Even when patients have recurrent symptoms, serious disorders are no more frequent in these patients than in the general population, unless other manifestations, anaemia, or an inflammatory syndrome is also present; (2) There is currently no way of radically modifying the natural course of recurrent irritable bowel syndrome; (3) The effects of antispasmodics on abdominal pain have been tested in about 20 randomised controlled trials. Pinaverium and peppermint essential oil have the best-documented efficacy and only moderate adverse effects. Antispasmodics with marked atropinic effects do not have a favourable risk-benefit balance; (4) Tricylic antidepressants seem to have only modest analgesic effects in this setting. In contrast, their adverse effects are frequent and they have somewhat negative risk-benefit balances. Nor has the efficacy of selective serotonin reuptake inhibitor antidepressants (SSRIs) been demonstrated; (5) Alosetron and tegaserod carry a risk of potentially life-threatening adverse effects and therefore have negative risk-benefit balances; (6) Seeds of plants such as psyllium and ispaghul, as well as raw apples and pears, have a limited impact on constipation and pain. Osmotic laxatives are effective on constipation. Symptomatic treatments for constipation can sometimes aggravate abdominal discomfort; (7) Loperamide has been poorly assessed in patients with recurrent irritable bowel syndrome with diarrhoea. It modestly slows bowel movement but does not relieve pain or abdominal discomfort; (8) Dietary measures have not been tested in comparative trials. Some patients are convinced that certain foods provoke a recurrence of irritable bowel syndrome, but restrictive diets carry a risk of nutritional deficiencies; (9) Various techniques intended to control emotional and psychological disturbances have been proposed, including relaxation, biofeedback, hypnosis, and psychotherapy. The results of clinical trials are not convincing; (10) Oral products containing live bacteria, designed to change the equilibrium of intestinal flora, have been tested in 13 placebo-controlled trials, with inconsistent results. A few cases of septicaemia have been reported; (11) The six available trials of acupuncture (versus sham acupuncture) showed no more than a placebo effect; (12) In practice, patients who have recurrent irritable bowel syndrome but with no other signs of a condition warranting specific treatment should be reassured as to the harmless nature of their disorder if a careful physical examination and basic laboratory tests are negative. The only available treatments have purely symptomatic effects and only limited efficacy. It is best to avoid using all treatments and additional diagnostic investigations that carry a risk of disproportionate adverse effects.

[1624]
[Benefits of hypnosis for women after mastectomy][Article in French]
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[abstract not found]

[1625]
Fibromyalgia pain and its modulation by hypnotic and non-hypnotic suggestion: an fMRI analysis.
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The neuropsychological status of pain conditions such as fibromyalgia, commonly categorized as 'psychosomatic' or 'functional' disorders, remains controversial. Activation of brain structures dependent upon subjective alterations of fibromyalgia pain experience could provide an insight into the underlying neuropsychological processes. Suggestion following a hypnotic induction can readily modulate the subjective experience of pain. It is unclear whether suggestion without hypnosis is equally effective. To explore these and related questions, suggestions following a hypnotic induction and the same suggestions without a hypnotic induction were used during functional magnetic resonance imaging to increase and decrease the subjective experience of fibromyalgia pain. Suggestion in both conditions resulted in significant changes in reported pain experience, although patients claimed significantly more control over their pain and reported...
greater pain reduction when hypnotised. Activation of the midbrain, cerebellum, thalamus, and midcingulate, primary and secondary sensory, inferior parietal, insula and prefrontal cortices correlated with reported changes in pain with hypnotic and non-hypnotic suggestion. These activations were of greater magnitude, however, when suggestions followed a hypnotic induction in the cerebellum, anterior midcingulate cortex, anterior and posterior insula and the inferior parietal cortex. Our results thus provide evidence for the greater efficacy of suggestion following a hypnotic induction. They also indicate direct involvement of a network of areas widely associated with the pain ‘neuromatrix’ in fibromyalgia pain experience. These findings extend beyond the general proposal of a neural network for pain by providing direct evidence that regions involved in pain experience are actively involved in the generation of fibromyalgia pain.


RATIONALE: Imaginative suggestibility, a trait closely related to hypnotic suggestibility, is modifiable under some circumstances. Nitrous oxide (laughing gas) is commonly used for sedation in dentistry and is reported to be more effective when combined with appropriate suggestions. OBJECTIVE: The aim of this study was to determine whether nitrous oxide inhalation alters imaginative suggestibility and imagery vividness. METHODS: Thirty participants were tested twice in a within-subjects design, once during inhalation of 25% nitrous oxide and once during inhalation of air plus oxygen. Before the study, participants' expectations regarding the effects of nitrous oxide were assessed. Participants were blinded to drug administration. During each session, participants were verbally administered detailed measures of imagination and suggestibility: the Sheehan-Betts Quality of Mental Imagery scale and the Stanford Hypnotic Susceptibility Scale Form C, minus the hypnotic induction. RESULTS: Imaginative suggestibility and imaginative ability (imagery vividness) were both elevated in the nitrous oxide condition. This effect was unrelated to participants' expectations regarding the effects of the drug. CONCLUSIONS: Nitrous oxide increased imaginative suggestibility and imaginative ability. Possible explanations of these findings are discussed with respect to the effects of N-methyl-d-aspartate antagonists and to other pharmacological effects upon suggestibility and imagination.


Brain mechanisms of hypnosis are poorly known. Cognitive accounts proposed that executive attentional systems may cause selective inhibition or disconnection of some mental operations. To assess motor and inhibitory brain circuits during hypnotic paralysis, we designed a go-no-go task while volunteers underwent functional magnetic resonance imaging (fMRI) in three conditions: normal state, hypnotic left-hand paralysis, and feigned paralysis. Preparatory activation arose in right motor cortex despite left hypnotic paralysis, and feigned paralysis. Preparatory activation arose in right motor cortex despite left hypnotic paralysis, indicating preserved motor intentions, but with concomitant increases in precuneus regions that normally mediate imagery and self-awareness. Precuneus also showed enhanced functional connectivity with right motor cortex. Right frontal areas subserving inhibition were activated by no-go trials in normal state and by feigned paralysis, but irrespective of motor blockade or execution during hypnosis. These results suggest that hypnosis may enhance self-monitoring processes to allow internal representations generated by the suggestion to guide behavior but does not act through direct motor inhibition.


Hypnosis is a modified state of consciousness linking the conscious and the unconscious of a person. In the context of chronic pain, hypnosis enables to help controlling the intensity of the pain, managing the pain and the emotions accompanying it and to help the patient finding his own resources allowing him getting involved in his treatment.

We administered suggestions to see a gray-scale pattern as colored and a colored pattern in shades of gray to 30 high suggestible and eight low suggestible students. The suggestions were administered twice, once following the induction of hypnosis and once without an induction. Besides rating the degree of color they saw in the stimuli differently, participants also rated their states of consciousness as normal, relaxed, hypnotized, or deeply hypnotized. Reports of being hypnotized were limited to highly suggestible participants and only after the hypnotic induction had been administered. Reports of altered color perception were also limited to high suggestibles, but were roughly comparable regardless of whether hypnosis had been induced. These data indicate that suggestible individuals do not slip into a hypnotic state when given imaginative suggestions without the induction of hypnosis, but nevertheless report experiencing difficult suggestions for profound perceptual alterations that are phenomenologically similar to what they report in hypnosis.

Xerostomia, the sensation of dry mouth, affects almost all patients who undergo radiotherapy for cancer in the head and neck area. Current therapies for xerostomia are inadequate, and the condition negatively impacts the quality of life. This prospective observational pilot study aimed to evaluate whether hypnosis could improve salivation and decrease xerostomia. Twelve patients with xerostomia after radiotherapy for head and neck cancer were assessed for severity of xerostomia symptoms and sialometry. They then received a single hypnosis session with specific suggestions to increase salivation. The session was recorded on a compact disk (CD), and the participants were instructed to listen to it twice a day for one month. Sialometry was repeated immediately after hypnosis. Validated xerostomia questionnaires were completed at one, four, and 12 weeks after hypnosis. A substantial overall improvement was reported by eight patients at 12 weeks (66%). The saliva flow rate increased on sialometry in nine patients following hypnosis (75%). There was no correlation between the magnitude of changes in the measured saliva flow rate and changes in subjective measures (Spearman's correlation coefficient r=0.134). Symptomatic improvement significantly correlated with the number of times the patients listened to the hypnosis CD (r=0.714, P=0.009). No adverse events were reported. The data from this small observational trial suggest that hypnosis may be an effective treatment for xerostomia. Confirmation in a larger randomized and controlled investigation is warranted.

Although many complementary therapies are promoted for the treatment of obesity, few are truly therapeutic. Evidence suggests that food containing diacylglycerol oil, acupuncture, and hypnosis are the only evidence-based complementary therapies for the treatment of obesity, and, at best, these should be used as adjuvants to the more conventional therapies of calorie restriction and exercise.

The growing acceptance of consciousness as a legitimate field of enquiry and the availability of functional imaging has rekindled research interest in the use of hypnosis and suggestion to manipulate subjective experience and to gain insights into healthy and pathological cognitive functioning. Current research forms two strands. The first comprises studies exploring the cognitive and neural nature of hypnosis itself. The second employs hypnosis to explore known psychological processes using specifically targeted suggestions. An extension of this second approach involves using hypnotic suggestion to create clinically informed analogues of established structural and functional neuropsychological disorders. With functional imaging, this type of experimental neuropsychopathology offers a productive means of investigating brain activity involved in many symptom-based disorders and their related phenomenology.
BACKGROUND: Induction of general anaesthesia can be distressing for children. Non-pharmacological methods for reducing anxiety and improving co-operation may avoid the adverse effects of preoperative sedation. OBJECTIVES: To assess the effects of non-pharmacological interventions in assisting induction of anaesthesia in children by reducing their anxiety, distress or increasing their co-operation. SEARCH STRATEGY: We searched CENTRAL (The Cochrane Library 2009, Issue 1), PsycINFO, CINAHL, DISSERTATION ABSTRACTS, Web of Science and EMBASE. SELECTION CRITERIA: We included randomized controlled trials of a non-pharmacological intervention implemented on the day of surgery or anaesthesia. DATA COLLECTION AND ANALYSIS: Two authors independently extracted data and assessed risk of bias in trials. MAIN RESULTS: We included 17 trials, all from developed countries, involving 1796 children, their parents or both. Eight trials assessed parental presence. None showed significant differences in anxiety or co-operation of children during induction, except for one where parental presence was significantly less effective than midazolam in reducing children's anxiety at induction. Six trials assessed interventions for children. Preparation with a computer package improved co-operation compared with parental presence (one trial). Children playing hand-held video games before induction were significantly less anxious than controls or premedicated children (one trial). Compared with controls, clown doctors reduced anxiety in children (modified Yale Preoperative Anxiety Scale (mYPAS); mean difference (MD) 30.75 95% CI 15.14 to 46.36; one trial). In children undergoing hypnosis, there was a nonsignificant trend towards reduced anxiety during induction (mYPAS < 24: risk ratio (RR) 0.59 95% CI 0.33 to 1.04 - 39% versus 68%; one trial) compared with midazolam. A low sensory environment improved children's co-operation at induction (RR 0.66, 95% CI 0.45 to 0.95; one trial) and no effect on children's anxiety was found for music therapy (one trial). Parental interventions were assessed in three trials. Children of parents having acupuncture compared with parental sham-acupuncture were less anxious during induction (mYPAS MD 17, 95% CI 3.49 to 30.51) and more children were co-operative (RR 0.63, 95% CI 0.4 to 0.99). Parental anxiety was also significantly reduced in this trial. In two trials, a video viewed preoperatively did not show effects on child or parental outcomes. AUTHORS' CONCLUSIONS: This review shows that the presence of parents during induction of general anaesthesia does not reduce their child's anxiety. Promising non-pharmacological interventions such as parental acupuncture; clown doctors; hypnotherapy; low sensory stimulation; and hand-held video games needs to be investigated further.

A comment on an alleged association between hypnosis and death: two remarkable cases.
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Dr. Ewin recently reported his research on two “remarkable” cases where hypnosis performed by a lay hypnotist was allegedly associated with the death of the subject. Commentary is provided about both cases. In the first case, it seems clear that the death was co-incident to the hypnosis. In the second case, Dr. Ewin speculates that hypnosis may have been related to the subject’s death following her experience in a stage hypnosis show. Instead, we propose that the alerting suggestion used to terminate the hypnosis (that “the subjects would feel 10,000 volts of electricity through the seat of their chairs”), not hypnosis per se, was inappropriate and may have specifically adversely affected this particular subject due to her phobia regarding electricity. Legal ramifications of these cases regarding the issue of informed consent are raised. It is concluded that these cases do not imply a duty to warn subjects/patients that one possible negative consequence of undergoing hypnosis is death.

The hypnotic diagnostic interview for hysterical disorders, pediatric form.
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This article reports on the use of hypnosis to facilitate the diagnostic process in two cases of pediatric hysterical reactions. The Hypnotic Diagnostic Interview for Hysterical Disorders (HDHID), an interview tool, specifically designed for these cases, is reported. The first case was an adolescent male with motor Conversion Disorder manifested as paralysis of his lower limbs. The second was a preadolescent girl with sensory Conversion Disorder manifested as reduction of visual field in her right eye. Freudian conceptualization of hysterical reactions was employed as the conceptual basis in the formulation of these cases. This orientation posits hysterical phenomena a psychological defense employed by individuals exposed to traumatic experiences in order to effectuate a defense from intolerable affective material. The emotionally overwhelming material converts into physical reactivity free of the traumatic consequences by keeping the intolerable images and emotions deeply repressed within the subconscious. As the focus on these cases was diagnostic, treatment efforts were avoided. As it turned out, environmental interventions, based on the obtained information from the hypnotic interviews, extinguished the symptoms. The children were symptom free at follow-up.

A spiritual-hypnosis assisted treatment of children with PTSD after the 2002 Bali terrorist attack.
The aim of this study was to assess the effectiveness of a spiritual-hypnosis assisted therapy (SHAT) for treatment of posttraumatic stress disorder (PTSD) in children. All children, age 6-12 years (N=226; 52.7% females), who experienced the terrorist bomb blasts in Bali in 2002, and subsequently were diagnosed with PTSD were studied, through a longitudinal, quasi-experimental (pre-post test), single-blind, randomized control design. Of them, 48 received group SHAT (treatment group), and 178 did not receive any therapy (control group). Statistically significant results showed that SHAT produced a 77.1% improvement rate, at a two-year follow up, compared to 24% in the control group, while at the same time, the mean PTSD symptom score differences were significantly lower in the former group. We conclude that the method of spiritual-hypnosis is highly effective, economic, and easily implemented, and has a potential for therapy of PTSD in other cultures or other catastrophic life-threatening events.

[1637]
The effect of pregnancy on hypnotizability.
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Hypnosis during pregnancy and childbirth has been shown to reduce labor analgesia use and other medical interventions. We aimed to investigate whether there was a difference in hypnotizability in pregnant and nonpregnant women. Study participants had hypnotizability measured by the Creative Imagination Scale (CIS) in the third trimester of pregnancy and subsequently between 14 and 28 months postpartum and when not pregnant. The 37 participants who completed the study gave birth in the largest maternity unit in South Australia between January 2006 and March 2007. CIS scores were increased in women when pregnant (Mean 23.5, SD 6.9) compared to when they were not pregnant (Mean 18.7, SD 6.6), p < 0.001. The mean effect size was 0.84 suggesting that the hypnotizability change was both statistically significant and clinically meaningful. Our study findings support previous evidence showing that women are more hypnotizable when pregnant than when not pregnant.

[1638]
A new mind-body approach for a total healing of fibromyalgia: a case report.
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Fibromyalgia is a severe, chronic and widespread pain syndrome with no definite treatment protocol. Several medications are currently in use to treat this condition. Various pharmacological treatments, as well as alternative mind-body therapies, have been directed towards reducing fatigue and pain, but these treatments have only resulted in a partial relief of symptoms with no long-term or permanent effects. This study shows the results obtained from four female patients suffering from fibromyalgia after undergoing a mind-body treatment in which psychosocial genomic postulates as well as ideodynamic hand movements were the main tools employed in their healing. It is suggested that a mind-body oriented treatment could generate stable and permanent changes that enable patients to experience a total recovery from fibromyalgia.

[1639]
[Non-cardiac chest pain][Article in Portuguese]
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CONTEXT: Non-cardiac chest pain or functional chest pain is a syndrome with high prevalence in occidental world. Findings on 15%-30% of coronary angiograms performed in patients with chest pain are normal. Causes significant impact in quality of life of patients and is associated with increased use of the health care facilities. DATA SOURCES: To this review the following data base were accessed: Medline, the Cochrane Library, LILACS. The limit was the last 5 years publications and were selected relevant original articles, reviews, consensus, guidelines and meta-analysis. RESULTS: Forty-four papers were selected, 28 original articles, 12 reviews, 2 guidelines, 1 consensus and 1 meta-analysis. CONCLUSIONS: Exclusion of cardiac disease is of crucial importance. On the other hand non-cardiac chest pain could be related to gastrointestinal, muscular and respiratory causes and/or psychological disturbances. Treatment aims to attack mechanism generator in order to relieve or to eliminate symptoms. Drugs are the cornerstone of treatment, exception to achalasia patients because those have better response to dilation of the esophagus or surgery, and to those who need intensive psychological therapy. The most important drugs used are proton pump inhibitors and tricyclic antidepressants, the latter, to modulate central signal process (visceral hypersensitivity) and autonomic response. Recently, new diagnostic facilities, and also therapeutic modalities, such as esophageal botoxin injection and
hypnosis are under investigations. In the near future, maybe some of them would take a place in the therapeutic scenario of these patients.


Anxiety has always been part of the human condition, with accounts of its various manifestations, including acute shyness and stage fright, dating back to classical antiquity. Nonetheless, since the end of the Second World War, reported levels of anxiety have risen alarmingly. At the beginning of the 21st century, anxiety disorders constitute the most prevalent mental health problem around the globe, afflicting millions of people. What social factors account for this stunning development in the mental health field during the past half century? Some observers target the ever increasing pace and demands of modern life. Nonetheless, a larger body of evidence suggests that the prevalence of anxiety is due less to these pressures themselves than to a prevailing social ethos that teaches people that anxiety-related symptoms are a socially and medically legitimate response to life in the modern age.


OBJECTIVE: An estimated 24% of patients referred to epilepsy clinics actually have nonepileptic seizures. Various procedures have been used to precipitate nonepileptic events. The goal of this study was to use hypnosis in seizure provocation and differentiation between epileptic and nonepileptic seizure events. METHODS: Fifty study participants were enrolled from the Via Christi Comprehensive Epilepsy Center's video/electroencephalography unit. Patients underwent the Hypnotic Induction Profile (HIP) to assess susceptibility to hypnosis. After completion of the HIP, participants underwent hypnosis by a physician trained to do so. They received a hypnotic suggestion to have a seizure. All seizure-like events were classified as either an epileptic, nonepileptic, or undetermined event based on whether or not the patient had abnormal EEG activity during the event. RESULTS: Of the 50 participants enrolled, 3 withdrew consent, resulting in 47 participants. Seven (15%) participants failed to have an event of any type and were classified as undetermined. Sixteen (34%) participants were classified as having epileptic seizure events, and 24 (51%) participants had nonepileptic events. Most participants were Caucasian (87%), female (57%), and unemployed (55%). HIP scores ranged from 0 to 10. Participants classified with nonepileptic scores had higher mean HIP scores (8.08, SD 2.483) than those diagnosed with epileptic seizures [5.94, SD 3.492, t(25)=2.126, P=0.044]. The sensitivity of eliciting a nonepileptic event during hypnosis was only 0.46, but the specificity was 0.88. CONCLUSION: Hypnosis may be considered as a method of seizure provocation. Events provoked by hypnotic suggestion were more likely than not to be nonepileptic events. However, the current study has moderate specificity and poor sensitivity. Seizures could not be induced in patients who did not also have spontaneous seizures. Additional methodologies for seizure provocation need to be explored.

Health Policy. 2009 Jul;91 Suppl 1:S15-25. Smoking cessation: How compelling is the evidence? A review. Tønnesen P. Department of Pulmonary Medicine, Gentofte University Hospital, Denmark. d144002@dadlnet.dk

OBJECTIVES: To provide a short review of the evidence base supporting smoking cessation interventions, including behavioral therapy and pharmacological treatment options. METHODS: Published meta-analysis was mainly used supplemented with a limited literature search. RESULTS: Effective smoking cessation consists of pharmacotherapy and behavioral support. Counseling increases abstinence rates parallel to the intensity of support. First-line pharmacological drugs for smoking cessation are nicotine replacement products (patch, gum, inhaler, nasal spray, lozenge/tablets), varenicline and bupropion SR with scientific well-documented efficacy when used for 2-3 months and mostly mild side effects. Alternative therapies such as hypnosis and acupuncture have no scientifically proven effects. CONCLUSIONS: With the most optimal drugs and counseling today a 1-year abstinence rate of approximately 25% can be expected in smoking cessation. On-going research is examining the potential effects of nicotine vaccination as relapse prevention.

This investigation assessed the effectiveness of a self-help, self-hypnosis treatment in a primary-care setting in Edinburgh, UK. A partially randomized preference (PRP) study design was used, with benchmarking results to trials of CBT and counseling. Patients seeing their general practitioner for depression were offered randomization to, or their treatment preference of, either self-help (self-hypnosis) or antidepressant medication. Evaluation measures were Beck’s Depression Inventory, Brief Symptom Inventory, and SF-36. Of the 58 patients recruited, 50 chose self-hypnosis, 4 chose antidepressants, and 4 were randomized. The preference groups demonstrated similar demography, baseline measurements, and outcome effects to benchmarked trials. This feasibility study of a self-help, self-hypnosis program for depression showed promise for its future use in primary care. Benchmarking improved validity and reliability. A PRP study design appeared useful in a primary-care setting, where past studies have experienced problems of recruitment, concordance, and compliance.


Patients with functional gastrointestinal disorders, such as irritable bowel syndrome, functional dyspepsia, and noncardiac chest pain, can suffer from a range of severe symptoms that often substantially erode quality of life. Unfortunately, these conditions are notoriously difficult to treat, with many patients failing to improve despite being prescribed a wide variety of conventional medications. As a consequence, the potential benefits of hypnotherapy have been explored with evidence that this approach not only relieves symptoms but also appears to restore many of the putative psychological and physiological abnormalities associated with these conditions toward normal. These observations suggest that this form of treatment has considerable potential in aiding the management of functional gastrointestinal disorders and should be integrated into the ongoing medical care that these patients are receiving.


To explore the nature of past-life memories in hypnosis, 64 normal male adults aged 21 to 23 were selected using the Korean version of the Harvard Group Scale of Hypnotic Susceptibility (HGSHS:K) and a simple belief in past-life scale. They all received hypnotic past-life regression 3 times. The influence of HGSHS:K scores on the production rate of past-life memories was statistically significant; however, the influence of belief was not. The percentage of subjects who responded to hypnotic past-life regression increased with hypnotizability. Content analysis showed that cultural background and religious concepts influenced past-life memory production. Animals as past-life identities, for example, were reported whereas all past-life identities were human in a Canadian study.


Thirty-seven adults with spinal-cord injury and chronic pain were randomly assigned to receive 10 sessions of self-hypnosis (HYP) or EMG biofeedback relaxation (BIO) training for pain management. Participants in both treatment conditions reported substantial, but similar, decreases in pain intensity from before to after the treatment sessions. However, participants in the HYP condition, but not the BIO condition, reported statistically significant decreases in daily average pain pre- to posttreatment. These pre- to posttreatment decreases in pain reported by the HYP participants were maintained at 3-month follow-up. Participants in the HYP condition, but not the BIO condition, also reported significant pre- to posttreatment increases in perceived control over pain, but this change was not maintained at the 3-month follow-up.

This study investigated the effect of hypnosis in patients with temporomandibular disorders (TMD) with focus on oral function and psychological outcomes. Forty women (mean age +/- s.d.: 38.6 +/- 10.8 years) suffering from TMD (mean duration 11.9 +/- 9.9 years) were randomized to four individual 1-hour sessions of either hypnotic intervention or a control condition of simple relaxation. Pain intensity was assessed three times daily on a 0-10 Numerical Rating Scale. Additional outcomes were TMD-associated symptoms assessed by the Research Diagnostic Criteria examination form and questionnaire, psychological symptoms (Symptom Check List 60), pain coping strategies (Coping Strategies Questionnaire), sleep difficulties (Pittsburgh Sleep Quality Index) and use of analgesics. Data were analyzed with between-groups within-subjects anovas. The hypnosis group significantly reduced the daily NRS pain scores from 4.5 +/- 2.1 at baseline to 2.9 +/- 2.4 after treatment (P < 0.001) compared to the control group where no significant changes were found (4.2 +/- 1.4 to 3.9 +/- 1.5) (P = 0.733). Number needed to treat for a 50% pain reduction was 4.0. The hypnosis group also increased use of the coping strategy 'reinterpreting pain sensations' from 5.2 +/- 6.9 to 10.3 +/- 6.8 (P < 0.001). Both groups exhibited significant reductions in the number of painful muscle palpation sites and pain on palpation (P < 0.004), in number of awakenings due to pain (P < 0.006), and in somatization, obsessive compulsive symptoms and anxiety (P < 0.004). Hypnosis thus appears to effectively reduce some aspects of complex TMD pain.

A unique hypnotherapeutic approach to interstitial cystitis: a case report.
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BACKGROUND: Interstitial cystitis (IC) is a disease of the urinary bladder in which the lining may become inflamed and ulcerated, resulting in pain, urinary frequency and urgency. While traditional hypnotherapy has been shown effective in treating IC, some clients do not want the use of suggestion, daily self-hypnosis or extended treatment. CASE: A woman presented with a 9-year medical history of IC without resolution despite multiple medical treatments. Six sessions with Dr. Sidman's advanced approach to hypnotherapy resulted in her being free of pain and related symptoms for at least 5 years since this intervention. CONCLUSION: Resolution of IC symptoms was obtained in a client who had been refractory to conventional medical treatment.

Psychogenic movement disorders.
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Psychogenic movement disorders (PMDs) represent a challenging dilemma for the treating neurologist. The terminology to classify this disorder is confusing and making the diagnosis is difficult. Once the diagnosis has been established, treatment options are limited, and the patient generally does not accept the diagnosis.

Reducing immunization discomfort in 4- to 6-year-old children: a randomized clinical trial.
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OBJECTIVE: The goal was to test a multifaceted distraction method designed to reduce injection-associated pain in school-aged children. METHODS: A clinical trial evaluated 41 children, 4 to 6 years of age, who were given 3 standard prekindergarten immunizations; 21 were assigned randomly to an office routine control group, whereas 20 received a multifaceted, discomfort-reducing intervention. The intervention added verbal suggestions of diminished sensation and a visual focusing activity to the use of ethyl chloride, an established pain-reducing measure. The distraction materials used for the intervention consisted of topical ethyl chloride spray, an improvised, plastic, multipronged arm gripper, and a vibrating instrument descending on the contralateral arm, which provided the focusing task and visual distraction. RESULTS: According to patient and parent Faces Pain Scale-Revised scores and nonblinded, video-taped observations scored according to the face-legs-activity-crying-consolability method, the intervention group showed highly significant reductions in pain and discomfort, compared with the control group (patient self-report, P < .0013; parent report, P < .0002; observation score, P < .0001). CONCLUSION: This multifaceted distraction intervention reduced significantly the pain and discomfort of childhood immunizations in children 4 to 6 years of age.

[Beliefs and attitudes toward hypnosis of Spanish psychologists][Article in Spanish]
The aims of this study are to analyze Spanish psychologists' beliefs and attitudes toward hypnosis and to examine the responses obtained in different branches of the Spanish Psychological Association. The results will be useful for this Association in order to know psychologists' needs of training in hypnosis. The Valencia Scale of Attitudes and Beliefs toward Hypnosis-Therapist was applied to 2434 Spanish psychologists. Results indicated that participants, in general, hold correct beliefs about hypnosis and showed a positive attitude toward it. No differences in beliefs and attitudes toward hypnosis were found among different branches of the Association. Because of the fact that there was a low response, it would be worthwhile for the different branches of the Spanish Psychological Association to repeat this research, increasing the sample size and offering scientific information about hypnosis. This would be very helpful to promote the efficacious and non-iatrogenic use of hypnosis.

[1652]
Treatments for somnambulism in adults: assessing the evidence.
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Somnambulism, or sleepwalking, is a parasomnia of non-rapid eye movement (NREM) sleep where movement behaviours usually confined to wakefulness are displayed during sleep. Generally, if sleepwalking is causing distress or danger in spite of safety measures, medical or psychological treatment is indicated. Clinicians will need to assess the evidence for treatment options. MEDLINE, EMBASE, PsycINFO and the Ovid Evidence-Based Medicine Reviews (EBM) multifile databases were searched. No properly powered rigorous controlled trials were found for treatment of sleepwalking in adults. Seven reports described small trials with some kind of control arm, or retrospective case series which included 30 or more patients. With no high quality evidence to underpin recommendations for treatments of somnambulism, full discussion with patients is advised. Adequately powered, well-designed clinical trials are now needed, and multi-centre collaborations may be required to obtain the sample sizes required.

[1653]
The effect of autogenic training combined with organ formula and movement therapy on spontaneous and provoked migraine headaches[[Article in Hungarian]]
Zsomba T.
Semmelweis Egyetem, Mentális Egészségügyi Doktori Iskola, Budapest.
[abstract not found]

[1654]
Suggestive interventions in psychoanalysis.
Pannell J.
[abstract not found]

[1655]
Is there a role for complementary therapy in the management of leukemia?
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Patients with leukemia often seek additional treatments not prescribed by their oncologist in an effort to improve their cancer treatment outcome or to manage symptoms. Complementary therapies are used in conjunction with traditional cancer treatments to decrease symptoms and side effects associated with cancer or cancer treatment, and to improve patients' overall quality of life. Complementary therapies are distinct from so-called 'alternative' therapies, which are unproven, ineffective and may postpone or interfere with mainstream cancer treatment. Complementary therapies are pleasant, inexpensive, nonpharmacologic and effective. For patients with leukemia, the complementary therapies that are always appropriate include mind-body interventions, such as self-hypnosis, meditation, guided imagery and breath awareness. Massage and reflexology (foot massage) decrease symptoms with effects lasting at least 2 days following treatment. Acupuncture is very beneficial for symptom management without adverse consequences. Physical fitness with regular exercise and healthy dietary habits can significantly decrease side effects of cancer treatments and may prolong survival. Botanical extracts and vitamin supplements may interfere with active cancer treatments, and should be
discussed with the oncologist or pharmacist before use.

[1656] 
Hum Brain Mapp. 2009 Sep;30(9):2890-7.
Strength of prefrontal activation predicts intensity of suggestion-induced pain.
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Suggestion, a powerful factor in everyday social interaction, is most effective during hypnosis. Subjective evaluations and brain-imaging findings converge to propose that hypnotic suggestion strongly modulates sensory processing. To reveal the brain regions that mediate such a modulation, we analyzed data from a functional-magnetic-resonance-imaging study on hypnotic-suggestion-induced pain on 14 suggestive subjects. Activation strengths in the right dorsolateral prefrontal cortex (DLPFC) during initiation of suggestion for pain correlated positively with the subjective intensity of the subsequent suggestion-induced pain, as well as with the strengths of the maximum pain-related activation in the in the secondary somatosensory (SII) cortex. Furthermore, activation of the insula and the anterior cingulate cortex predicted the pain-related SII activation. The right DLPFC, as an area important for executive functions, likely contributes to functional modulation in the modality-specific target areas of given suggestions. 2009 Wiley-Liss, Inc.

[1657] 
Women's views regarding hypnosis for the control of surgical pain in the context of a randomized clinical trial.
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OBJECTIVE: The aim of this study was to assess women's satisfaction with a hypnotic intervention for anxiety and pain management during a pregnancy-terminating procedure. METHODS: Women (N = 350) scheduled for first-trimester surgical abortion were randomly assigned to standard care or to a short, standardized hypno-analgesia intervention before and during the procedure. We assessed their individual use of the various hypnotic strategies proposed during the intervention and their views (likes/dislikes) about the hypnotic intervention, the pregnancy termination experience, and their participation in this randomized study. RESULTS: Mental imagery of a secure place was the strategy used by most women (71%) in the hypnosis group, but a significant proportion of them also used dissociation (42%) and focal analgesia (39%). Advantages of hypnosis over standard care were found in the patients' report that they could resume their normal activities right after being discharged from the hospital (72% in hypnosis vs. 56% in control group) and in their appreciation of the accompaniment (hypnotherapist vs. nurse) provided during the procedure (97% in hypnosis vs. 56% in control group). Among those who received hypnosis, 97% affirmed that they would recommend hypnosis to a friend for a similar procedure. More than 98% in both groups indicated they would again volunteer to participate in a study evaluating hypnosis for pain management. CONCLUSIONS: Women in the hypnosis group generally reported higher levels of satisfaction with various aspects of the procedure. This is consistent with the growing literature in favor of hypnotic interventions to improve pain management and care.

[1658] 
Pain and non-pain processing during hypnosis: a thulium-YAG event-related fMRI study.
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The neural mechanisms underlying the antinociceptive effects of hypnosis still remain unclear. Using a parametric single-trial thulium-YAG laser fMRI paradigm, we assessed changes in brain activation and connectivity related to the hypnotic state as compared to normal wakefulness in 13 healthy volunteers. Behaviorally, a difference in subjective ratings was found between normal wakefulness and hypnotic state for both non-painful and painful intensity-matched stimuli applied to the left hand. In normal wakefulness, non-painful range stimuli activated brainstem, contralateral primary somatosensory (S1) and bilateral insular cortices. Painful stimuli activated additional areas encompassing thalamus, bilateral striatum, anterior cingulate (ACC), premotor and dorsolateral prefrontal cortices. In hypnosis, intensity-matched stimuli in both the non-painful and painful range failed to elicit any cerebral activation. The interaction analysis identified that contralateral thalamus, bilateral striatum and ACC activated more in normal wakefulness compared to hypnosis during painful versus non-painful stimulation. Finally, we demonstrated hypnosis-related increases in functional connectivity between S1 and distant anterior insular and prefrontal cortices, possibly reflecting top-down modulation.

[1659] 
Complementary and alternative medicine use in Gilles de la Tourette syndrome.
The aim of this study was to describe the use of complementary and alternative medicine (CAM) in patients with Tourette syndrome (TS) and explore associations with CAM use. In recent years CAM use has increased, but rates of CAM use in TS patients are not reported. Consecutive TS patients or their parent(s), seen in an academic movement disorder center, completed a questionnaire regarding their use of CAM. One hundred TS patients or parents completed the questionnaire, mean age 21.5 +/- 13.5, 76 males, 87 Caucasians. Sixty four patients had used at least one CAM modality. CAM treatments used were prayer (28), vitamins (21), massage (19), dietary supplements (15), chiropractic manipulations (12), meditation (10), diet alterations (nine), yoga (nine), acupuncture (eight), hypnosis (seven), homeopathy (six), and EEG biofeedback (six). Fifty six percent of patients using CAM reported some improvement. Users paid out of pocket for 47% of treatments pursued, and 19% of these payers received partial reimbursement by third party payer. Users and non-users did not differ in age, gender, race, income, educational level, general health, tic severity, medication use for TS, current satisfaction from medications or experience of side effects from medications. CAM use was associated with the presence of affective disorder (P = 0.004), but not with either ADHD or OCD. Among CAM users, 80% initiated CAM without informing their doctor. CAM is commonly used in children and adults with TS, and often without the neurologist's knowledge. Physicians should inquire about CAM to understand the spectrum of interventions that patients with TS use.

Placebo controls, exorcisms, and the devil.
Kaptchuk TJ, Kerr CE, Zanger A.

[abstract not found]

Hypnosis: seventy years of amazement, and still don't know what it is!
Watkins JG.
University of Montana, USA.
This paper has reviewed the author's experience with hypnosis and related therapies from 1934 through World War II, psychological warfare, multiple personality, the origins and feuding of hypnosis societies, the development of hypnotic ego state therapy and the unique contributions of his colleague and wife, Helen Watkins.

Diagnosis and hypnotic treatment of an unusual case of hysterical amnesia.
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This article reports on the use of hypnosis to facilitate the diagnostic process and the treatment of an unusual case of adult psychogenic amnesia. An Iraqi citizen living in the U.S. developed an atypical case of Dissociative Amnesia, Systematized type, post-automotive collision. The amnesia presented with features encompassing complete loss of the patient's native language. Dissociation theory as a conceptualization of hysterical reactions was employed as the basis in the formulation of this case. The differential diagnosis was facilitated by the Hypnotic Diagnostic Interview for Hysterical Disorders (HDIHD) Adult Form, an interview tool specifically designed for cases such as this. Treatment consisted exclusively of ego strengthening and time projection approaches in hypnosis. It was hypothesized that, as the coping capacities became more viable, the dissociative symptoms would remiss. After 6 weekly visits the patient regained complete command of his native language. Follow-up at 6 months indicated that the patient remained devoid of symptoms.

Ambroise August LiÂ¢beaut and psychic phenomena.
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Some nineteenth-century hypnosis researchers did not limit their interest to the study of the conventional psychological and behavioral aspects of hypnosis, but also studied and wrote about psychic phenomena such as mental suggestion and clairvoyance. One example, and the topic of this paper, was French physician Ambroise August LiÂ¢beaut (1823-1904), who influenced the Nancy school of hypnosis. LiÂ¢beaut wrote about mental suggestion, clairvoyance, mediumship, and
even so-called poltergeists. Some of his writings provide conventional explanations of the phenomena. Still of interest today, Liébeault's writings about psychic phenomena illustrate the overlap that existed during the nineteenth-century between hypnosis and psychic phenomena—an overlap related to the potentials of the mind and its subconscious activity.

[1664]
ECEM (Eye Closure, Eye Movements): application to depersonalization disorder.
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Eye Closure, Eye Movements (ECEM) is a hypnotically-based approach to treatment that incorporates eye movements adapted from the Eye Movement Desensitization and Reprocessing (EMDR) protocol in conjunction with hypnosis for the treatment of depersonalization disorder. Depersonalization Disorder has been differentiated from post-traumatic stress disorders and has recently been conceptualized as a subtype of panic disorder (Baker et al., 2003; David, Phillips, Medford, & Sierra, 2004; Segui et al., 2000). During ECEM, while remaining in a hypnotic state, clients self-generated six to seven trials of eye movements to reduce anticipatory anxiety associated with depersonalization disorder. Eye movements were also used to process triggers that elicited breath holding, often followed by episodes of depersonalization. Hypnotic suggestions were used to reverse core symptoms of depersonalization, subjectively described as "feeling unreal" (Simeon et al., 1997).

[1665]
A concurrent validity study between the Hypnotic Induction Profile (HIP) and the Stanford Hypnotic Clinical Scale for Adults (SHCS:A) in an inpatient sample: a brief report.
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The Hypnotic Induction Profile (HIP) is a brief, standardized assessment of hypnotizability which takes 5-10 minutes to administer. The Stanford Hypnotic Clinical Scale for Adults (SHCS:A) is a different clinical measure of hypnotizability that takes about 20-25 minutes to administer. Although both scales purport to measure the same thing, they were based on different theories of hypnosis and constructed using different psychometric techniques. The present investigation is a concurrent validation study comparing scores on the two instruments in a sample of 24 inpatients. The correlation between the SHCS:A and HIP Induction score was 0.41 (p < .01). However, the Eye Roll Sign (ERS) did not correlate significantly with either the SHCS:A (.04, ns) or the HIP-IND score (-.05, ns). These results indicate that while scores on the HIP and SHCS:A are significantly correlated the inter-correlations are not high enough to consider them as interchangeable measures. Implications of these findings for future research are discussed.

[1666]
[Abdominal bloating: an up-to-date][Article in French]
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Bloating is a common symptom, especially in women. In the clinical practice, it remains a therapeutic challenge. Since recently, its pathophysiology is better understood: an impaired transit of gas (particularly in the small bowel) or a visceral hypersensitivity leading to the induction of an abdominal discomfort despite a normal volume of gas are two of the main causes, far more frequent than an excessive production of gas. Moreover, bloating can be related to abnormal visceral-somatic reflexes promoting both an abdomino-phrenic dysynergia and the relaxation of the muscles of the abdominal wall. From a therapeutic point of view, the efficacy of the gas absorbants remains to be more documented. Besides the treatment of a constipation and the avoidance of nutrients either highly fermentable or rich in fructose, other therapeutic options include prokinetics and drugs acting on visceral sensitivity. Probiotics are another promising option. In some centers, a non pharmacological therapeutic approach, mainly based on hypnosis, is discussed.

[1667]
Clinical research on the utility of hypnosis in the prevention, diagnosis, and treatment of medical and psychiatric disorders.
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The authors summarize 4 articles of special interest to the hypnosis community in the general scientific and medical literatures. All are empirical studies testing the clinical utility of hypnosis, and together address the role of hypnosis in prevention, diagnosis, and treatment of medical and psychiatric disorders/conditions. The first is a randomized controlled
study of smoking cessation treatments comparing a hypnosis-based protocol to an established behavioral counseling protocol. Hypnosis quit rates are superior to those of the accepted behavioral counseling protocol. A second study with pediatric patients finds hypnosis critically helpful in differentiating nonepileptic seizure-like behaviors (pseudoseizures) from epilepsy. The remaining 2 papers are randomized controlled trials testing whether hypnosis is effective in helping patients manage the emotional distress of medical procedures associated with cancer treatment. Among female survivors of breast cancer, hypnosis reduces perceived hot flashes and associated emotional and sleep disruptions. Among pediatric cancer patients, a brief hypnotic intervention helps control venepuncture-related pain.

A meta-analysis of hypnosis in the treatment of depressive symptoms: a brief communication.
Shih M, Yang YH, Koo M.
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The efficacy of hypnosis in the treatment of depressive symptoms was subjected to a meta-analysis. Studies were identified using Google Scholar and 6 electronic databases: PubMed, Cochrane Library, Psitri, PsychLit, Embase, and the Cochrane Depression, Anxiety and Neurosis Review Group (CCDAN). The keywords used were (a) hypnosis, (b) hypnotherapy, (c) mood disorder, (d) depression, and (e) dysthymia. Six studies qualified and were analyzed using the Comprehensive Meta-Analysis software package. The combined effect size of hypnosis for depressive symptoms was 0.57. Hypnosis appeared to significantly improve symptoms of depression (p < .001). Hypnosis appears to be a viable nonpharmacologic intervention for depression. Suggestions for future research are discussed.

"Robbery by hypnosis" in Italy: a psycho-criminological analysis of the phenomenon based on 20 years of newspaper articles (1988-2007).
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Shocking news of robberies committed using hypnosis on bank cashiers, salespeople, or passers-by has sporadically been reported by the media in countries around the world. The first reported episode in Italy dates to the 1950s. Although the phenomenon has been reported in the papers more frequently in recent years, no objective analysis of it has been published in the scientific literature. This paper analyzes 106 episodes recorded in Italy between 1988 and 2007, identified by a systematic review of the online and printed archives of Italian national and local dailies and of the database of the country's principal press agency. When they are analyzed from a psychological and criminological standpoint, there is no evidence to support any real use of hypnotic methods in the episodes described.

Effects of an affect bridge for age regression.
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The authors tested tailored hypnotic inductions for age regression with an affect bridge to access meaning-laden events. They used emotional intensity, spontaneity, elaboration, and transitional-object measures to assess the genuineness of the topographic shift to primary process characteristic of hypnotic age regression. An affect bridge was used to access stressful events within the age range of 3 to 6 years. The Stanford Hypnotic Susceptibility Scale, Form C was administered to determine high hypnotizables-reals, (n = 8, scores 9-12) and low hypnotizables-simulators, (n = 8, scores 3 or less). The groups behaved differently on frequency of transitional objects, spontaneity, and intensity but not on elaboration. The hypnotizable-reals but not the simulators produced a plethora of primary-process childlike affective responses that could not be produced by the role-playing simulators.

Effects of a hypnotically altered state of consciousness on intensification of semantic processing.
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In a study of the linguistic processes involved in hypnosis, 22 volunteer medical students performed semantic and phonologic fluency tasks and then associative priming tests with 2 delay-lengths in waking alert and hypnotic conditions as well. The participants performed better during semantic than phonological fluency tests in alert and also in hypnotic states, and this difference was significantly greater in hypnosis. The increased semantic performance in hypnosis was accompanied by a decrease of the rule-offending errors. Significant semantic priming effects were detected in both states.
of consciousness in direct and indirect relations as well as in the automatic, intralexical level, and also when the extralexical control processes were activated. Overall, the results appear to show that the hypnotically altered state of consciousness produces significantly better performance in semantic information processing than can be elicited in alert waking conditions.

[1672]
Late 19th- and early 20th-century discussions of animal magnetism.
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The mesmerists explained the phenomena of what was later called hypnosis as the effects of a force called animal magnetism. Both psychologists' and physicians' writings generally create the impression that the magnetic movement disappeared after the mid-19th century. While the concept of animal magnetism declined significantly by the end of the 19th century, it did not disappear completely. Some examples include the work of Hector Durville, Henri Durville, Emile Magnin, and Edmund Shaftesbury. Detailed accounts of the work of Edmund Gurney and Albert de Rochas are presented. Similar to its earlier counterpart, the late mesmeric movement was associated with what today is known as parapsychological phenomena. This association, and the belief that the demise of magnetic theory represents scientific progress, has led many to emphasize a history that is incomplete.

[1673]
Structural aspects of three hypnotizability scales: smallest space analysis.
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Smallest space analysis (SSA) was used to examine structural aspects of the Creative Imagination Scale (CIS), Harvard Group Scale of Hypnotic Susceptibility, Form A (HGSHS:A), and Stanford Scale of Hypnotic Susceptibility, Form C (SHSS:C). Correlation matrices for each of the instruments came from published studies of other investigators. The SSA on the CIS suggested the presence of 1 facet, focus of processing, with 2 subsets of items: somato-sensory and imagination sensory. The combined 22-item matrix SSA showed that the CIS and HGSHS:A items regionalized separately. The item configuration suggested 1 facet, nature of suggestions including 3 subsets: direct motor items of the HGSHS:A, challenge-inhibition items of the HGSHS:A, and the cognitive items of the CIS. The SSA for the SHSS:C suggested 2 facets, containing 2 elements each: processing focus of suggestions (cognitive-sensory and motor-sensory) and nature of suggestions (direct and challenge-inhibition). A general mapping sentence is offered with possible implications.

[1674]
Affect and hypnosis: on paying friendly attention to disturbing thoughts.
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The real mystery about hypnosis is the simplicity of induction and the ease with which a willing participant will accept and work within the trance state. Something so natural must involve neural systems that make trance a normal phenomenon. Presented is the language for emotion developed by Silvan Tomkins between 1960 and his death in 1991, brought into contemporary science by the author. Tomkins focused on the facial displays of affect, programmed reactions to specific patterns of stimulation. Each of these 9 innate mechanisms initiates a reaction pattern people experience as an emotion that brings its trigger into conscious awareness. How people think about or understand anything is controlled by the affect with which it has become linked. Cognitions locked to unpleasant emotions can become disturbingly resistant to change until trance work alters the affective environment of the participant.

[1675]
Effect of biofeedback-assisted autogenic training on headache activity and mood states in Korean female migraine patients.
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Biofeedback with or without combined autogenic training is known to be effective for the treatment of migraine. This study aimed to examine the effect of biofeedback treatment on headache activity, anxiety, and depression in Korean female patients with migraine headache. Patients were randomized into the treatment group (n=17) and monitoring group (n=15).
Mood states including anxiety and depression, and psychophysiological variables such as mean skin temperature of the patients were compared with those of the normal controls (n=21). We found greater treatment response rate (defined as > or =50% reduction in headache index) in patients with biofeedback-assisted autogenic training than in monitoring group. The scores on the anxiety and depression scales in the patients receiving biofeedback-assisted autogenic training decreased after the biofeedback treatment. Moreover, the decrease in their anxiety levels was significantly related to the treatment outcome. This result suggests that the biofeedback-assisted autogenic training is effective for the treatment of migraine and its therapeutic effect is closely related to the improvement of the anxiety level.

[1676]
Conceptions of ability affect motor learning.
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The authors examined the effects of induced conceptions of ability on motor learning. Participants in 3 groups practiced a balance task after receiving instructions suggesting that the task would reflect an inherent ability (IA group), represent an acquirable skill (AS group), or no ability-related instructions (control group). Across 2 days of practice, the AS and IA groups showed greater improvement in performance compared with the control group. For the retention test on Day 3, the AS group tended to demonstrate generally more effective balance performance than the control group and increasingly greater effectiveness compared with the IA group. Moreover, AS group participants made higher-frequency (reflexive) movement adjustments than participants of the other 2 groups, indicating a greater automaticity in the control of their movements. Thus, learning was enhanced by instructions portraying the task as a learnable skill, rather than revealing a fixed inherent capacity or no instructions (control group).

[1677]
New Dir Child Adolesc Dev. 2009 Fall;2009(125):79-93.
Evidentiality and suggestibility: a new research venue.
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Recent research suggests that acquisition of mental-state language may influence conceptual development. We examine this possibility by investigating the conceptual links between evidentiality in language and suggestibility. Young children are disproportionately suggestible and tend to change their reports or memories when questioned. The authors discuss the extent to which components of mental-state understanding, specifically representational understanding and understanding origins of knowledge, are implicated in improvements in resistance to suggestions and comprehending evidentiality. The authors also review social-psychological evidence that has implications for evidential understanding. Integration of the literature on both topics is followed by suggestions for new research directions.

[1678]
Complementary, holistic, and integrative medicine: nocturnal enuresis.
Adams D, Vohra S.
Complementary and Alternative Research and Education, Program, Department of Pediatrics, Faculty of Medicine, University of Alberta, Edmonton, Alberta, Canada.

[abstract not found]

[1679]
Arch Kriminol. 2009 Nov-Dec;224(5-6):177-83.
[Death in a relaxation tank][Article in German]
Rupp W, Simon KH, Bohnert M.
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Complete relaxation can be achieved by floating in a darkened, sound-proof relaxation tank filled with salinated water kept at body temperature. Under these conditions, meditation exercises up to self-hypnosis may lead to deep relaxation with physical and mental revitalization. A user manipulated his tank, presumably to completely cut off all optical and acoustic stimuli and accidentally also covered the ventilation hole. The man was found dead in his relaxation tank. The findings suggested lack of oxygen as the cause of death.

[1680]
Practical uses of clinical hypnosis in enhancing fertility, healthy pregnancy and childbirth.
The following article identifies practical uses of hypnosis within midwifery. The author and her team teaches clinical hypnosis at 11 medical schools in the UK.

[1681]
HNO. 2009 Nov;57(11):1167-75; quiz 1176-7.
[Psychosomatic treatment of otorhinolaryngological diseases][Article in German]
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The spectrum of psychosomatic diseases in the field of otorhinolaryngology covers reactive disorders brought on by excessive psychosocial demands, post-traumatic disorders following mental traumatization, purely psychological disorders brought on by personality development deficits or learnt false behavior, and multifactorial diseases with somatic correlatives and mental triggers. Psychosomatic medicine describes the interaction of physical and psychological processes. The central treatment method is psychotherapy. In Germany, the costs of psychodynamic psychotherapies and behavioral therapy are covered by the health insurance companies. The tasks of psychosomatic treatment in the field of otorhinolaryngology comprise differential diagnostics, basic psychosomatic treatment and the determination of differential indications for the respective forms of psychotherapy.

[1682]
Give a person power and he or she will show interpersonal sensitivity: the phenomenon and its why and when.
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The goal of the present research was to investigate whether high or low power leads to more interpersonal sensitivity and what potentially mediates and moderates this effect. In Study 1, 76 participants in either a high- or low-power position interacted; in Study 2, 134 participants were implicitly primed with either high- or low-power or neutral words; and in Study 3, 96 participants were asked to remember a situation in which they felt high or low power (plus a control condition). In Study 4, 157 participants were told to identify with either an egoistic, empathic, or neutral leadership style. In all studies, interpersonal sensitivity, defined as correctly assessing other people, was then measured using different instruments in each study. Consistently, high power resulted in more interpersonal sensitivity than low power. Feeling respected and proud was partially responsible for this effect. Empathic power as a personality trait was related to more interpersonal sensitivity, and high-power individuals who adopted an empathic instead of an egoistic leadership style were more interpersonally sensitive.

[1683]
Affirmed yet unaware: exploring the role of awareness in the process of self-affirmation.
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Three studies investigated whether self-affirmation can proceed without awareness, whether people are aware of the influence of experimental self-affirmations, and whether such awareness facilitates or undermines the self-affirmation process. The authors found that self-affirmation effects could proceed without awareness, as implicit self-affirming primes (utilizing sentence-unscrambling procedures) produced standard self-affirmation effects (Studies 1 and 3). People were generally unaware of self-affirmation's influence, and self-reported awareness was associated with decreased impact of the affirmation (Studies 1 and 2). Finally, affirmation effects were attenuated when people learned that self-affirmation was designed to boost self-esteem (Study 2) or told of a potential link between self-affirmation and evaluations of threatening information (Study 3). Together, these studies suggest not only that affirmation processes can proceed without awareness but also that increased awareness of the affirmation may diminish its impact.

[1684]
Features of color reflection in psychogenic pain in patients with somatoform disorders during psychotherapeutic treatment.
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The present work examines the change in color reflection in psychogenic pain in patients with somatoform disorders (SFD) during psychotherapeutic treatment, for which empatho-techniques were used. At the start and end of the course the psychophysiological condition was determined according to psychological parameters and assessment of bioelectrical brain activity. All initial indicators for the patients significantly differed from those for the healthy subjects. At the same time, color reflection in the psychogenic pain was characterised by colors in the longwave part of the spectrum, in contradistinction to healthy subjects for whom achromatic and shortwave colors predominated. After the completed course patients with SFD had a significant improvement of all psychophysiological indicators and a lack of color reflections in the longwave part of the spectrum. The data obtained permits the proposition that there exists a link between the psychogenic pain, its color reflection and anxiety, and also changes in the functional condition of the CNS.


The Irritable bowel syndrome (IBS) is a highly prevalent functional disorder with a remarkable clinical and economic impact. Several pathogenetic factors of IBS are discussed and summarised within a bio-psycho-social model. Data from published hypnotherapeutic interventions with approximately 800 patients show long-lasting symptom relief. The underlying mechanisms of action are not well understood. Nine mechanism studies show influences of hypnosis on colorectal sensitivity, colorectal motility and mental strain (anxiety, depression, maladaptive cognitions). Results are often contradictory and effects of hypnosis on several of the proposed pathogenetic factors are not examined at all. This paper reviews previous studies on hypnotherapy in IBS patients with a focus on symptom relief and mechanisms of action.


Can suggestion, particularly hypnotic suggestion, influence cognition? Addressing this intriguing question experimentally is on the rise in cognitive research, nowhere more prevalently than in the domain of cognitive control and attention. This may well rest on the intuitive connection between hypnotic suggestion and attention, where the hypnotist controls the subject's attention. Particularly impressive has been the work of Raz and his colleagues demonstrating the modulation and even the complete elimination of classic Stroop color-word interference when subjects are given a posthypnotic suggestion that words are meaningless. Overriding a highly practiced, possibly even automatic response like reading is testament to the attentional control that can be exerted under (post)hypnotic suggestion. What else do we need to know—in the Stroop context and more broadly—to obtain a clear picture of how suggestion can orchestrate attention?


Physicians commonly recommend 'placebo treatments', which are not believed to have specific efficacy for the patient's condition. Motivations for placebo treatments include complying with patient expectations and promoting a placebo effect. In this article, we focus on two key empirical questions that must be addressed in order to assess the ethical legitimacy of placebo treatments in clinical practice: 1) do placebo treatments have the potential to produce clinically significant benefit? and 2) can placebo treatments be effective in promoting a therapeutic placebo response without the use of deception? We examine evidence from clinical trials and laboratory experiments bearing on these two questions. The conclusion is reached that based on currently available evidence, it is premature to judge whether placebo treatments are ethically justifiable, with the possible exception of acupuncture for pain relief.

Placebos in clinical practice and the power of suggestion.
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[abstract not found]

Adaptive computer control of anesthesia in humans.
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This paper presents an efficient computer control technique for regulation of anesthesia in humans. The anesthetic used is propofol and the objective is to control the degree of hypnosis of the patient. The paper describes the basic hardware/software setup of the system and the closed-loop methodologies. The bispectral index (BIS) is considered as the feedback signal. The control methods proposed here are based in the use of proportional integral controllers with dead-time compensation to avoid undesirable oscillations in the BIS signal during the process. The compensation is based on the Smith predictor. To guarantee the applicability of the method to different patients, an adaptive module to tune the compensator is developed. Some real and simulated results are presented in this work to attest the efficiency of the methods used.

Hypnotic induction decreases anterior default mode activity.
Department of Psychology, University of Hull, UK.

The ‘default mode’ network refers to cortical areas that are active in the absence of goal-directed activity. In previous studies, decreased activity in the ‘default mode’ has always been associated with increased activation in task-relevant areas. We show that the induction of hypnosis can reduce anterior default mode activity during rest without increasing activity in other cortical regions. We assessed brain activation patterns of high and low suggestible people while resting in the fMRI scanner and while engaged in visual tasks, in and out of hypnosis. High suggestible participants in hypnosis showed decreased brain activity in the anterior parts of the default mode circuit. In low suggestible people, hypnotic induction produced no detectable changes in these regions, but instead deactivated areas involved in alertness. The findings indicate that hypnotic induction creates a distinctive and unique pattern of brain activation in highly suggestible subjects.

Hypnotic suggestibility, cognitive inhibition, and dissociation.
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We examined two potential correlates of hypnotic suggestibility: dissociation and cognitive inhibition. Dissociation is the foundation of two of the major theories of hypnosis and other theories commonly postulate that hypnotic responding is a result of attentional abilities (including inhibition). Participants were administered the Waterloo-Stanford Group Scale of Hypnotic Susceptibility, Form C. Under the guise of an unrelated study, 180 of these participants also completed: a version of the Dissociative Experiences Scale that is normally distributed in non-clinical populations; a latent inhibition task, a spatial negative priming task, and a memory task designed to measure negative priming. The data ruled out even moderate correlations between hypnotic suggestibility and all the measures of dissociation and cognitive inhibition overall, though they also indicated gender differences. The results are a challenge for existing theories of hypnosis.

Attention control and susceptibility to hypnosis.
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The present work aimed at assessing whether the interference exerted by task-irrelevant spatial information is comparable in high- and low-susceptible individuals and whether it may be eliminated by means of a specific posthypnotic suggestion. To this purpose high- and low-susceptible participants were tested using a Simon-like interference task after the administration of a suggestion aimed at preventing the processing of the irrelevant spatial information conveyed by the stimuli. The suggestion could be administered either in the absence or following a standard hypnotic induction. We showed that, outside from the hypnotic context, the Simon effect was similar in high and low-susceptible participants and it was significantly reduced following the posthypnotic suggestion in high-susceptible participants only. These results show that a specific posthypnotic suggestion can alter information processing in high-susceptible individuals and reduce the interfering effect exerted by arrow stimuli.

[1694]
Are psychological treatments effective for fibromyalgia pain?
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This article considers four broad classes of psychological techniques and their effects on fibromyalgia (FM) pain. A literature search identified 14 randomized controlled trials (RCTs) of cognitive-behavioral therapy (CBT) and operant-behavioral therapy (OBT), five relaxation RCTs, five biofeedback RCTs, five hypnotherapy RCTs, and two writing intervention RCTs. For psychoanalytic therapy in FM, no RCTs have been published. The highest effect sizes (r = 0.53-2.14) for pain reduction are found after CBT and OB T group treatments. Relaxation as a single treatment has not been proven useful. Hypnotherapy and writing intervention have demonstrated mild treatment effects, whereas psychological treatment is effective in FM pain. Considering the heterogeneity of FM, the promising effects of matched interventions such as CBT and OB T with pharmacotherapy, exercise, and other treatment domains require further research.

[1695]
Management of stress in inflammatory bowel disease: a therapeutic option?
Goodhand JR, Wahed M, Rampton DS.
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There is increasing evidence that psychological stress and associated mood disorders are linked with, and can adversely affect the course of, inflammatory bowel disease (IBD). Unfortunately, owing to methodological difficulties inherent in undertaking appropriately targeted and blinded trials, there are limited high-quality data regarding the effects on IBD of interventions aimed to ameliorate stress and mood disorders. Nevertheless, patients want psychological intervention as well as conventional medical strategies. Emerging trial evidence supports the suggestion that psychologically orientated therapy may ameliorate IBD-associated mood disorders, but there are no strong data as of yet to indicate that stress management has a beneficial effect on the activity or course of IBD. As yet, which, when and how interventions targeted at psychological stress and mood disturbances should be offered to individual patients with IBD is not clear.

[1696]
Pain management in patients with burn injuries.
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[abstract not found]

[1697]
Human figure drawings and children’s recall of touching.
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In 2 studies, children ages 3 to 7 years were asked to recall a series of touches that occurred during a previous staged event. The recall interview took place 1 week after the event in Study 1 and immediately after the event in Study 2. Each recall interview had 2 sections: In 1 section, children were given human figure drawings (HFDs) and were asked to show where the touching took place; in the other section, the same questions were asked without the HFDs (verbal condition). Children were randomly assigned to 2 different conditions: HFD 1st/verbal 2nd or verbal 1st/HFD 2nd. There were 2 major findings. First, HFDs elicited more errors than the verbal condition when used to probe for information that the child had already been asked. Second, regardless of interview method, children had poor recall of the touches even when
these occurred minutes before the interview. It is suggested that cognitive mechanisms involving memory and semantics underlie children's poor recall of touching in both verbal and HFD conditions. Copyright 2009 APA


[abstract not found]


OBJECTIVES: Autogenic training (AT) is a behaviourally orientated intervention usually taught in eight or nine sessions in the United Kingdom: clients are taught six simple mental formulae designed to induce a calm state of mind and body, five additional emotional expression exercises, and individually tailored 'personal formulae' for supporting positive change. In the absence of existing psychological (as opposed to neuro-physiological) models of AT's mechanisms, this study aimed to produce the first such model, drawing on the perceptions of recent AT clients. DESIGN: An abbreviated form of grounded theory was used to explore retrospectively and in detail the experiences of a small sample of people of the process of change. METHODS: Forty people were approached and 12 women participated who had completed AT in group form after referral for anxiety. Each was interviewed individually. A preliminary model of change was produced, grounded in the interview data. RESULTS: Factors reported to be salient were learning in a group, the core AT experience (the six standard exercises), difficulties with practice, the importance of regular practice integrated into daily life, and enhanced well-being and coping, which incorporated reduced worrying and clearer thinking. Limitations of the study are discussed, as are areas for further research and implications for anxiety treatment. CONCLUSIONS: This was a small study with a self-selected sample. However, theoretical generalizations can be made about the process of change. Since AT does not specifically focus on challenging negative cognitions, the cognitive changes reported have implications for anxiety treatments.


[abstract not found]


The study investigated whether participants who received Reiki would show greater health and well-being benefits than a group who received no Reiki. A method of blinding participants to Reiki was also tested, where non-contact Reiki or No-Reiki with random assignment was given to 35 healthy psychology undergraduates whose attention was absorbed in one of three tasks involving self-hypnosis/relaxation. Participants experienced ten 20-min intervention sessions over a period of two and a half to 12 weeks. Reiki was directed by the experimenter who sat behind the participants as they were absorbed in the tasks. Self-report measures of illness symptoms, mood and sleep were assessed pre-post-intervention as was salivary cortisol. While the Reiki group had a tendency towards a reduction in illness symptoms, a substantive increase was seen in the No-Reiki. The Reiki group also had a near-significant comparative reduction in stress, although they also had significantly higher baseline illness symptoms and stress scores. The Reiki blinding was successful - the groups did not differ statistically in their beliefs regarding group membership. The results are suggestive that the Reiki buffered the substantive decline in health in the course of the academic year seen in the No-Reiki group.

Research in cognitive neuroscience now considers the state of the brain prior to the task an important aspect of performance. Hypnosis seems to alter the brain state in a way which allows external input to dominate over internal goals. We examine how normal development may illuminate the hypnotic state. Copyright © 2009 Elsevier Inc. All rights reserved.

[1703]
Predicting animal attachment from hypnotizability, absorption, and dissociation scores.
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Using a sample of nearly 300 undergraduate students, we examined whether absorption, dissociation, and hypnotizability were linked with pet attachment, and whether completing assessment scales in the same or different testing contexts affected the association. We found a positive correlation between scores on the Tellegen Absorption Scale (TAS; Tellegen & Atkinson, 1974) and the Companion Animal Bonding Scale (CABS; Poresky, Hendrix, & Mosier, 1987), but failed to find a positive link between animal attachment and scores on the Dissociative Experiences Scale (DES; Bernstein & Putnam, 1986). We observed a small positive correlation between Harvard Group Scale of Hypnotic Susceptibility, Form A (HGSHS:A; Shor & Orne, 1962) scores and animal attachment among our female participants. Collectively, absorption, dissociation, hypnotizability, age, gender, years owning a pet, and the testing context accounted for no more than 16% of the variance in CABS scores.

[1704]
Memory focused interventions (MFI) as a therapeutic strategy in hypnotic psychotherapy.
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The prospect of utilizing memory plasticity (the constructive and transitory nature of memory) for therapeutic purposes has not been widely recognized. However, a number of theoretical and clinical venues throughout the last century have shown its potential application. Intensive research conducted during these last decades, pointed out the possibility of influencing human memory in relation to new memories and their specific components. Moreover, the research showed the feasibility of planting alternative early childhood memories and thus altering memories of personal history. Additionally, researchers found that memory is naturally very fallible due to everyday phenomena of forgetfulness, distortion and intrusion of past and present information. Throughout the course of this paper, the integrative overview of these empirical findings with the aforementioned clinical and theoretical foundations serves as a substratum in an attempt to present an integrative therapeutic approach, named Memory Focused Interventions (MFI).

[1705]
A dissociative episode following stage hypnosis in a combat-injured soldier: implications, treatment and reflections.
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Significant data to suggest the need for more appropriate precautions for volunteers participating in stage hypnosis is presented. This paper is a case report of a soldier previously injured in battle who, due to participating in stage hypnosis one year after his injury, experienced a dissociative episode wherein post-traumatic stress symptoms were prominent. During this episode, which lasted over three hours, the service member assaulted an acquaintance, subsequently believed he was a prisoner of war, experienced amnesia for some of the events, and was eventually psychiatrically hospitalized. The diagnosis of acute psychotic reaction was rendered. Fortunately for this service member, upon his return to his treating hospital center, his primary medical team made an appropriate referral. Psychotherapeutic treatment allowed this individual to integrate his traumatic experiences, gain control and understanding of his behavior, and extinguish his pain and suffering, returning to his successful career.

[1706]
No change in rectal sensitivity after gut-directed hypnotherapy in children with functional abdominal pain or irritable bowel syndrome.
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Department of Pediatrics, St. Antonius Hospital, Nieuwegein, The Netherlands. a.vlieger@antonius.net
OBJECTIVES: Gut-directed hypnotherapy (HT) has recently been shown to be highly effective in treating children with functional abdominal pain (FAP) and irritable bowel syndrome (IBS). This study was conducted to determine the extent to which this treatment success is because of an improvement in rectal sensitivity. METHODS: A total of 46 patients (aged 8-18 years) with FAP (n=28) or IBS (n=18) were randomized to either 12 weeks of standard medical therapy (SMT) or HT. To assess rectal sensitivity, a pressure-controlled intermittent distension protocol (barostat) was performed before and after the therapy. RESULTS: Rectal sensitivity scores changed in SMT patients from 15.1+/−7.3 mm Hg at baseline to 18.6+/−8.5 mm Hg after 12 weeks of treatment (P=0.09) and in HT patients from 17.0+/−9.2 mm Hg to 22.5+/−10.1 mm Hg (P=0.09). The number of patients with rectal hypersensitivity decreased from 6 of 18 to 0 of 18 in the HT group (P=0.04) vs. 6 of 20 to 4 of 20 in the SMT group (P=0.67). No relationship was established between treatment success and rectal pain thresholds. Rectal sensitivity scores at baseline were not correlated with intensity, frequency, or duration of abdominal pain. CONCLUSIONS: Clinical success achieved with HT cannot be explained by improvement in rectal sensitivity. Furthermore, no association could be found between rectal barostat findings and clinical symptoms in children with FAP or IBS. Further studies are necessary to shed more light on both the role of rectal sensitivity in pediatric FAP and IBS and the mechanisms by which hypnotherapy results in improvement of clinical symptoms.


INTRODUCTION: Hypnosis is not only intrinsically interesting, but it can be used instrumentally as a powerful tool to investigate phenomena outside its immediate domain. In focusing on instrumental hypnosis research, we first sketch the many contributions of hypnosis across a range of areas in experimental psychopathology. In particular, we summarise the historical and more recent uses of hypnosis to create and explore clinically relevant, temporary delusions. METHODS: We then describe in detail the steps that hypnosis researchers take in constructing a hypnotic paradigm to map the features and processes shared by clinical and hypnotic delusions, as well as their impact on information processing (including autobiographical memory). We illustrate with hypnotic versions of mirrored-self misidentification, somatoparaphrenia, alien control, and identity delusions. RESULTS: Finding indicate that hypnotic analogues can produce compelling delusions with features that are strikingly similar to their clinical counterparts. These similarities encompass phenomenological features of delusions, delusional resistance to challenge, and autobiographical memory during delusions. CONCLUSIONS: We recognise important methodological issues and limitations of such hypnotic analogues, including: indexing response (behaviour vs. experience), alternative explanations (e.g., social compliance), the need for converging data, the need for close and continuing dialogue between the clinic and the laboratory, and generalisability of the findings.


This article investigates the effect of hypnosis on immunity and whether this is the key mechanism in the hypnotic treatment of the genital infection caused by human papillomavirus (HPV). HPV is the most common sexually transmitted disease and can lead to cervical and other cancers. Current medical treatments are aimed at tissue assault (acids, freezing, surgery). Medical wart clearance rates are only 30% to 70% and recurrence is common. Our research contrasted hypnosis-only with medical-only therapies, using both urban hospital and rural community samples. Both hypnosis and medical therapy resulted in a statistically significant (p < .04) reduction in areas and numbers of lesions. Yet, at the 12-week follow-up, complete clearance rates were 5 to 1 in favor of hypnosis.


This descriptive study evaluates the hypnoanalgesic experience’s effect on participants’ hypnotizability and opinions about hypnosis and identifies factors associated with hypnotizability. Hypnotizability was assessed using the Stanford Hypnotic Susceptibility Scale: Form A in 290 women 1 month after their participation in a randomized clinical trial evaluating hypnotic intervention for pain/anxiety versus standard care during pregnancy termination. Opinions were collected before and after the intervention. The regression model describing hypnotizability (F = 13.55; r < .0001; R2 = 0.20) retained 5 variables but not the intervention group. The variable explaining most of total variance (62.9%) was the level of perceived automaticity/involuntariness. Opinions about hypnosis were modified by the hypnotic experience compared to standard care but were not associated with hypnotizability. Exposure to hypnoanalgesia did not influence
hypnotizability but modifies significantly the opinions about hypnosis. Consistent with previous findings, perceived automaticity appears to best predict hypnotizability.


The hypnotic relationship is an important parameter for both experimental and therapeutic contexts. Hypnotic dreams may serve as a lens to examine the hypnotic relationship. By answering 5 questions per item, 70 judges rated 12 accounts of brief hypnotic dreams conducted as part of the Stanford Hypnotic Susceptibility Scale, Form C. The data show that the judges were able to correctly discern highly from less hypnotizable individuals. Interestingly, highly hypnotizable females coached by a male hypnotic operator had more sexually charged dreams than either less hypnotizable females or males regardless of hypnotizability. These findings contextualize for further research and therapy transference issues related to the hypnotic relationship and the use of hypnotic dreams.


Chronic low back pain (CLBP) is a significant healthcare problem, and many individuals with CLBP remain unresponsive to available interventions. Previous research suggests that hypnosis is effective for many chronic pain conditions; however, data to support its efficacy for CLBP are outdated and have been limited primarily to case studies. This pilot study indicated that a brief, 4-session standardized self-hypnosis protocol, combined with psycho-education, significantly and substantially reduced pain intensity and pain interference. Significant session-to-session improvements were also noted on pain ratings and mood states; however, follow-up data suggest that these benefits may not have been maintained across time in this sample. These findings need to be replicated and confirmed in a larger clinical trial, which could also assess the long-term effects of this treatment.


This study assessed whether high hypnotizability is associated with posttraumatic stress and depressive symptoms in a sample of 124 metastatic breast cancer patients. Hypnotic Induction Profile Scores were dichotomized into low and high categories; posttraumatic intrusion and avoidance symptoms were measured with the Impact of Events Scale (IES); hyperarousal symptoms with items from the Profile of Mood States; and depressive symptoms with the Center for Epidemiologic Studies-Depression Scale. High hypnotizability was significantly related to greater IES total, IES intrusion symptoms, and depressive symptoms. A logistic regression model showed that IES total predicts high hypnotizability after adjusting for depressive symptoms and hyperarousal. The authors relate these results to findings in other clinical populations and discuss implications for the psychosocial treatment of metastatic breast cancer.

[1713] Int J Clin Exp Hypn. 2010 Jan;58(1):21-38. Effects of hypnosis as an adjunct to intravenous sedation for third molar extraction: a randomized, blind, controlled study. Mackey EF. Department of Nursing, West Chester, University of Pennsylvania, 855 S. New Street, West Chester, PA 19348, USA. emackey@wcupa.edu

The effects of hypnosis/therapeutic suggestion in connection with intravenous sedation and surgery have been described in many clinical publications; however, few randomized, controlled, and blind studies have been performed in the outpatient area. This study aimed to evaluate the use of hypnosis/therapeutic suggestion as an adjunct to intravenous (IV) sedation in patients having 3rd molar removal in an outpatient setting. The patients were randomly assigned to a treatment (n = 46) or control (n = 54) group. The treatment group listened to a rapid conversational induction and therapeutic suggestions via headphones throughout the entire surgical procedure along with a standard sedation dose of intravenous anesthetic. The control group listened to only music without any hypnotic intervention. Intraoperative Propofol administration, patient postoperative pain ratings, and postoperative prescription pain reliever consumption were all...
significantly reduced in the treatment compared to the control group. Implications of these results are discussed.

[1714]
The mesmerists inquire about "Oriental mind powers": West meets East in the search for the universal trance.
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Contemporary interest in Asian meditation raises questions about when Westerners began investigating these practices. A synopsis of Western-originating scientific meditation research is followed by a brief introduction to mesmerism. Next, the unappreciated ways the mesmerists explored Oriental mind powers is recounted. How the mesmerists’ cultural positioning, philosophy, and interest in mind-body practices facilitated their inquiries of Oriental medicine and Hindu contemplative practices is explored, followed by a consideration of why these investigations were unique for the era. The way this work subverted Western cultural imperialism is examined. A consideration of the historical continuities and discontinuities between the mesmerists’ inquiries and twentieth-century meditation research concludes the article.

[1715]
Mind-body treatments for the pain-fatigue-sleep disturbance symptom cluster in persons with cancer.
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CONTEXT: Co-occurring pain, fatigue, and sleep disturbance comprise a common symptom cluster in patients with cancer. Treatment approaches that target the cluster of symptoms rather than just a single symptom need to be identified and tested. OBJECTIVES: To synthesize evidence regarding mind-body interventions that have shown efficacy in treating two or more symptoms in the pain-fatigue-sleep disturbance cancer symptom cluster. METHODS: A literature search was conducted using CINAHL, Medline, and PsycINFO databases through March 2009. Studies were categorized based on the type of mind-body intervention (relaxation, imagery/hypnosis, cognitive-behavioral therapy/coping skills training [CBT/CST], meditation, music, and virtual reality), and a preliminary review was conducted with respect to efficacy for pain, fatigue, and sleep disturbance. Mind-body interventions were selected for review if there was evidence of efficacy for at least two of the three symptoms. Forty-three studies addressing five types of mind-body interventions met criteria and are summarized in this review. RESULTS: Imagery/hypnosis and CBT/CST interventions have produced improvement in all the three cancer-related symptoms individually: pain, fatigue, and sleep disturbance. Relaxation has resulted in improvements in pain and sleep disturbance. Meditation interventions have demonstrated beneficial effects on fatigue and sleep disturbance. Music interventions have demonstrated efficacy for pain and fatigue. No trials were found that tested the mind-body interventions specifically for the pain-fatigue-sleep disturbance symptom cluster. CONCLUSION: Efficacy studies are needed to test the impact of relaxation, imagery/hypnosis, CBT/CST, meditation, and music interventions in persons with cancer experiencing concurrent pain, fatigue, and sleep disturbance. These mind-body interventions could help patients manage all the symptoms in the cluster with a single treatment strategy. Copyright 2010 U.S. Cancer Pain Relief Committee. Published by Elsevier Inc. All rights reserved.

[1716]
Involuntaryness in hypnotic responding and dissociative symptoms.
Dell PF.

Clark Hull's (1933) research on dissociation was based on a 'straw man' formulation of dissociation; he claimed that dissociation requires noninterference. Hull completely ignored the then-current paradigm of dissociation--dissociation as automatism--and claimed that he had refuted the validity of the phenomenon of dissociation. Hull's view of dissociation held sway in the hypnosis field for 60 years. This essay seeks to retrieve the Janetian paradigm of dissociation as automatism. Automatisms are unexpected, uninitiated, involuntary behaviors that just "happen." The author argues that human sensitivity to the experience of involuntariness (a) is quite important, (b) was selected by evolution, and (c) is central to both hypnotic responses and dissociative symptoms. This editorial urges the hypnosis field and the dissociation field to jointly undertake a renewed investigation of the experience of involuntariness and to follow recent neuroimaging studies which indicate that the parietal cortex underlies the experience of involuntariness.

[1717]
Effects of therapeutic suggestion in children undergoing general anesthesia: a randomized controlled trial.
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OBJECTIVES AND AIM: The goal of this randomized controlled trial was to examine the effect of intraoperative positive therapeutic suggestion on postoperative nausea and vomiting (PONV) in children undergoing general anesthesia and
otolaryngological surgery. BACKGROUND: Because of the high incidence of PONV following otolaryngological surgery and its negative impact on recovery, researchers have examined various nonpharmacological interventions to target this phenomenon. To date, the effectiveness of therapeutic suggestion has not been studied in children. METHODS: Participants were 67 children undergoing tonsillectomy and adenoidectomy and their mothers. Children received a standardized anesthetic procedure and were randomly assigned to one of three interventions administered under general anesthesia: therapeutic suggestion, story (prosody control), or standard operating room noise. Children, parents, and healthcare personnel were blinded to group assignment. Nausea and vomiting were recorded in the postanesthesia care unit (PACU) and for the first 3 days at home. RESULTS: Results demonstrated a decrease in nausea severity across the first 3 days, $F(2,49) = 10.37, P < 0.001$, but no group differences in nausea severity in the PACU ($F(2,49) = 0.87, P = 0.43$) or at home ($F(2,49) = 0.80, P = 0.46$). There were also no group differences in vomiting episodes in the PACU ($chi^2(2) = 1.25, P > 0.05$) or at home ($F(2,49) = 1.59, P = 0.21$). CONCLUSIONS: In this blinded controlled trial, therapeutic suggestion delivered intraoperatively did not impact children’s PONV. However, because this is the first study of this kind, replication may be needed.

Using hypnosis to gain insights into healthy and pathological cognitive functioning.
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The demonstration that hypnotic suggestion can inhibit word/colour Stroop highlights one of the benefits of using hypnosis to explore cognitive psychology and in particular attentional processes. The compelling results using a rigorous design have particular relevance for the presumed automaticity of some forms of information processing. Moreover the results support the potential that hypnotic suggestion offers for creating clinically informed analogues of relevant psychological and neuropsychological conditions. As with all novel research, the results of Raz and Campbell raise further operational and theoretical questions, relating in this case to the use of hypnotic, post-hypnotic and non-hypnotic suggestion and the utility of existing measures of hypnotizability. Copyright © 2010 Elsevier Inc. All rights reserved.

[Emile Coue, a victim of psychoanalysis?] [Article in French]
Nau JY.
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[abstract not found]

[Hypnosis and anxiety problems] [Article in French]
Smaga D, Cheseaux N, Forster A, Colombo S, Rentsch D, de Tonnac N.
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This article describes how hypnosis can be used as an efficient technique in treating patients with anxious disorders. Hypnosis can be used to achieve a better control of the anxious symptoms through relaxation. It allows the patient to anticipate the anxiety triggering events. This technique also allows the patient to mentalise and integrate traumatic events, therefore helping him to prevent the post-traumatic anxious symptoms.

The treatment of psychogenic movement disorders with suggestion is ethically justified.
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Recent developments in our understanding of psychogenic movement disorders have not yet led to advances in treatment. A potentially beneficial treatment strategy is suggestion, the voluntary use by the physicians of techniques that introduce into the patient’s mind a belief that he or she will be healed. Principalism, the dominant school of contemporary medical ethics, holds that the use of suggestion is not ethically justifiable because it undermines patient autonomy and degrades the doctor-patient relationship. However, evidence from a variety of sources (neuroimaging, anecdote, expert opinion, randomized controlled trials, and meta-analysis) supports the efficacy of suggestion as a treatment for psychogenic movement disorders. When issues of choice, consent, deceit, disclosure, and decision-making are analyzed from the perspective of an ethics of care, we see that suggestion may enhance patient autonomy and does not violate the trust between doctors and their patients. I conclude that suggestion is therefore an ethically justifiable treatment for
Hypnotizability-related EEG alpha and theta activities during visual and somesthetic imageries.
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Hypnotizability is a cognitive multidimensional trait that involves peculiar imagery characteristics. Subjects with high-(Highs) and low (Lows)-susceptibilities to hypnosis have shown different levels of skill at visual and somesthetic-guided imageries performed during upright stance. The aim of this experiment is to study the modulation of the EEG alpha and theta band amplitude during guided visual and somesthetic imageries in Highs and Lows, as these rhythms are responsive to the cognitive activities involved in mental imagery. Our results show that, at variance with standing subjects, subjects in both groups in a semi-reclined position report higher vividness and lower effort for visual than for somesthetic imagery. EEG patterns however are different between the two groups. Highs exhibit a more widespread alpha desynchronization and slightly different EEG patterns during visual and somesthetic imageries, while Lows show segregated alpha- and theta-desynchronization, without any difference between the tasks. Our results indicate that different, hypnotizability-related cognitive strategies, that are revealed by differences in EEG modulation, are responsible for the similar subjective experience associated with visual and somesthetic imageries in Highs and Lows. In addition, in both groups higher order mental representation of different sensory modalities might be subserved by a unique integrated neural network.

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Self-hypnosis training represents a rapid, cost-effective, nonaddictive and safe alternative to medication for the treatment of anxiety-related conditions. Here we provide a review of the experimental literature on the use of self-hypnosis in the treatment of anxiety and stress-related disorders, including anxiety associated with cancer, surgery, burns and medical/dental procedures. An overview of research is also provided with regard to self-hypnotic treatment of anxiety-related disorders, such as tension headaches, migraines and irritable bowel syndrome. The tremendous volume of research provides compelling evidence that hypnosis is an efficacious treatment for state anxiety (e.g., prior to tests, surgery and medical procedures) and anxiety-related disorders, such as headaches and irritable bowel syndrome. Although six studies demonstrate changes in trait anxiety, this review recommends that further randomized controlled outcome studies are needed on the hypnotic treatment of generalized anxiety disorder and in documenting changes in trait anxiety. Recommendations are made for selecting clinical referral sources.

Sigmund Freud: pioneer in energy healing.
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BACKGROUND: Energy healing is a popular contemporary term for forms of healing that facilitate a natural healing process through harmonizing, rebalancing, and releasing energy flow disturbed or blocked by disease and illness. Biographical evidence indicates that Freud used physical, suggestive, and radiant forms of energy healing, and that his personal life, metapsychology, and psychoanalysis were founded on dynamic, energetic experiences and conceptualizations. CONCLUSIONS: Analysis of Freud’s life and work leads to the conclusion that in experience, theory, and practice, Freud typified the traditional role of therapist and was a pioneer in modern forms of energy healing.

The predictive utility of hypnotizability: the change in suggestibility produced by hypnosis.
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OBJECTIVE: The predictive utility of hypnotizability, conceptualized as the change in suggestibility produced by a hypnotic induction, was investigated in the suggested reduction of experimental pain. METHOD: One hundred and seventy-three participants were assessed for nonhypnotic imaginative suggestibility. Thereafter, participants experienced hypnotic and nonhypnotic imaginative analgesia suggestions, counterbalanced for order. Hypnotic suggestibility was then
assessed. RESULTS: Hypnotizability, operationalized as hypnotic suggestibility with imaginative suggestibility statistically controlled (Braffman & Kirsch, 1999), predicted intraindividual differences in responding to the hypnotic and imaginative analgesia suggestions. Higher hypnotizability was associated with relatively greater response to the hypnotic analgesia suggestion than to the imaginative analgesia suggestion. CONCLUSIONS: Operationalized in this way, hypnotizability may be a useful predictor of the effect of adding a hypnotic induction to a specific imaginative suggestion.

[1726]
Mediators of a brief hypnosis intervention to control side effects in breast surgery patients: response expectancies and emotional distress.
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OBJECTIVE: The present study was designed to test the hypotheses that response expectancies and emotional distress mediate the effects of an empirically validated presurgical hypnosis intervention on postsurgical side effects (i.e., pain, nausea, and fatigue). METHOD: Women (n = 200) undergoing breast-conserving surgery (mean age = 48.50 years; 63% White, 15% Hispanic, 13% African American, and 9% other) were randomized to a hypnosis or to an attention control group. Prior to surgery, patients completed assessments of hypothesized mediators (response expectancies and emotional distress), and following surgery, patients completed assessments of outcome variables (pain, nausea, and fatigue). RESULTS: Structural equation modeling revealed the following: (a) Hypnotic effects on postsurgical pain were partially mediated by pain expectancy (p < .0001) but not by distress (p = .12); (b) hypnotic effects on postsurgical nausea were partially mediated by presurgical distress (p = .02) but not by nausea expectancy (p = .10); and (c) hypnotic effects on postsurgical fatigue were partially mediated by both fatigue expectancy (p = .0001) and presurgical distress (p = .02). CONCLUSIONS: The results demonstrate the mediational roles of response expectancies and emotional distress in clinical benefits associated with a hypnotic intervention for breast cancer surgical patients. More broadly, the results improve understanding of the underlying mechanisms responsible for hypnotic phenomena and suggest that future hypnotic interventions target patient expectancies and distress to improve postsurgical recovery.

[1727]
The role of suggestibility in determinations of Miranda abilities: a study of the Gudjonsson Suggestibility Scales.
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Traditionally, high levels of suggestibility have been widely assumed to be linked with diminished Miranda abilities, especially in relationship to the voluntariness of waivers. The current investigation examined suggestibility on the Gudjonsson Suggestibility Scales in a multisite study of pretrial defendants. One important finding was the inapplicability of British norms to American jurisdictions. Moreover, suggestibility appeared unrelated to Miranda comprehension, reasoning, and detainees’ perceptions of police coercion. In testing rival hypotheses, defendants with high compliance had significantly lower Miranda comprehension and ability to reason about exercising Miranda rights than their counterparts with low compliance. Implications of these findings to forensic practice are examined.

[1728]
Ned Tijdschr Tandheelkd. 2010 Feb;117(2):75-8.[Treatment of idiopathic facial pain following implant placement][Article in Dutch]
Gorisse E, de Jongh A, Hassan B.
Uit de secties Sociale Tandheelkunde en Voorlichtingskunde en Orale Radiologie van het Academisch Centrum Tandheelkunde Amsterdam. e.gorisse@therapeia.nl

A 39-year-old woman suffered from chronic a-typical facial pain and complaints associated with Post Traumatic Stress Disorder. The pain originated from the surgical removal of a residual tooth root under an oral implant and the stress symptoms were the consequences of the pain. Eventually, these problems had led to dississal from work and family problems. She was unable to attend her dentist for a periodic oral survey due to extreme fear. Pharmacologic treatment, acupuncture, homeopathy and hypnotherapy had not improved her condition. Treatment aimed at coping with the memories of the oral treatment using ‘eye movement desensitization and reprocessing’ ultimately led to decline of complaints. This case report demonstrates that an oral problem may disrupt a patient’s life and how psychotherapy can complete medical treatment.

[1729]
Dufresne A, Dugas MA, Samson Y, BarrÃ© P, Turcot L, Marc I.
OBJECTIVES: We aimed to quantify children's levels of pain and fear during needle puncture procedures in a context where intravenous sedation-analgesia seems to be effective for pain and anxiety relief. The relevance of a nonpharmacological intervention in the pharmacological regimen was evaluated. DESIGN: Fear and pain were assessed by children, parents, and physicians, on a visual analog scale (VAS, 0-10 cm), before and during puncture procedures. Higher scores represented more intense pain/fear. RESULTS: During 4 consecutive months, 18 children were recruited, but four were excluded from analyses because they did not receive the full sedation regimen (midazolam/ketamine) (N = 14, mean age +/- SD: 9.9 +/- 3.4 years). Parents self-reported their own anxiety before the procedure (4.69 +/- 3.17), but no correlation was found with their children's self-reported fear. Before procedures, the children's fear was self-reported on a VAS by children (2.93 +/- 2.93), parents (4.45 +/- 2.87), and physicians (3.67 +/- 2.48). During procedures under sedation, the children's pain (1.71 +/- 2.74) did not correlate with the parents' (4.01 +/- 3.23) and physicians' (1.83 +/- 2.32) ratings. Children anticipating high levels of pain and fear on the VAS experienced higher levels of pain (r = 0.65, P < 0.05) and fear (r = 0.59, P < 0.05) during the procedures. Sixteen parents (16/18) agreed to participate with their children if a study evaluating hypnosis for pain and anxiety was conducted. CONCLUSIONS: Sedation is effective in lowering levels of fear and pain in children during procedures, but they still anticipate fear before the procedures. Parents are anxious for their children. Future hypnotic intervention could be helpful for children as well as parents to cope with anxiety during procedures.

In extreme situations, for example during emergencies or when facing surgery, patients exhibit heightened and focused attention and increased susceptibility to suggestion. In this trance-like state negative suggestion, usually spoken unintentionally can aggravate anxiety, stress and pain. On the other hand words can offer an opportunity to benefit the patient via positive suggestion. In order to improve communication with anxious patients during stressful and painful medical procedures, certain hypnotherapeutic insights and methods can be employed, such as utilization, reframing, indirect suggestion, safe place, dissociation, metaphors, posthypnotic instructions and non-verbal communication and this without requiring formal hypnotic induction and without need for additional time, premises or personnel. Indications for such approaches are the preoperative visit, induction of anaesthesia, as well as operations under local or regional anaesthesia. An extreme example of the latter is awake craniotomy employing cranial nerve blocks and an awake-awake technique avoiding centrally acting drugs. Such hypnotic communication can help the patient to regain self-control and access to inner resources.

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Common practice during local anesthetic injection is to warn the patient using words such as: "You will feel a big bee sting; this is the worst part." Our hypothesis was that using gentler words for administration of the local anesthetic improves pain perception and patient comfort. One hundred forty healthy women at term gestation were randomized to either a "placebo" ("We are going to give you a local anesthetic that will numb the area and you will be comfortable during the procedure") or "nocebo" ("You are going to feel a big bee sting; this is the worst part of the procedure") group. Pain was assessed immediately after the local anesthetic skin injection using verbal analog scale (0-10) ratings. Children anticipating high levels of pain and fear on the VAS experienced higher levels of pain (r = 0.65, P < 0.05) and fear (r = 0.59, P < 0.05) during the procedures. Sixteen parents (16/18) agreed to participate with their children if a study evaluating hypnosis for pain and anxiety was conducted. CONCLUSIONS: Sedation is effective in lowering levels of fear and pain in children during procedures, but they still anticipate fear before the procedures. Parents are anxious for their children. Future hypnotic intervention could be helpful for children as well as parents to cope with anxiety during procedures.

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This implies not only that brain activity changes in hypnosis, but also that there is a difference in brain function between people of low and high hypnotic susceptibility. The latter exhibited a faster-acting left hemisphere in the waking state, but faster right when hypnotized.

[1733]
Hypnosis in refractory alopecia areata significantly improves depression, anxiety, and life quality but not hair regrowth. Willemsen R, Haentjens P, Roseeuw D, Vanderlinden J.

[abstract not found]

[1734]
Hypnosis: exploring the benefits for the role of the hospital social worker.
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This article will provide an examination of Erickson's model of hypnosis and the impact hypnosis has made on the psychosocial well being of the medically ill patient. The intrinsic three stage process of a hypnotic intervention, as well as its value, practice assumptions, and its relevance to alleviating pain, distress, and anxiety with oncology patients will be discussed. We have found this approach to be particularly effective with adult oncology patients at alleviating the side effects of the arduous treatment that is often endured. Case vignettes will demonstrate the benefits of utilizing this intervention with adult patients in the hospital setting as well as provide specific insight into the creative methods in which we have woven hypnosis into our clinical work. Finally, we will explore the use and rationale of hypnosis in medical settings and the impact of using this intervention on the role of the hospital social worker.

[1735]
Physiology of the placebo effect, and the evidence for changes in brain metabolism.
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Placebo effects are accompanied by localised changes in brain physiology. Variation between individuals in the extent of a placebo effect is due to genetic variation in brain enzyme activity. Some of the effect of any active drug is a placebo effect, and this should be considered in the evaluation of overall action.

[1736]
Rapid remission of anorexia nervosa and unconscious communication.
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An alternate framework for thinking about anorexia treatment is presented with a treatment approach that results in prompt remission of anorexia symptoms. Prior treatment of eating disorders using hypnosis is reviewed. A case example illustrating the method is followed by a discussion. The process is described for teaching clients how to nullify the anorexia symptom complex when it is reactivated.

[1737]
Suggestibility, expectancy, trance state effects, and hypnotic depth: I. Implications for understanding hypnotism.
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This paper reviews the relationships between trance or altered state effects, suggestibility, and expectancy as these concepts are defined in the theorizing of Weitzenhoffer (2002), Holroyd (2003), Kirsch (1991), and others, for the purpose of demonstrating how these concepts can be assessed with the PCI-HAP (Phenomenology of Consciousness Inventory: Hypnotic Assessment Procedure; Pekala, 1995a, b). In addition, how the aforementioned variables may relate to the nature of hypnosis/hypnotism as a function of self-reported hypnotic depth are discussed, along with how the PCI-HAP may be used as a means to measure hypnotic responsivity from a more phenomenological state perspective, in contrast to more traditional behavioral trait assessment instruments like the Harvard, the Stanford C, or the HIP. A follow-up paper (Pekala, Kumar, Maurer, Elliott-Carter, Moon, & Mullen, 2010) will present research data on the PCI-HAP model and how this model can be useful for better understanding hypnotism.
This study sought to determine if self-reported hypnotic depth (srHD) could be predicted from the variables of the Phenomenology of Consciousness Inventory - Hypnotic Assessment Procedure (PCI-HAP) (Pekala, 1995a, 1995b; Pekala & Kumar, 2007; Pekala et al., 2010), assessing several of the processes theorized by researchers to be associated with hypnotism: trance (altered state effects), suggestibility, and expectancy. One hundred and eighty participants completed the PCI-HAP. Using regression analyses, srHD scores were predicted from the PCI-HAP pre-hypnotic and post-hypnotic assessment items, and several other variables. The results suggested that the srHD scores were found to be a function of imagoic suggestibility, expectancy (both estimated hypnotic depth and expected therapeutic efficacy), and trance state and eye catalepsy effects; effects that appear to be additive and not (statistically) interactive. The results support the theorizing of many investigators concerning the involvement of the aforementioned component processes with this particular aspect of hypnotism, the self-reported hypnotic depth score.

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Over the past 30 years, mental health practitioners, encouraged by rigorous empirical studies and literature and meta-analytic reviews, have increasingly appreciated the ability of hypnosis to modulate attention, imagination, and motivation in the service of therapeutic goals. This article describes how hypnosis can be used as an adjunctive procedure in the treatment of depression and rumination symptoms, in particular. The focus is on attention-based treatments that include rumination-focused cognitive behavioral therapy, cognitive control training, and mindfulness-based cognitive therapy. The authors provide numerous examples of techniques and approaches that can potentially enhance treatment gains, including a hypnotic induction to facilitate mindfulness and to motivate mindfulness practice. Although hypnosis appears to be a promising catalyist of attention and mindfulness, research is required to document the incremental value of adding hypnosis to the treatments reviewed.

Cognitive hypnotherapy (CH) is a comprehensive evidence-based hypnotherapy for clinical depression. This article describes the major components of CH, which integrate hypnosis with cognitive-behavior therapy as the latter provides an effective host theory for the assimilation of empirically supported treatment techniques derived from various theoretical models of psychotherapy and psychopathology. CH meets criteria for an assimilative model of psychotherapy, which is considered to be an efficacious model of psychotherapy integration. The major components of CH for depression are described in sufficient detail to allow replication, verification, and validation of the techniques delineated. CH for depression provides a template that clinicians and investigators can utilize to study the additive effects of hypnosis in the management of other psychological or medical disorders. Evidence-based hypnotherapy and research are encouraged; such a movement is necessary if clinical hypnosis is to integrate into mainstream psychotherapy.

Depressive disorders constitute a serious problem in the United States and around the world. The appearance of practice guidelines and lists of evidenced-based therapies suggests that adequate treatments for depression exist. However, a careful consideration of what is known and not known about the treatment of depression leaves plenty of room for improved approaches to addressing this condition. Although there has been a dearth of research on the treatment of depression using hypnosis, there are several compelling arguments for the inclusion of hypnotic approaches in the array of current strategies for dealing with depression. However, traditional "gold-standard" research methods, namely randomized controlled trials, have many shortcomings for identifying the potential impact of hypnosis on depression. Other strategies, notably single-case design and benchmarking approaches, may offer a more practical solution to the problem of determining "what works for depression."
This study evaluated the effects of hypnosis on self-efficacy and soccer performance. Fifty-nine collegiate soccer players were randomly allocated to either a hypnosis (n = 30) or video attention-control group (n = 29). A pretest-posttest design with an additional 4-week follow-up was used. Self-efficacy was measured via a task-specific questionnaire comprising 10 items relating to good performance on a soccer wall-volley task. The hypnotic intervention comprised three sessions using ego-strengthening suggestions. The control group watched edited videos of professional soccer games. Results indicated that, following the intervention, the hypnosis group were more efficacious and performed better than the control group. These differences were also seen at the 4-week follow-up stage. Although changes in self-efficacy were associated with changes in performance, the effect of hypnosis on performance was not mediated by changes in self-efficacy. The study demonstrates that hypnosis can be used to enhance and maintain self-efficacy and soccer wall-volley performance.

Since the mid-1990s, eye movement desensitization (EMD) has been used in the realm of clinical psychology and psychiatry as a nonpharmacotherapeutic modality for the treatment of phobias, post-traumatic symptoms, and various psychotrauma cases. EMD can also be incorporated into the use of hypnosis, although the two are not the same thing. This study examined various clinical applications of the eye movement component of EMD (known as alternating bilateral stimulation (ABS)) on fearful dental patients who had a history of traumatic dental experiences. Findings were based on the clinical impressions and assessments of both the patients and the operating team. Results show that ABS, while effective for enabling patients to undergo non-invasive dental procedures such as clinical examinations and simple prophylaxis, has only limited beneficial effect for extremely fearful patients who must undergo invasive procedures such as extraction, drilling, and injections. Nevertheless, ABS is effective for mild to moderate patient phobia and anxiety. Although EMD is more effective than ABS, ABS is simple and easy for patients and clinicians to perform during treatment and can be performed readily in the dental office.

Evidence regarding the influence of the mind on the body is abundant. Several mind-body healing procedures are currently being used, among them hypnosis, biofeedback, meditation, visualizations, management of emotions and prayer. Since the Big Bang, we are entangled with everything. This interaction would let individuals to communicate with the minds and bodies of others. The field of parapsychological research has provided a lot of information about significant events, including apparitions, communications with the dead, near-death experiences and out of the body experiences. It looks apparently evident, that consciousness can persist in the absence of brain function. According to the model that assumes that it is consciousness and not matter, the base of everything that exists, what survives after death is the "quantum monad" or spirit. It is said that spiritual cures are practiced by discarnate physicians who diagnose and prescribe conventional treatments, but very often they use unknown procedures based on the management of energy fields that are currently being studied by many physicists. Representative examples of the practice of spiritual medicine were the mediums Ze Arigo, George Chapman, Barbara Guerrero (Pachita) and presently the Brazilian medium John of God. Case reports of paranormal phenomena observed and studied by honest and serious scientists are very important for the advancement of parapsychology, because it has not been clearly established which approach, the qualitative or the quantitative, is more useful for the development of this field.
Besides more conventional tumor risks, depression and negative life events are significant risk factors in cancer here in Hungary, therefore oncopsychology is increasingly important. We discuss traumatizing effects of the diagnosis and invasive diagnostic and therapeutic procedures from the viewpoint of altered state of consciousness. During stress and hypnosis brain functioning is altered in a similar way, which can be seen both in the patient's symptoms and his/her physiological and neuroimaging findings. In trance state patients part from reality, they no longer communicate conventionally or maturely. Hypnosis is characterized not only by physical and mental changes, but important unique social interactions as well. These interactions affect the endocrine and immune system and the mental state of the patient, they strengthen and synchronize resources and help posttraumatic growth. Since in the stress induced spontaneous altered state of consciousness the susceptibility to suggestions is increased, suggestive communication can be used effectively and it can even result in formal hypnosis induction. Under the strong time and mental pressure characterizing the work of the oncologic departments, it might help the staff to improve the cooperation with the patient if staff members, physicians and nurses as well, are aware of the nature and the neurophysiologic background of the spontaneous trance state induced by the life-threatening diagnosis of cancer.

[1746]
The astrological roots of mesmerism.
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Franz Anton Mesmer's 1766 thesis on the influence of the planets on the human body, in which he first publicly presented his account of the harmonic forces at work in the microcosm, was substantially copied from the London physician Richard Mead's early eighteenth century tract on solar and lunar effects on the body. The relation between the two texts poses intriguing problems for the historiography of medical astrology: Mesmer's use of Mead has been taken as a sign of the Vienna physician's enlightened modernity while Mead's use of astro-meteorology has been seen as evidence of the survival of antiquated astro-medicine in the eighteenth century. Two aspects of this problem are discussed. First, French critics of mesmerism in the 1780s found precedents for animal magnetism in the work of Paracelsus, Fludd and other early modern writers; in so doing, they began to develop a sophisticated history for astrology and astro-meteorology. Second, the close relations between astro-meteorology and Mead's project illustrate how the environmental medical programmes emerged. The making of a history for astrology accompanied the construction of various models of the relation between occult knowledge and its contexts in the enlightenment.

[1747]
[Hypnotherapy, gestational age and incidence of preterm labour.]. [Article in German]
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PURPOSE: This study examines whether or not those women who have participated in a hypnoreflexogenous birth preparation course have a lower incidence of preterm labour and higher gestational age. MATERIAL AND METHODS: 101 women participated in the birth preparation hypnosis course (hypnomental birth preparation) and were evaluated against a parallelised control group. The following parameters were evaluated: education, number of previous pregnancies and live births, average number of cigarettes smoked per day and age of the mother. The control group was selected out of the hospital birth register from 2001 to 2008 (n=10 812). RESULTS: In the hypnosis group (n=101) there were six late preterm deliveries (5.49%) whereas in the parallelised control group there were significantly more preterm deliveries (n=11; 11.3%; p=0.02). There was also a statistically significant correlation between gestational age and maternal participation in the hypnomental birth preparation. CONCLUSION: In the hypnosis group there were significantly less preterm deliveries after parallelising the socio-economical demographics. A planned randomised controlled study of preterm labour should identify whether clinical hypnosis can reduce the incidence of preterm labour.

[1748]
Hypnosis and the relationship between trance, suggestion, expectancy and depth: some semantic and conceptual issues.
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In the first of two recent papers, Pekala, Kumar, Maurer, Elliot-Carter, Moon and Mullen (2010a) review what they consider to be the relationships between trance or altered state effects, suggestibility, and expectancy, and how they relate to the concepts of hypnosis and hypnotism. They also suggest that these concepts can be assessed with an instrument they term the PCI-HAP (Phenomenology of Consciousness: Inventory-Hypnotic Assessment Procedure). In the second paper (Pekala, Kumar, Elliot-Carter, Moon, & Mullen, 2010b), they set out to determine empirically whether these concepts can predict hypnotic depth scores using the PCI-HAP. They conclude that their results support the view that all of these component processes may be involved in 'hypnotism' and experiences of hypnotic depth. However,
according to their conceptualization, 'hypnosis' itself involves, or consists of, only altered state or trance effects. These papers raise a number of fundamental methodological, semantic and conceptual issues that are discussed in this commentary. Topics discussed include distinctions between concepts such as 'hypnosis', and 'hypnotism,' the role of inductions and suggestion in producing hypnotic phenomena, and the measurement and conceptualization of 'hypnotic depth.' It is concluded that many of the problems relating to the definition and conceptualization of terms associated with hypnosis may be clarified by placing the terms in their historical context, and that difficulties in identifying the origins of the experiences and behaviors associated with hypnosis may stem from insufficient attention to the role of suggestion and expectancies in producing hypnotic phenomena, and an over-reliance on the role of the procedures and mechanics of the induction process.

A new bioinformatics paradigm for the theory, research, and practice of therapeutic hypnosis.
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In a 2008 pilot study we used DNA microarrays to explore the historical ideo-plastic faculty of therapeutic hypnosis. We documented how to measure changes in activity or experience-dependent gene expression over relatively brief time periods (1 hour and 24 hours) following a single intervention of therapeutic hypnosis (about 1 hour). In the present paper we utilize bioinformatic software to explore the possible meaning and significance of this ideo-plastic faculty of therapeutic hypnosis. Indications suggest that the ideo-plastic process of therapeutic hypnosis may be associated with (1) theheightening of a molecular-genomic signature for the up-regulation (heightened activity) of genes characteristic of stem cell growth, (2) a reduction in cellular oxidative stress, and (3) a reduction in chronic inflammation. We identify these three empirical associations as an initial beta version of the molecular-genomic signature of the ideo-plastic process of therapeutic hypnosis, which can serve as a theoretical and practical guide for clinical excellence by beginners as well as senior professionals. We propose this molecular-genomic level of discourse as a supplement to the traditional cognitive-behavioral description of therapeutic suggestion, hypnosis, and psychotherapy that is consistent with "translational research" currently funded by the National Institute of Mental Health (NIMH).

Hypnotically facilitated exposure response prevention therapy for an OIF veteran with OCD.
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The highly stressful conditions of a war zone may exacerbate or trigger a wide variety of symptoms including Obsessive Compulsive Disorder (OCD) once a service member returns home. Service members and new veterans of the Iraq and Afghanistan wars present to treatment with multiple psychosocial concerns and co-morbid psychiatric conditions. Evidence-based treatments including exposure based therapies are commonly recommended for use with returning veterans. Although studies support the efficacy of Exposure Response Prevention (ERP) therapy for treating OCD, eligibility for these studies limits participation to subjects who self-report a well-defined, circumscribed complaint. This approach is not typical of clinic clients who, more often than not, report multiple psychological issues. The following individual case study demonstrates how integrating hypnosis facilitated the cognitive-behavioral ERP therapy and treatment for a patient suffering from OCD.

A historical context for understanding "An eye roll test for hypnotizability" by Herbert Spiegel, M.D.
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Herb Spiegel was known for many professional and scientific achievements. He is may be best remembered for his discovery of the Eye Roll Sign (ERS) and its relation to innate trance capacity and the parallel creation and development of the Hypnotic Induction Profile (HIP). The present paper provides a historical context for understanding Herb's 1972 publication of "An Eye Roll Test for Hypnotizability" which originally appeared in the American Journal of Clinical Hypnosis 38 years ago and is reprinted in this journal issue.

Preferences for hypnotic imagery for hot-flash reduction: a brief communication.
The purpose of this brief report is to identify imagery preferences of women receiving hypnotherapy to alleviate hot flashes. As part of a larger study, 51 breast cancer survivors were asked to identify their own personal preferences for imagery for reducing hot flashes. Most of the participants identified personal imagery associated with coolness; none of the participants selected imagery for warmth or heat. The most widely used was imagery involving water associated with coolness (27.0%). It is recommended that clinicians using hypnosis for reduction of hot flashes attend to patients' preferences as specific imagery may moderate the effectiveness of hypnosis for hot flashes.

[1753]
A new hypnotic technique for treating combat-related posttraumatic stress disorder: a prospective open study.
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Many combat veterans with posttraumatic stress disorder (PTSD) have an olfactory component to their traumatic memories that might be utilized by a technique called hypnotherapeutic olfactory conditioning (HOC). Thirty-six outpatients with chronic PTSD, featuring resistant olfactory-induced flashbacks, were treated with six 1.5-hour sessions using hypnosis. The authors used the revised Impact of Events Scale (IES-R), Beck Depression Inventory, and Dissociative Experiences Scale as outcome measures. Significant reductions in symptomatology were recorded by the end of the 6-week treatment period for the IES-R, as well as for the Beck Depression Inventory and the Dissociative Experiences Scale; 21 (58%) of the subjects responded to treatment by a reduction of 50% or more on the IES-R. Improvement was maintained at 6-month and 1-year follow-ups. Use of medication was curtailed. HOC shows potential for providing benefit to individuals suffering from PTSD with olfactory components.

[1754]
Virtual reality hypnosis for pain associated with recovery from physical trauma.
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Pain following traumatic injuries is common, can impair injury recovery and is often inadequately treated. In particular, the role of adjunctive nonpharmacologic analgesic techniques is unclear. The authors report a randomized, controlled study of 21 hospitalized trauma patients to assess the analgesic efficacy of virtual reality hypnosis (VRH)-hypnotic induction and analgesic suggestion delivered by customized virtual reality (VR) hardware/software. Subjective pain ratings were obtained immediately and 8 hours after VRH (used as an adjunct to standard analgesic care) and compared to both adjunctive VR without hypnosis and standard care alone. VRH patients reported less pain intensity and less pain unpleasantness compared to control groups. These preliminary findings suggest that VRH analgesia is a novel technology worthy of further study, both to improve pain management and to increase availability of hypnotic analgesia to populations without access to therapist-provided hypnosis and suggestion.

[1755]
Motion in response to the hypnotic suggestion of arm rigidity: a window on underlying mechanisms.
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Among hypnotized subjects passing a challenge suggestion of arm rigidity, how might patterns of motor activity (strategies) contribute to the illusion that the elbow cannot be bent? Kinematic analyses of upper limb and trunk were performed. Nonhypnotized subjects carefully enacted a set of prescribed strategies typifying responses possibly adopted by a hypnotized subject. Profile analysis showed striking heterogeneity of response in hypnotic subjects. Half of the participants showed no perceivable strategy consistent with the hypothesis that subjects hallucinate the suggestion and so do not engage the motor periphery. Equally common were subtle oscillations or trembling of the arm implying that motion resembling difficulty in bending was initiated. This can be misperceived as unintentional and thus evidence of inability to bend. The lack of a motor strategy is more consistent with dissociated-control theory, whereas the trembling response is more consistent with social-cognitive and dissociated-experience theories.

[1756]
Nonpharmacological treatment of tics in Tourette syndrome adding videotape training to self-hypnosis.
Lazarus JE, Klein SK.
OBJECTIVE: This case series examines the practicality of using a standardized method of training children in self-hypnosis (SH) methods to explore its efficiency and short-term efficacy in treating tics in patients with Tourette syndrome.

METHODS: The files of 37 children and adolescents with Tourette syndrome referred for SH training were reviewed, yielding 33 patients for analysis. As part of a protocol for SH training, all viewed a videotape series of a boy undergoing SH training for tic control. Improvement in tic control was abstracted from subjective patient report. RESULTS: Seventy-nine percent of the patients trained in this technique experienced short-term clinical response, defined as control over the average 6-week follow-up period. Of the responders, 46% achieved tic control with SH after only 2 sessions and 96% after 3 visits. One patient required 4 visits. CONCLUSIONS: Instruction in SH, aided by the use of videotape training, augments a protocol and probably shortens the time of training in this technique. If SH is made more accessible in this way, it will be a valuable addition to multi-disciplinary management of tic disorders in Tourette syndrome.

[1757]
Relaxation strategies for patients during dermatologic surgery.
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Patient stress and anxiety are common preoperatively and during dermatologic procedures and surgeries. Stress and anxiety can occasionally interfere with performance of procedures or surgery and can induce hemodynamic instability, such as elevated blood pressure or syncope, as well as producing considerable discomfort for some patients. Detection of excess stress and anxiety in patients can allow the opportunity for corrective or palliative measures. Slower breathing, biofeedback, progressive muscular relaxation, guided imagery, hypnosis, meditation and music can help calm and rebalance the patient's autonomic nervous system and immune functioning. Handheld miniaturized heart rate variability biofeedback devices are now available. The relaxation response can easily be taught. Guided imagery can be recorded or live. Live rapid induction hypnosis followed by deepening and then self-guided imagery requires no experience on the part of the patient but does require training and experience on the part of a provider.Recorded hypnosis inductions may also be used. Meditation generally requires more prior experience and training, but is useful when the patient already is skilled in it. Live, guided meditation or meditation recordings may be used. Relaxing recorded music from speakers or headphones or live performance music may also be employed to ease discomfort and improve the patient's attitude for dermatologic procedures and surgeries.

[1758]
People who expect to enter psychotherapy are prone to believing that they have forgotten memories of childhood trauma and abuse.
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We asked 1004 undergraduates to estimate both the probability that they would enter therapy and the probability that they experienced but could not remember incidents of potentially life-threatening childhood traumas or physical and sexual abuse. We found a linear relation between the expectation of entering therapy and the belief that one had, but cannot now remember, childhood trauma and abuse. Thus individuals who are prone to seek psychotherapy are also prone to accept a suggested memory of childhood trauma or abuse as fitting their expectations. In multiple regressions predicting the probability of forgotten memories of childhood traumas and abuse, the expectation of entering therapy remained as a substantial predictor when self-report measures of mood, anxiety, post-traumatic stress disorder symptom severity, and trauma exposure were included.

[1759]
Best practice guide for the treatment of nightmare disorder in adults.
Aurora RN, Zak RS, Auerbach SH, Casey KR, Chowdhuri S, Karippot A, Maganti RK, Ramar K, Kristo DA, Bista SR, Lamm CI, Morgenthaler TI; Standards of Practice Committee; American Academy of Sleep Medicine.
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Prazosin is recommended for treatment of Posttraumatic Stress Disorder (PTSD)-associated nightmares. Level A. Image Rehearsal Therapy (IRT) is recommended for treatment of nightmare disorder. Level A. Systematic Desensitization and Progressive Deep Muscle Relaxation training are suggested for treatment of idiopathic nightmares. Level B. Venlafaxine is not suggested for treatment of PTSD-associated nightmares. Level B. Clonidine may be considered for treatment of PTSD-associated nightmares. Level C. The following medications may be considered for treatment of PTSD-associated nightmares, but the data are low grade and sparse: trazodone, atypical antipsychotic medications, topiramate, low dose cortisol, fluvoxamine, triazolam and nitrazepam, phenelzine, gabapentin, cyproheptadine, and tricyclic antidepressants.
Nefazodone is not recommended as first line therapy for nightmare disorder because of the increased risk of hepatotoxicity. Level C. The following behavioral therapies may be considered for treatment of PTSD-associated nightmares based on low-grade evidence: Exposure, Relaxation, and Rescripting Therapy (ERRT); Sleep Dynamic Therapy; Hypnosis; Eye-Movement Desensitization and Reprocessing (EMDR); and the Testimony Method. Level C. The following behavioral therapies may be considered for treatment of nightmare disorder based on low-grade evidence: Lucid Dreaming Therapy and Self-Exposure Therapy. Level C No recommendation is made regarding clonazepam and individual psychotherapy because of sparse data.

[1760]
Pachman DR, Jones JM, Loprinzi CL.
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Hot flashes are one of the most common and distressing symptoms associated with menopause, occurring in more than 75% of postmenopausal women. They are especially problematic in breast cancer patients since some breast cancer therapies can induce hot flashes. For mild hot flashes, it is proposed that behavioral modifications are the first step in management. Hormonal therapies, including estrogens and progestogens, are the most well known effective agents in relieving hot flashes; however, the safety of these agents is controversial. There is an increasing amount of literature on nonhormonal agents for the treatment of hot flashes. The most promising data regard newer antidepressant agents such as venlafaxine, which reduces hot flashes by about 60%. Gabapentin is another nonhormonal agent that is effective in reducing hot flashes. While many complimentary therapies, including phytoestrogens, black cohosh, and dehydroepiandrosterone, have been explored for the treatment of hot flashes; none can be recommended at this time. Furthermore, there is a lack of strong evidence to support exercise, yoga, or relaxation for the treatment of hot flashes. Paced respirations and hypnosis appear to be promising enough to warrant further investigation. Another promising nonpharmacological therapy, currently under investigation, involves a stellate ganglion block.

[1761]
Al-Harasi S, Ashley PF, Moles DR, Parekh S, Walters V.
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BACKGROUND: Managing children is a challenge that many dentists face. Many non-pharmacological techniques have been developed to manage anxiety and behavioural problems in children, such as: ‘tell, show & do’, positive re-forcement, modelling and hypnosis. The use of hypnosis is generally an overlooked area, hence the need for this review. OBJECTIVES: This systematic review attempted to answer the question: What is the effectiveness of hypnosis (with or without sedation) for behaviour management of children who are receiving dental care in order to allow successful completion of treatment? Null hypothesis: Hypnosis has no effect on the outcome of dental treatment of children. SEARCH STRATEGY: We searched the Cochrane Oral Health Group’s Trials Register, CENTRAL, MEDLINE (OVID), EMBASE (OVID), and PsycINFO. Electronic and manual searches were performed using controlled vocabulary and free text terms with no language restrictions. Date of last search: 11th June 2010. SELECTION CRITERIA: All children and adolescents aged up to 16 years of age. Children having any dental treatment, such as: simple restorative treatment with or without local anaesthetic, simple extractions or management of dental trauma. DATA COLLECTION AND ANALYSIS: Information regarding methods, participants, interventions, outcome measures and results were independently extracted, in duplicate, by two review authors. Authors of trials were contacted for details of randomisation and withdrawals and a quality assessment was carried out. The methodological quality of randomised controlled trials (RCTs) was assessed using the criteria described in the Cochrane Handbook for Systematic Reviews of Interventions 5.0.2. MAIN RESULTS: Only three RCTs (with 69 participants) fulfilled the inclusion criteria. Statistical analysis and meta-analysis were not possible due to insufficient number of studies. AUTHORS’ CONCLUSIONS: Although there are a considerable number of anecdotal accounts indicating the benefits of using hypnosis in paediatric dentistry, on the basis of the three studies meeting the inclusion criteria for this review there is not yet enough evidence to suggest its beneficial effects.

[1762]
Systematic review: self-management support interventions for irritable bowel syndrome.
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BACKGROUND: Irritable bowel syndrome is an extremely common and costly condition. Because there is no cure, patients must be supported to manage their own condition. AIM: To assess systematically the interventions used to support irritable bowel syndrome patient self-management. METHODS: A search of PubMed, EMBASE, CINAHL and PsycINFO was performed to identify all studies that involved self-management support interventions for irritable bowel syndrome.
syndrome. Studies that compared the self-management-related intervention to a control group were included. RESULTS: Eleven studies that involved a total of 1657 patients were included. For nearly all studies, the intervention was associated with statistically significant benefits. However, across studies there was significant heterogeneity in terms of sample size, diagnostic criteria, study setting, study design, primary outcome, statistical analyses and study quality. Therefore, individual study results could not be statistically combined. CONCLUSIONS: Many self-management support interventions appear benefit patients with irritable bowel syndrome. However, studies were limited by methodological flaws. Furthermore, feasibility in ‘real world’ clinical practice is uncertain. Thus, practical self-management interventions that can be applied across various clinical settings should be developed, and then tested in well-designed clinical trials.

[1763]
Abreaction for conversion disorder: systematic review with meta-analysis.
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BACKGROUND: The value of drug interviews in the treatment of conversion disorder is at present unknown. AIMS: To review all the available papers published in English that report on the use of drug interviews for treating conversion/dissociative disorder. METHOD: Databases (including EMBASE, MEDLINE and PsycINFO) were searched from 1920 to 2009. Selected publications had to report on the use of drug interviews in people diagnosed with a conversion/dissociative disorder. Qualitative and quantitative data were extracted. Predictors of a positive response were ascertained using meta-analytic techniques. RESULTS: Fifty-five papers meeting inclusion criteria were identified. No studies compared the intervention with a suitable control group. However, two studies reported high response rates when drug interview was used in individuals with treatment-resistant conversion disorder. In the meta-analysis, the use of suggestion and occurrence of emotional catharsis during the interview were positively associated with recovery. Combining two medications and comorbid psychiatric disorder were negatively associated with recovery. CONCLUSIONS: The evidence for effectiveness of drug interviews is of poor quality but it may be of benefit in the treatment of acute and treatment-resistant conversion disorder. A proactive approach during the interview, making suggestions the individual will respond, could influence outcome. Comorbid psychiatric disorder should be treated conventionally. Experimental studies to determine efficacy are required.

[1764]
Impact of a pain protocol including hypnosis in major burns.
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BACKGROUND: Pain is a major issue after burns even when large doses of opioids are prescribed. The study focused on the impact of a pain protocol using hypnosis on pain intensity, anxiety, clinical course, and costs. METHODS: All patients admitted to the ICU, aged >18 years, with an ICU stay >24h, accepting to try hypnosis, and treated according to the protocol were included. Pain was scored on the Visual Analog Scale (VAS) (mean of daily multiple recordings), and basal and procedural opioid doses were recorded. Clinical outcome and economical data were retrieved from hospital charts and information system, respectively. Treated patients were matched with controls for sex, age, and the burned surface area. FINDINGS: Forty patients were admitted from 2006 to 2007: 17 met exclusion criteria, leaving 23 patients, who were matched with 23 historical controls. Altogether patients were 36+/−14 years old and burned 27+/−15%BSA. The first hypnosis session was performed after a median of 9 days. The protocol resulted in the early delivery of higher opioid doses/24h (p<0.0001) followed by a later reduction with lower pain scores (p<0.0001), less procedural related anxiety, less procedures under anaesthesia, reduced total grafting requirements (p=0.014), and lower hospital costs per patient. CONCLUSION: A pain protocol including hypnosis reduced pain intensity, improved opioid efficiency, reduced anxiety, improved wound outcome while reducing costs. The protocol guided use of opioids improved patient care without side effects, while hypnosis had significant psychological benefits.

[1765]
The use of paraphrasing in investigative interviews.
Evans AD, Roberts KP, Price HL, Stefek CP.
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OBJECTIVE: Young children's descriptions of maltreatment are often sparse thus creating the need for techniques that elicit lengthier accounts. One technique that can be used by interviewers in an attempt to increase children's reports is "paraphrasing," or repeating information children have disclosed. Although we currently have a general understanding of how paraphrasing may influence children's reports, we do not have a clear description of how paraphrasing is actually used in the field. METHOD: The present study assessed the use of paraphrasing in 125 investigative interviews of allegations of maltreatment of children aged 4-16 years. Interviews were conducted by police officers and social workers.
All interviewer prompts were coded into four different categories of paraphrasing. All children's reports were coded for the number of details in response to each paraphrasing statement. RESULTS: “Expansion paraphrasing” was used significantly more often and elicited significantly more details, while “yes/no paraphrasing” resulted in shorter descriptions from children, compared to other paraphrasing styles. Further, interviewers more often distorted children’s words when using yes/no paraphrasing, and children rarely corrected interviewers when they paraphrased inaccurately.

CONCLUSIONS AND PRACTICAL IMPLICATIONS: Investigative interviewers in this sample frequently used paraphrasing with children of all ages and, though children's responses differed following the various styles of paraphrasing, the effects did not differ by the age of the child. The results suggest that paraphrasing affects the quality of statements by children. Implications for investigative interviewers will be discussed and recommendations offered for easy ways to use paraphrasing to increase the descriptiveness of children's reports of their experiences.

[1766]
Treatment of angina and microvascular coronary dysfunction.
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OPINION STATEMENT: Microvascular coronary dysfunction (MCD) is an increasingly recognized cause of cardiac ischemia and angina that is diagnosed more commonly in women. Patients with MCD present with the triad of persistent chest pain, ischemic changes on stress testing, and no obstructive coronary artery disease on cardiac catheterization. Data from the National Heart, Lung, and Blood Institute-sponsored Women's Ischemia Syndrome Evaluation (WISE) study show that the diagnosis of MCD is not benign, with a 2.5% annual risk of adverse cardiac events including myocardial infarction, stroke, congestive heart failure, and death. The gold standard diagnostic test for MCD is the invasive coronary reactivity test (CRT), which uses acetylcholine, adenosine, and nitroglycerin to test endothelial-dependent and -independent microvascular and macrovascular coronary function. The CRT allows for diagnostic and treatment options as well as further risk stratification of patients for future cardiovascular events. Treatment of angina and MCD should be aimed at ischemia disease management to reduce the risk of adverse cardiac events, ameliorate symptoms to improve quality of life, and decrease morbidity from unnecessary and repeated cardiac catheterization in patients with open coronary arteries. A comprehensive treatment approach aimed at risk factor management, including lifestyle counseling regarding smoking cessation, nutrition, and physical activity, should be initiated. Current pharmacotherapy for MCD may include treatment of microvascular endothelial dysfunction (with statins, angiotensin-converting enzyme inhibitors, or low-dose aspirin), as well as treatment for angina and myocardial ischemia (with f2-blockers, calcium channel blockers, nitrates, or ranolazine). Additional symptom management techniques may include tricyclic medication, enhanced external counterpulsation, hypnosis, and spinal cord stimulation. Although our current therapies are effective in treating angina and MCD, large randomized outcome trials are needed to optimize strategies to improve morbidity and mortality.

[1767]
Effect of autogenic training on general improvement in patients with irritable bowel syndrome: a randomized controlled trial.
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Autogenic training (AT) is a useful and comprehensive relaxation technique. However, no studies have investigated the effects of AT on irritable bowel syndrome (IBS). In this study we tested the hypothesis that AT improves symptoms of IBS. Twenty-one patients with IBS were randomly assigned to AT (n = 11, 5 male, 6 female) or control therapy (n = 10, 5 male, 5 female). AT patients were trained intensively, while the control therapy consisted of discussions about patients’ meal habits and life styles. All patients answered a question related to adequate relief (AR) of IBS symptoms and four questionnaires: Self-induced IBS Questionnaire (SIBSQ), Self-reported Depression Scale (SDS), State-Trait Anxiety Inventory (STAI), and Medical Outcome Short Form 36 Health Survey (SF-36). The proportion of AR in the last AT session in the AT group (9/11, 81.8%) was significantly higher than that in the controls (3/10, 30.0%, Chi-square test, p = 0.048). Two subscales of the SF-36, i.e., social functioning and bodily pain, were significantly improved in the AT group (p < 0.05) as compared to the control group. Role emotional (p = 0.051) and general health (p = 0.068) showed a tendency for improvement in the AT group. AT may be useful in the treatment of IBS by enhancing self-control.

[1768]
Gilles de la Tourette's criminal women: the many faces of fin de siecle hypnotism.
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Gilles de la Tourette is now known for the disease which now bears his name, but his activities in the management of
hysteric and in hypnosis, which gained him most of his lifetime reputation, have been largely forgotten. As one of the closest followers of Jean-Martin Charcot, he always remained faithful to his mentor's views, and was one of the most vehement defenders of La Salpetriere school during the quarrel with Hippolyte Bernheim and the Nancy school on the question of the specificity of hypnotic susceptibility in hysteria. This controversy became critical during medico-legal assessment of crimes supposedly committed under hypnotic suggestion. Gilles de la Tourette's involvement in criminal hypnosis was striking, as shown by his own experiments, the most famous of which being his suggested poisoning of a colleague by Blanche Wittman, the celebrated Charcot's hysterical patient in the 1887 Brouillet's painting. Gilles de la Tourette also acted as expert in murder trials, and his Epilogue in the Gouff's trunk case, where he affirmed that no murder in real life could be due to hypnosis, and considered that Gabrielle Bompard, the murderer's accomplice, was not under hypnotic suggestion, had a considerable impact. Finally, he was confronted to the issue of murder under hypnosis in his private life, since in 1893, a former patient, Rose Kamper, came and shot him in the head at his home, claiming that hypnotism sessions had changed her own person, and that she had been hypnotized "at distance". These acts from three very different "hysterical" women highlight the Salpetriere's theories on hypnosis and their inner contradictions in the fin de siecle ambiance, a few years before Joseph Babinski renewed the concepts on hysteria.

[1769]
Do patients with globus sensation respond to hypnotically assisted relaxation therapy? A case series report.
Kiebles JL, Kwiatek MA, Pandolfino JE, Kahrilas PJ, Keefer L.
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Globus sensation is a bothersome and difficult symptom to treat. The aims of this study were to evaluate the acceptability and utility of hypnotically-assisted relaxation (HAR) in decreasing the perception of globus sensation and the effect of HAR on interdeglutitive upper esophageal sphincter (UES) pressure. Sixteen subjects with persistent globus sensation unresponsive to therapy for reflux disease and with normal esophageal/laryngeal imaging studies were invited to participate in a 7-session clinical protocol. Before and after HAR, subjects completed standard questionnaires including the esophageal symptoms questionnaire. High-resolution manometric assessment of respiratory augmentation and average resting UES pressure were assessed before and after HAR. Ten of the 16 subjects agreed to participate in the protocol. All participants were women with median age 51.5 (range 30-72 years). The participants found HAR acceptable and completed the entire 7-session trial. Globus symptom severity varied widely pre-treatment (median=52.5, range 16-72), and 9 of 10 subjects reported a reduction in globus symptomatology following treatment (median=14.0, range 3-19; P=.007). Only 1 subject exhibited abnormal respiratory augmentation of UES pressure (>27 mm Hg) prior to treatment and was normal following treatment (9.9 mm Hg). Resting UES pressure was normal in all subjects (<118 mm Hg). Group respiratory augmentation and average resting UES pressure were unaffected by HAR (P=.48, .89). This case series suggests that HAR can provide a substantial improvement in globus sensation irrespective of cause. UES function was unaffected. We suggest that HAR therapy is an acceptable and useful intervention for patients with globus sensation.

[1770]
Reestablishment of hope as an intervention for a patient with cystic fibrosis awaiting lung transplantation.
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Patients with cystic fibrosis (CF) experience a progressive deterioration in health leading to a shortened life expectancy with concomitant psychologic challenges that also may require intervention. Approaches to address psychologic dysfunction include insight-oriented therapy, cognitive-behavioral therapy, biofeedback, hypnosis, massage, music therapy, relaxation and family therapy. Patients who learn to use coping strategies are more likely to adhere to treatment, which helps improve both their physical and psychologic well-being. Unique stressors arise for patients awaiting lung transplant as a result of their advanced state of disease along with their fear of death before donor lungs become available. This case report demonstrates some of the psychologic struggles faced by a 10-year-old with CF as he awaited lung transplantation, which led to a loss of hope and his request for withdrawal of care. Encouraging of the patient to express how his life might be improved yielded changes in his management that restored his hopefulness, and allowed him to survive long enough to undergo successful lung transplantation. Thus, reestablishment of hope might be studied as an additional intervention to help improve the well-being of patients who are seriously ill.

[1771]
An exploratory study on the effects of an expectancy manipulation on chemotherapy-related nausea.
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CONTEXT: Previous research has shown that the effectiveness of acupressure bands in reducing chemotherapy-related...
nabuse is related to patients' expectations of efficacy. OBJECTIVE: To test whether an informational manipulation designed to increase expectation of efficacy regarding acupressure bands would enhance their effectiveness. METHODS: We conducted an exploratory, four-arm, randomized clinical trial in breast cancer patients about to begin chemotherapy. All patients received acupressure bands and a relaxation CD. This report focuses on Arm 1 (expectancy-neutral informational handout and CD) compared with Arm 4 (expectancy-enhancing handout and CD). Randomization was stratified according to the patient's level of certainty that she would have treatment-induced nausea (two levels: high and low). Experience of nausea and use of antiemetics were assessed with a five-day diary. RESULTS: Our expectancy-enhancing manipulation resulted in improved control of nausea in the 26 patients with high nausea expectancies but lessened control of nausea in 27 patients having low nausea expectancies. This interaction effect (between expected nausea and intervention effectiveness) approached statistical significance for our analysis of average nausea (P=0.084) and reached statistical significance for our analysis of peak nausea (P=0.030). Patients receiving the expectancy-enhancing manipulation took fewer antiemetic pills outside the clinic (mean[enhanced]=12.6; mean[neutral]=18.5, P=0.003). CONCLUSION: This exploratory intervention reduced antiemetic use overall and also reduced nausea in patients who had high levels of expected nausea. Interestingly, it increased nausea in patients who had low expectancies for nausea. Confirmatory research is warranted.


This study examined whether the behavioral and electrophysiological correlates of synaesthetic response conflict could be disrupted by posthypnotic suggestion. We recorded event-related brain potentials while a highly suggestible face-color synaesthete and matched controls viewed congruently and incongruently colored faces in a color-naming task. The synaesthete, but not the controls, displayed slower response times, and greater P1 and sustained N400 ERP components over frontal-midline electrodes for incongruent than congruent faces. The behavioral and N400 markers of response conflict, but not the P1, were abolished following a posthypnotic suggestion for the termination of the participant's synaesthesia and reinstated following the cancellation of the suggestion. These findings demonstrate that the conscious experience of synaesthesia can be temporarily abolished by cognitive control.

[1773] Neurosci Behav Physiol. 2010 Sep;40(7):801-6. Epub 2010 Jul 17. Correlations between neuron activity in the sensorimotor cortex of the right and left hemispheres in rabbits during a defensive dominant and "animal hypnosis". Bogdanov AV, Galashina AG, Karamysheva NN. Institute of Higher Nervous Activity and Neurophysiology, Russian Academy of Sciences, Moscow, Russia. bogdav@mail.ru

A latent focus of excitation with a rhythmic nature (a defensive dominant focus) was created in the CNS of rabbits. The focus was formed by threshold electrocutaneous stimulation of the left forelimb using series of impulses consisting of 15-20 stimuli with interstimulus intervals of 2 sec. The linked activity of cells in the sensorimotor cortex of the right and left hemispheres was analyzed. When cross-correlation histograms of the spike activity of sensorimotor cortex neurons in the left hemisphere were constructed and analyzed in relation to spikes of high and intermediate amplitude recorded in the right hemisphere, the linked activity of 15% and 23% of neuron pairs, respectively, showed predominance of a rhythm equal or close to the stimulation rhythm used to form the dominant focus. When the appearance times of spikes from neurons in the sensorimotor cortex of the right hemisphere were analyzed in relation to spikes of high and intermediate amplitude recorded in the cortex of the left hemisphere, predominance of 2-sec rhythms was seen in the linked activity of only 3% and 10% of neuron pairs, respectively. After induction of "animal hypnosis," differences between the hemispheres in relation to this measure leveled out.


BACKGROUND: Hypnotherapy is widely promoted as a method for aiding smoking cessation. It is proposed to act on underlying impulses to weaken the desire to smoke or strengthen the will to stop. OBJECTIVES: To evaluate the efficacy of hypnotherapy for smoking cessation. SEARCH STRATEGY: We searched the Cochrane Tobacco Addiction Group Specialized Register and the databases MEDLINE, EMBASE, AMED, SCI, SSCI using the terms smoking cessation and hypnotherapy or hypnosis. Date of most recent searches July 2010. There were no language restrictions. SELECTION CRITERIA: We considered randomized controlled trials of hypnotherapy which reported smoking cessation rates at least six months after the beginning of treatment. DATA COLLECTION AND ANALYSIS: Three authors independently...
The effectiveness of clinical hypnosis in the digestive endoscopy: a multiple case report.
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The aim of this study is to evaluate the efficacy and viability of hypnosis before and during a gastrointestinal endoscopy. Six Gastroscopies and 22 colonoscopies were carried out under hypnosis in a group of patients. The patients ranged in age from 20 and 67 years and have a history of previously incomplete and poorly tolerated examinations or expressed an active demand for sedation. For 6 of the patients who underwent a gastroscopy under hypnosis, the procedure was successfully completed, reaching the second part of the duodenum without difficulty for the endoscopist. Colonoscopy of the cecum was completed in 19 of 20 patients. All patients, except 1, considered their tolerance level as "good." Hypnosis facilitated an adequate endoscopy intervention without any discomfort in 85% of the cases examined. Avoidance of anaesthesia reduces risk to the patient. Hence, hypnosis for gastrointestinal endoscopy appears to provide a promising strategy.

Intentions to use hypnosis to control the side effects of cancer and its treatment.
Sohl SJ, Stossel L, Schnur JB, Tatrow K, Gherman A, Montgomery GH.
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Evidence suggests that hypnosis is an effective intervention for reducing distress, pain and other side effects associated with cancer and its treatment. However, hypnosis has failed to be adopted into standard clinical practice. This study (n = 115) investigated overall intentions to use hypnosis to control side effects of cancer and its treatment, as well as demographic predictors of such intentions among healthy volunteers. Results suggest that the vast majority of participants (89%) would be willing to use hypnosis to control side effects associated with cancer treatment. Mean intention levels did not differ by gender, ethnicity, education or age. These results indicate that in the general public, there is a willingness to consider the use of hypnosis, and that willingness is not determined by demographic factors. This broad acceptance of hypnosis argues for more widespread dissemination.

This article is part of an occasional series profiling editors of the American Journal of Clinical Hypnosis (AJCH). William E. Edmonston, Jr. was the second editor, succeeding Milton H. Erickson. His research focused on the use of conditioning paradigms and psychophysiological measures to explore a wide variety of hypnotic phenomena, leading to a "neo-Pavlovian" theory of neural hypnosis as physiological relaxation (anesis). A longtime professor of psychology at Colgate University, he created an interdisciplinary undergraduate major in neuroscience, and was named New York State College Professor of the Year in 1988. He gave the Journal a new look, and a greater balance of clinical and experimental papers. The article also provides background on George Barton Cutten, George H. Estabrooks, and Frank A. Pattie, pioneers of hypnosis who were linked to Edmonston.

[1775]
The effectiveness of clinical hypnosis in the digestive endoscopy: a multiple case report.
Dominguez-Ortega L, Rodriguez-Muiz S.

[1776]
Intentions to use hypnosis to control the side effects of cancer and its treatment.
Sohl SJ, Stossel L, Schnur JB, Tatrow K, Gherman A, Montgomery GH.

[1777]
Kihlstrom JF, Frischholz EJ.
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This article is part of an occasional series profiling editors of the American Journal of Clinical Hypnosis (AJCH). William E. Edmonston was the second editor, succeeding Milton H. Erickson. His research focused on the use of conditioning paradigms and psychophysiological measures to explore a wide variety of hypnotic phenomena, leading to a "neo-Pavlovian" theory of neural hypnosis as physiological relaxation (anesis). A longtime professor of psychology at Colgate University, he created an interdisciplinary undergraduate major in neuroscience, and was named New York State College Professor of the Year in 1988. He gave the Journal a new look, and a greater balance of clinical and experimental papers. The article also provides background on George Barton Cutten, George H. Estabrooks, and Frank A. Pattie, pioneers of hypnosis who were linked to Edmonston.

[1778]
OBJECTIVE: To determine the influence of the knowledge of the endoscopic findings and the influence of the patient's history on the cytologist's judgement, as urinary cytology is known to be subjective and has several limitations, in particular a high inter- and intra-observer variability. PATIENTS AND METHODS: We analysed the cytological and histological findings of patients who underwent transurethral resection of a bladder tumour, and determined whether the cytologist was aware of the endoscopic findings or not. The sensitivity and specificity of cytology were calculated with or without this knowledge, and that of the patients' bladder cancer history. RESULTS: The findings of 1705 patients were reviewed; in 641 the histological examination confirmed a malignant tumour and 1046 were classified as benign. The sensitivity of cytology was 66.0% and the specificity was 78.4%. The cytologist was aware of the endoscopic finding and patient history in 742 cases, and unaware of the endoscopic findings in 963. The sensitivity was higher in the latter group (80.2% vs 73.0%; P = 0.006). The specificity in patients with the endoscopic findings described as 'negative', 'inflammation', 'scar tissue', 'flat lesion', 'suspicious for tumour', and 'exophytic tumour' was 89.8%, 89.9%, 85.0%, 77.1%, 63.2% and 48.6%, respectively (P < 0.001). In 898 patients the history was negative for bladder tumours. Among these patients the sensitivity and specificity of cytology was 67.3% and 79.7%; the sensitivity and specificity was 65.4% and 74.8% for the 807 patients with a positive history of bladder cancer (P = 0.054). CONCLUSION: Both being aware of the endoscopic findings and a positive patient history for bladder cancer lowers the specificity of cytology. Consequently, the cytologist should be unaware of the endoscopic findings.


IMPORTANCE OF THE FIELD: Dyspeptic symptoms are highly prevalent in the population and represent a major burden for healthcare systems. The ROME III criteria address and define two separate entities of functional dyspepsia: epigastric pain syndrome and postprandial distress syndrome. The etiology of dyspeptic symptoms is heterogeneous, underlying mechanisms are poorly understood and symptomatic improvement after drug therapy is often incomplete. AREAS COVERED IN THIS REVIEW: This review of the literature included Medline data being published in the field of functional dyspepsia and different therapies. WHAT THE READER WILL GAIN: The reader will gain a current, unbiased understanding of the pathophysiological mechanisms underlying functional dyspepsia and of the therapeutic regimens based on randomized, controlled trials and on the meta-analyses that have been published on different therapeutic agents. TAKE HOME MESSAGE: Before starting medical treatment, a careful physical examination should exclude 'alarm symptoms'. Laboratory data, ultrasound and endoscopy are recommended in patients older than 45 - 55 years (depending on the guidelines being used). In areas with a high prevalence of Helicobacter pylori, the initial strategy includes 'test and treat' for H. pylori in addition to empiric acid suppressive therapy. Many studies have focused on the role of gastrointestinal dysmotility and hypersensitivity for dyspepsia with inconclusive results. Further therapeutic medical strategies include prokinetics, herbal preparations and psycho-/neurotopic drugs as well as additional psycho- or hypnotherapy.


The authors describe two studies of special interest to clinicians and clinical researchers. Both are randomized controlled studies, exclusively focused on female patients. The first study tests whether a year-long weekly group intervention including hypnosis can reduce cancer pain among women with metastatic breast cancer. Findings suggest the intervention slowed the increase in reported pain over a 12-month period relative to controls. The second study examines the effect of hypnosis in women suffering from temporomandibular disorder (TMD), with a special focus on function as well as pain. Hypnosis reduced TMD pain as measured by a numerical-rating scale.

The aim of this study was to examine whether a lecture on hypnosis can modify attitudes and misconceptions about hypnosis. The sample consisted of 97 health professionals from institutions in Havana City, Cuba. Group 1 consisted of 46 participants who received a lecture on hypnosis. Group 2 consisted of 51 participants who received a lecture about urology. and Beliefs toward Hypnosis-Therapist was applied before and after the lecture. Results indicated that there were significant differences between the groups: Group 1 showed more positive attitudes toward hypnosis. However, both groups showed similar misconceptions about hypnosis and memory, which changed significantly in Group 1 after receiving the lecture about hypnosis but not in Group 2. Therefore, the lecture about hypnosis had a significant impact in correcting participants’ misconceptions about memory and hypnosis.

[1782]
Comparison of conventional therapies for dentin hypersensitivity versus medical hypnosis.
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stephan.eitner@uk-erlangen.de

This study compared the efficacy of conventional treatments for dentin hypersensitivity (DHS) and hypnotherapy. During a 1-month period at an urban practice in a service area of approximately 22,000 inhabitants, all patients were examined. A total of 102 individuals were included in the evaluation. Values of 186 teeth were analyzed. The comparison of the different treatment methods (desensitizer, fluoridation, and hypnotherapy) did not show significant differences in success rates. However, a noticeable difference was observed in terms of onset and duration of effect. For both desensitizer and hypnotherapy treatments, onset of effect was very rapid. Compared to the other methods studied, hypnotherapy effects had the longest duration. In conclusion, hypnotherapy was as effective as other methods in the treatment of DHS.

[1783]
Autogenic training alters cerebral activation patterns in fMRI.
Schlamann M, Naglatzki R, de Greiff A, Forsting M, Giezewski ER.
University Hospital Essen and University Duisburg-Essen, Germany.

Cerebral activation patterns during the first three auto-suggestive phases of autogenic training (AT) were investigated in relation to perceived experiences. Nineteen volunteers trained in AT and 19 controls were studied with fMRI during the first steps of autogenic training. FMRI revealed activation of the left postcentral areas during AT in those with experience in AT, which also correlated with the level of AT experience. Activation of prefrontal and insular cortex was significantly higher in the group with experience in AT while insular activation was correlated with number years of simple relaxation exercises. Specific activation in subjects experienced in AT may represent a training effect. Furthermore, the correlation of insular activation suggests that these subjects are different from untrained subjects in emotional processing or self-awareness.

[1784]
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The author sent surveys to 178 consecutive youths previously referred for hypnosis for headaches. The survey sought current status of headaches: treatment, application of self-hypnosis, headache intensity, frequency, duration after self-hypnosis, generalization of self-hypnosis to other problems, and attitudes regarding self-hypnosis and life stresses. Of 134 delivered surveys, 52 were returned complete. Years after treatment, 85% (44/52) reported continued relief with self-hypnosis, 44% (23/52) reported decreased headache frequency, 31% (16/52) noted decreased severity, and 56% (29/52) reported that self-hypnosis reduced headache intensity. Many (26/52) emphasized the value of self-hypnosis to life stresses. In children and adolescents, self-hypnosis is associated with significant improvement of headaches and with an enduring positive effect for many years following training. Results suggest common and spontaneous generalizability of self-hypnosis by young people to modulation of other problems in their lives.

[1785]
Trance state effects and imagery vividness before and during a hypnotic assessment: a preliminary study.
Pekala RJ, Maurer R, Kumar VK, Elliott-Carter N, Mullen K.
Coatesville Veterans Administration Medical Center, Coatesville, Pennsylvania 19320, USA. pekalar@voicenet.com

This preliminary study explored the relationship between imagery vividness before and during a hypnotic phenomenological assessment procedure, the Phenomenology of Consciousness Inventory-Hypnotic Assessment
Procedure (PCI-HAP), while also assessing trance (hypnoidal) state effects and several other variables. The PCI-HAP allows the assessment of trance state effects associated with hypnotism to be quantified and statistically assessed. The 102 subjects completed the PCI-HAP along with several other questionnaire items. Correlational and regression analyses suggested that imagery vividness during hypnotism (hypnotic imagoic suggestibility) was predicted by combined imagery vividness before hypnotism and trance (altered) state effects during hypnotism. When measuring several additional variables, imagery vividness during hypnotism was found to be a function of self-reported hypnotic depth and additional other variables. The usefulness of these results for better understanding imagery vividness before and during hypnotism is discussed.

[1786]
Allocation of attentional resources in posthypnotic suggestion.
Tobis IP, Kihlstrom JF.
University of Wisconsin, Madison, USA.
Highly hypnotizable subjects received a nonhypnotic instruction to respond to a particular digit in a display and a posthypnotic suggestion to respond to a different digit. On some test trials, these 2 responses were tested separately; on others, they were placed in conflict. Overall, subjects were no more responsive to posthypnotic cues than to nonhypnotic cues, nor did their response latencies differ. However, response to posthypnotic cues diminished when they conflicted with the nonhypnotic cues. Analysis of response latencies showed that posthypnotic responding interfered with nonhypnotic responding (and vice versa), even on those trials where there was no procedural conflict. Posthypnotic behavior is not inevitably evoked by the presentation of the prearranged cue. Furthermore, the interference between posthypnotic and nonhypnotic responses indicates that posthypnotic responding consumes attentional resources. Both findings indicate that posthypnotic behavior is not automatic in the technical sense of that term.

[1787]
Placebo/nocebo: the "biochemical" power of words and suggestions.
Eli I.
[abstract NOT found]

[1788]
Using hypnosis as adjunct care in mental health nursing.
Mottern R.
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Although hypnosis was accepted in 1958 by the American Medical Association as an adjunct treatment, it remains an underused modality for alleviation of clients' suffering. This hesitancy to apply established practices that show efficacy in patient care may be due to a general lack of cognizance about the therapeutic benefits of hypnosis or a reluctance to learn skills based on preconceptions about hypnosis itself. The purpose of this article is to provide evidence of the efficacy of hypnosis as an adjunct treatment in the healing professions and explain hypnosis in a manner consistent with the core values of nursing as defined by the American Nurses Association. Implications for mental health nursing practice will be explored.

[1789]
"An Object of Vulgar Curiosity": Legitimizing Medical Hypnosis in Imperial Germany.
Wolffram H.
During the late nineteenth and early twentieth centuries, German medical hypnotists sought to gain a therapeutic and epistemological monopoly over hypnosis. In order to do this, however, these physicians were required to engage in a complex multi-dimensional form of boundary-work, which was intended on the one hand to convince the medical community of the legitimacy and efficacy of hypnosis and on the other to demarcate their use of suggestion from that of stage hypnotists, magnetic healers, and occultists. While the epistemological, professional, and legal boundaries that medical hypnotists erected helped both exclude lay practitioners from this field and sanitize the medical use of hypnosis, the esoteric interests, and sensational public experiments of some of these researchers, which mimicked the theatricality and occult interests of their lay competitors, blurred the distinctions that these professionals were attempting to draw between their "legitimate" medical use of hypnosis and the "illegitimate" lay and occult use of it.

[1790]
Complementary and alternative medicine modalities for the treatment of irritable bowel syndrome: facts or myths?
Wu JC.
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Due to unsatisfactory results from conventional treatment of irritable bowel syndrome (IBS), complementary and alternative medicine (CAM) modalities are increasingly popular treatment alternatives. Unfortunately, most CAM clinical trials have been of poor quality, and the efficacies of these therapies have not been adequately elucidated, even through systematic reviews or meta-analyses. There is also a general lack of understanding of their mechanisms of action. Currently, insufficient evidence exists to support the use of traditional Chinese medicine, acupuncture, meditation, and reflexology for treatment of IBS. However, there is some evidence supporting the use of peppermint oil and gut-directed hypnotherapy for IBS treatment. Due to mounting evidence of the microbiologic and immunologic basis of IBS, probiotics and exclusion diets are also becoming promising treatment modalities. This paper will review the current literature on various CAM practices for IBS treatment and appraise their advantages and disadvantages in clinical practice.

[1791]
Hist Psychol. 2010 Nov;13(4):393-408.
Reflexivity, the role of history, and the case of mesmerism in early Victorian Britain.
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As part of a wider argument that history is essential to psychological understanding because of the reflexive nature of psychological knowledge, this article examines the case of mesmerism in early Victorian Britain as an example of how psychological knowledge is both constructive and constructed. It is argued that the shift from "mesmerism" to "hypnotism" was a change in understanding that created a new kind of psychological experience. It is also argued that demonstrations of mesmerism, far from being self-evident facts, could be framed as evidence either for or against the central claims of mesmerism. It is concluded that the case of mesmerism in early Victorian Britain provides a further example of the need for historical understanding within Psychology.

[1792]
Cognitive-behavioral therapy and hypnotic relaxation to treat sleep problems in an adolescent with diabetes.
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Inadequate sleep among adolescents frequently contributes to obesity and reduced academic performance, along with symptoms of anxiety, depression, fatigue, and attention deficits. The etiological bases of sleep quality has been associated with both stress and sleep habits. These problems tend to be especially important for adolescents with diabetes as the effects of poor sleep complicate health outcomes. This case example concerns a 14-year-old adolescent girl with a history of type I diabetes and stress-related sleep difficulties. Treatment included cognitive-behavioral methods and hypnotic relaxation therapy. Results of this case example and other controlled research suggest that hypnotic relaxation therapy is well accepted, results in good compliance, and serves as a useful adjunctive to cognitive-behavioral intervention for sleep problems.

[1793]
Psychosocial treatments in pain management of sickle cell disease.
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The principal symptom of sickle cell disease (SCD) is pain. Many studies have been conducted on pain management strategies for this illness. There is recognition that psychosocial factors influence clinical disease outcomes; therefore, more attention is being provided to behavioral interventions that address psychosocial problems. This review examines the psychosocial interventions that have been researched for children and adults with SCD, the limitations of these studies, and barriers to implementing the treatments. The intervention receiving the most empirical support was cognitive-behavioral therapy. Additional research is needed to define the efficacy and effectiveness of the other psychosocial treatments. Suggestions for future investigations include conducting research that has better methodology, and providing more education for health care providers about psychosocial treatments and the importance of considering cultural factors in health care delivery. In addition, individuals with SCD need to have more information about their illness and better access to psychosocial interventions.

[1794]
Parasomnias are undesirable physical or experiential events that occur in and around sleep. Treatments include reassurance in some cases, various forms of cognitive-behavioral therapy (CBT), and pharmacologic agents. Cognitive restructuring, imagery rehearsal, relaxation, hypnosis, desensitization, and anticipatory awakenings are some of the common CBT and nonpharmacologic interventions. Medications that are used belong to a wide variety of pharmacologic classes, such as alpha-blockers (prazosin), tricyclic antidepressants (imipramine and clomipramine), selective serotonin reuptake inhibitors, benzodiazepines (diazepam and clonazepam), anticonvulsants (topiramate and gabapentin), desmopressin acetate, and anticholinergic agents (oxybutynin and tolterodine). Data on efficacy are only available from randomized trials on CBT and prazosin for nightmares and on pharmacologic and alarm therapy for enuresis. No large-scale randomized trials are available to assess the efficacy of the other treatments, and most data come from anecdotal case reports, case series, or small open-label trials.

[1795]
Conscious Cogn. 2010 Dec 13. [Epub ahead of print]
Dissociated control as a signature of typological variability in high hypnotic suggestibility.
Terhune DB, Cardeña E, Lindgren M.
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This study tested the prediction that dissociative tendencies modulate the impact of a hypnotic induction on cognitive control in different subtypes of highly suggestible individuals. Low suggestible (LS), low dissociative highly suggestible (LDHS), and high dissociative highly suggestible (HDHS) participants completed the Stroop color-naming task in control and hypnosis conditions. The magnitude of conflict adaptation (faster response times on incongruent trials preceded by a congruent trial) was used as a measure of cognitive control. LS and LDHS participants displayed marginally superior up-regulation of cognitive control following a hypnotic induction, whereas HDHS participants' performance declined. These findings indicate that dissociative tendencies modulate the influence of a hypnotic induction on cognitive control in high hypnotic suggestibility and suggest that HS individuals are comprised of distinct subtypes with dissimilar cognitive profiles.

[1796]
Mood color choice helps to predict response to hypnotherapy in patients with irritable bowel syndrome.
Carruthers HR, Morris J, Tarrier N, Whorwell PJ.
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BACKGROUND: Approximately two thirds of patients with irritable bowel syndrome (IBS) respond well to hypnotherapy. However, it is time consuming as well as expensive to provide and therefore a way of predicting outcome would be extremely useful. The use of imagery and color form an integral part of the hypnotherapeutic process and we have hypothesised that investigating color and how it relates to mood might help to predict response to treatment. In order to undertake this study we have previously developed and validated a method of presenting colors to individuals for research purposes called the Manchester Color Wheel (MCW). Using this instrument we have been able to classify colors into positive, neutral and negative shades and this study aimed to assess their predictive role in hypnotherapy.

METHODS: 156 consecutive IBS patients (aged 14-74, mean 42.0 years, 127 (81%) females, 29 (19%) males) were studied. Before treatment, each patient was asked to relate their mood to a color on the MCW as well as completing the IBS Symptom Severity Score, the Hospital Anxiety and Depression (HAD) Scale, the Non-colonic Symptom Scale, the Quality of Life Scale and the Tellegen Absorption Scale (TAS) which is a measure of hypnotisability. Following hypnotherapy all these measures were repeated with the exception of the TAS. RESULTS: For patients with a positive mood color the odds of responding to hypnotherapy were nine times higher than that of those choosing either a neutral or negative color or no color at all (odds ratio: 8.889; p = 0.042). Furthermore, a high TAS score and the presence of HAD anxiety also had good predictive value (odds ratio: 4.024; p = 0.092, 3.917; p < 0.001 respectively) with these markers and a positive mood color being independent of each other. In addition, these factors could be combined to give an even stronger prediction of outcome. Twice as many responders (63, 77.8%) had a positive mood color or were anxious or had a high TAS score compared with 32 (42.7%) without these factors (p < 0.001). CONCLUSION: A positive mood color, especially when combined with HAD anxiety and a high TAS score, predict a good response to hypnotherapy.

[1797]
Reflections on the varieties of hypnotizables: a commentary on Terhune and Cardena.
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This commentary reflects on the varieties of high hypnotizable subjects suggested in the works by Barber, Barrett, Pekala and colleagues, and Terhune and Cardeña (2010). These different studies point to the existence of different types of low, medium, and high hypnotizable subjects. However, types of high hypnotizables have received the most attention. Two main concerns are raised in this commentary: (a) drawing parallels between the suggested typologies is not without problems given methodological differences among different studies, and (b) the low base rates of these special types is likely not to appeal to a typical clinician, already resistant to testing for hypnotizability, to conduct initial assessments so as to tailor suggestion to fit specific typologies.

[1798]
Differential patterns of spontaneous experiential response to a hypnotic induction: a latent profile analysis.
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A hypnotic induction produces different patterns of spontaneous experiences across individuals. The magnitude and characteristics of these responses covary moderately with hypnotic suggestibility, but also differ within levels of hypnotic suggestibility. This study sought to identify discrete phenomenological profiles in response to a hypnotic induction and assess whether experiential variability among highly suggestible individuals matches the phenomenological profiles predicted by dissociative typological models of high hypnotic suggestibility. Phenomenological state scores indexed in reference to a resting epoch during hypnosis were submitted to a latent profile analysis. The profiles in the derived four-class solution differed in multiple experiential dimensions and hypnotic suggestibility. Highly suggestible individuals were distributed across two classes that exhibited response patterns suggesting an inward attention subtype and a dissociative subtype. These results provide support for dissociative typological models of high hypnotic suggestibility and indicate that highly suggestible individuals do not display a uniform response to a hypnotic induction.

[1799]
Curr Treat Options Oncol. 2010 Dec;11(3-4):128-40.
Mind-body therapies in integrative oncology.
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There is growing interest in mind-body therapies as adjuncts to mainstream cancer treatment, and an increasing number of patients turn to these interventions for the control of emotional stress associated with cancer. Increased research funding has enabled many such interventions to be evaluated for their efficacy, including studies of mind-body interventions to reduce pain, anxiety, insomnia, anticipatory, and treatment-related nausea, hot flashes, and improved mood. Mind-body treatments evaluated for their utility in oncology include relaxation therapies, biofeedback, meditation and hypnosis, yoga, art and music therapy, tai chi, and qigong. Although studies are not always methodologically sound and results mixed, a growing number of well-designed studies provide convincing evidence that mind-body techniques are beneficial adjuncts to cancer treatment. The evidence is sufficient to recommend further investigation and adoption of these techniques in mainstream oncology care.

[1800]
Therapy options in irritable bowel syndrome.
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BACKGROUND: Numerous meta-analyses have recently assessed the overall clinical benefit of single therapy options and groups of therapies in the irritable bowel syndrome (IBS). By large, this should enable physicians to select from a number of therapy options available. METHODS: We entered dichotomous outcome data from 121 IBS trials published over the last 35 years with different groups and subgroups of drugs (antispasmodics, motility-affecting agents, antidepressants, peppermint oil), dietary interventions (bran, probiotics), and psychotherapy (cognitive behavioral, psychodynamic, hypnotherapy, relaxation techniques) into meta-analytic tools and estimate the overall efficacy (odds ratio, number needed to treat). RESULTS: Highest efficacy is currently found for peppermint oil, followed by psychotherapeutic and psychopharmacological interventions and probiotics. Traditional antispasmodic therapy has a moderate efficacy, whereas the list of (partially failed or cancelled) motility affecting drugs yielded weak clinical results, and therapies by bran and fibers are of no value in IBS. CONCLUSION: Evidence-based therapy in IBS provides a number of effective treatment options beyond the fact that many novel compounds under development have failed to reach the market. An algorithm for clinical therapy decision is proposed.

[1801]
A hypnotic paradigm for studying intrusive memories.
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School of Psychology, University of New South Wales, Sydney, NSW 2052, Australia.

Despite the importance of intrusive memories in clinical disorders, research has been limited by a dearth of paradigms that permit experimental study of intrusions. This study describes a hypnotic paradigm for eliciting intrusive memories. Forty-nine highly hypnotisable participants nominated a distressing memory prior to being hypnotised. During hypnosis, they received the suggestion that they would remember the memory in response to a designated cue after the hypnosis session. Half of the participants also received a posthypnotic amnesia suggestion for the source of the memory. Following hypnosis, all participants completed a cognitive task and during the task received the cue to recall the memory. Results demonstrated that memories experienced after posthypnotic amnesia were experienced as more involuntary and more distressing than those that were knowingly retrieved. Participants in the posthypnotic amnesia condition also demonstrated greater interference on the cognitive task after the retrieval cue was given than those who intentionally retrieved the memory. These findings suggest that posthypnotic suggestion provides a useful paradigm to elicit intrusive memories under experimental conditions.

[1802]
Use of complementary and alternative medical interventions for the management of procedure-related pain, anxiety, and distress in pediatric oncology: an integrative review.
Landier W, Tse AM.
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This integrative review aims to identify evidence in four electronic databases (MEDLINE, CINAHL, PsyINFO, and COCHRANE) regarding the effectiveness of complementary and alternative medical interventions, either alone or as an adjunct to pharmacological therapy, in alleviating procedure-related pain, anxiety, and distress in children and adolescents with cancer. A total of 32 articles met inclusion criteria. Results suggest that mind-body interventions, including hypnosis, distraction, and imagery, may be effective, alone or as adjuncts to pharmacological interventions, in managing procedure-related pain, anxiety, and distress in pediatric oncology.

[1803]
Effect of hypnotic pain modulation on brain activity in patients with temporomandibular disorder pain.
Department of Clinical Oral Physiology, School of Dentistry, Aarhus University, Aarhus, Denmark.

Hypnosis modulates pain perception but the associated brain mechanisms in chronic pain conditions are poorly understood. Brain activity evoked by painful repetitive pin-prick stimulation of the left mental nerve region was investigated with use of fMRI in 19 patients with painful temporomandibular disorders (TMD) during hypnotic hypoalgesia and hyperalgesia and a control condition. Pain intensity and unpleasantness of the painful stimulation was scored on a 0-10 Numerical Rating Scale (NRS). NRS pain and unpleasantness scores during hypnotic hypoalgesia were significantly lower than in the control condition and significantly higher in the hypnotic hyperalgesia condition. In the control condition, painful stimulation caused significant activation of right posterior insula, primary somatosensory cortex (SI), BA21, and BA6, and left BA40 and BA4. Painful stimulation during hypnotic hyperalgesia was associated with increased activity in right posterior insula and BA6 and left BA40 whereas hypnotic hypoalgesia only was associated with activity in right posterior insula. Unexpectedly, direct contrasts between control and hypnotic hyperalgesia conditions revealed significant decreases in S1 during hyperalgesia. Direct contrasts between control and hypnotic hypoalgesia conditions demonstrated significant decreases in right posterior insula and BA21, as well as left BA40 during hypoalgesia. These findings are the first to describe hypnotic modulation of brain activity associated with nociceptive processing in chronic TMD pain patients and demonstrate that hypnotic hypoalgesia is associated with a pronounced suppression of cortical activity and a disconnection between patient-based scores and cortical activity in S1 during hypnotic hyperalgesia.

[1804]
Nocturnal enuresis.
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University of Alberta, Alberta, Canada.

INTRODUCTION: Nocturnal enuresis affects 15% to 20% of 5-year-old children, 5% of 10-year-old children, and 1% to 2% of people aged 15 years and over. Without treatment, 15% of affected children will become dry each year. Nocturnal enuresis is not diagnosed in children younger than 5 years, and treatment may be inappropriate for children younger than 7 years. METHODS AND OUTCOMES: We conducted a systematic review and aimed to answer the following clinical question: What are the effects of interventions for relief of symptoms? We searched: Medline, Embase, The Cochrane Library, and other important databases up to February 2010 (Clinical Evidence reviews are updated periodically, please check our website for the most up-to-date version of this review). We included harms alerts from relevant organisations.
such as the US Food and Drug Administration (FDA) and the UK Medicines and Healthcare products Regulatory Agency (MHRA). RESULTS: We found 19 systematic reviews, RCTs, or observational studies that met our inclusion criteria. We performed a GRADE evaluation of the quality of evidence for interventions. CONCLUSIONS: In this systematic review we present information relating to the effectiveness and safety of the following interventions: acupuncture, anticholinergics (oxybutynin, tolterodine, hyoscyamine), desmopressin, dry bed training, enuresis alarm, hypnotherapy, standard home alarm clock, and tricyclics (imipramine, desipramine).

Use of complementary and alternative medicine at Norwegian and Danish hospitals.
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BACKGROUND: Several studies have found that a high proportion of the population in western countries use complementary and alternative medicine (CAM). However, little is known about whether CAM is offered in hospitals. The aim of this study was to describe to what extent CAM is offered in Norwegian and Danish hospitals and investigate possible changes in Norway since 2001. METHODS: A one-page questionnaire was sent to all included hospitals in both countries. The questionnaire was sent to the person responsible for the clinical activity, typically the medical director. 99 hospitals in the authority (85%) in Norway and 126 in Denmark (97%) responded. Given contact persons were interviewed. RESULTS: CAM is presently offered in about 50% of Norwegian hospitals and one-third of Danish hospitals. In Norway CAM was offered in 50 hospitals, 40 of which involved acupuncture. 19 hospitals gave other alternative therapies like biofeedback, hypnosis, cupping, ear-acupuncture, herbal medicine, art therapy, homeopathy, reflexology, thought field therapy, gestalt therapy, aromatherapy, tai chi, acupressure, yoga, pilates and other. 9 hospitals offered more than one therapy form. In Denmark 38 hospitals offered acupuncture and one Eye Movement Desensitization and Reprocessing Light Therapy. The most commonly reported reason for offering CAM was scientific evidence in Denmark. In Norway it was the interest of a hospital employee, except for acupuncture where the introduction is more often initiated by the leadership and is more based on scientific evidence of effect. All persons (except one) responsible for the alternative treatment had a medical or allied health professional background and their education/training in CAM treatment varied substantially. CONCLUSIONS: The extent of CAM being offered has increased substantially in Norway during the first decade of the 21(st) century. This might indicate a shift in attitude regarding CAM within the conventional health care system.

[Positive suggestion techniques in somatic medicine] [Article in Hungarian]
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There is a re-occurring question in medical practice: do positive attitude and communication of the medical staff make any difference? Aim: Our aim is to present a comprehensive image of the medically relevant effects of positive suggestions by reviewing the recent literature. Methods: We review the studies measuring the effects of suggestive communication of the past 20 years. In cases of studies presented in more details we quote from the suggestion scripts used in the study, too. Results: Most of the reviewed papers affirm that positive suggestions lead to decreased pain and use of pain medication. But physiological factors like bowel motility, blood pressure and bleeding during surgery can be positively affected, too. Conclusions: Suggestive communication - a yet poorly utilized tool - used appropriately can significantly affect healing and recovery of a patient. Thus we emphasize further, more detailed study of this technique and its integration into the education of medical professionals.

Hypnosis and alopecia areata: Long-term beneficial effects on psychological well-being.
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Although there often exists important psychological comorbidity in patients with alopecia areata, few studies have investigated the role of psychotherapeutic interventions. The aim of this prospective cohort study was to investigate the long-term evolution of psychological symptoms in twenty-one patients with refractory alopecia areata. Patients received 10 individual sessions of hypnosis during an approximate 6-month period. Before treatment, patients presented a pathological psychological comorbidity. After treatment, a significant amelioration of alexithymia, anxiety, depression and mental well-being was observed. These improvements were maintained up to 6 months after the end of treatment. Important limitations of this study include the recruitment of highly motivated patients and a non-controlled study design. In summary, hypnotherapy may be effective for significantly improving and maintaining psychological well-being and quality of life in patients with refractory alopecia areata.
Reply to Wagstaff: "Hypnosis and the relationship between trance, suggestion, expectancy, and depth: some semantic and conceptual issues".
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Wagstaff (2010) reviews and comments on two recent papers by Pekala et al. (2010a, 2010b), concluding that "many of the problems relating to the definition and conceptualization of terms associated with hypnosis... may stem from insufficient attention to the role of suggestion and expectancies in producing hypnotic phenomena, and an over-reliance on the role of the procedures and mechanics of the induction process" (p. 47). Although I agree with his semantic and conceptual focus, I believe that a number of these problems are due to not operationally defining terms such as hypnosis, hypnotic state, or trance in a comprehensive phenomenological manner. By using the PCI (Phenomenology of Consciousness Inventory) via retrospective phenomenological assessment, and using a phenomenological state instrument like the PCI-HAP (Phenomenology of Consciousness Inventory - Hypnotic Assessment Procedure) to obtain a state measure of hypnotic responsiveness, a means is available to define and empirically address some of these issues in a way that can significantly further our understanding of the nature of hypnotism. Such an approach might also address Kallio and Revonsuo's (2005) admonition concerning the need to develop "an internally coherent and widely shared theoretical vocabulary" (p. 51) to better understand consciousness, altered states of consciousness, and related phenomena, such as hypnosis/hypnotism.

An integrated hypnotherapeutic model for the treatment of childhood sexual trauma: a case study.
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Sexual abuse appears to constitute a major risk factor for a variety of problems in adult life. The effects of abuse on adult living are not uniform therefore intervention strategies should be individualized to address unique symptom constellations. The purpose of this paper is to introduce an integrated Ericksonian and Ego state therapy approach, based on a strengths perspective for the treatment of survivors of childhood sexual abuse. The theoretical foundation for this model is described, followed by a case study. The case study demonstrates how application of this model enabled the client to resolve the experience of sexual abuse, as well as to enhance her sense of general psychological well-being.

Clinical hypnosis with a Little League baseball population: performance enhancement and resolving traumatic experiences.
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A model for the use of clinical hypnosis with a Little League population was proposed and outlined with dual emphasis: performance enhancement and resolving traumatic experiences. The Performance Enhancement Training Model was developed to enhance performance with this non-patient population. It employed clinical hypnosis to bring to fruition recommendations made by coaches to enhance players' batting proficiency. The second emphasis of the proposed model focused on the resolution of involuntary maladaptive habits secondary to a traumatic experience that impede or compromise optimum performance. Included in this category were detrimental defensive habits "at the plate" after a beating by a pitch and detrimental defensive habits "on the field" after being hit by a batted ball.

Hypnotically induced dissociation (HID) as a strategic intervention for enhancing OCD treatment.
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To date, cognitive behavioral therapy has been designated the most efficient evidence-based psychotherapeutic approach for OCD management. This is mainly due to its ability to effectively address the constitutional and developmentally acquired emotional and cognitive deficiencies of OCD, which express themselves through behavioral compulsions and intrusive thoughts. Yet some reports indicate that from 30 to 60 percent of OCD patients are not responsive to psychotherapeutic interventions. As a consequence, broader therapeutic models have been considered. These models encompass multifactorial etiologies of OCD and take intrapsychic stressogenic factors into consideration as well. Some of these models have adopted hypnotherapeutic approaches. In the present article, we introduce a therapeutic tool that utilizes hypnotically induced dissociation (HID) to identify and address the intrapsychic etiology of OCD. The result is a therapeutic intervention that complements existing OCD treatment strategies. Clinical cases are...
Ideomotor movements account for non-conscious motions of the hand held pendulum and Ouija board planchette that once were attributed to external spirits. Chevreul and Carpenter in the mid-1800s pioneered our scientific understanding of ideomotor movements. The intention or thought is transmitted to the motor cortex at a subconscious level, coordinated by the cerebellum, and sent down spinal nerves to the appropriate muscles, inducing micromovements not visible to the naked eye but amplified by the hand held pendulum or by the slow ratchet-like cumulative movements of a finger or other body part. This ideomotor phenomenon has been utilized during hypnotic trance to provide nonverbal communication of "yes" or "no" or "I don't want to answer" using finger signals or hand held pendulum. LeCron first used this ideomotor form of communication in conjunction with psychosomatic hypnoanalysis. Cheek expanded and more recently Hammond, Walsh, Ewin and others have refined its use.

[1813]
Hysteria after Charcot: back to the future.
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The studies on hysteria and hypnotism probably constitute the most important long-term work of Jean-Martin Charcot and his school, starting around 1870 until Charcot's death in 1893. D'Arcosiré Bourneville, Charcot's sixth interne at La Salpétrière, was probably instrumental in stimulating his mentor's interest in hysteria, while Charles Richet's 1875 article on somnambulism was the trigger for Charcot to introduce hypnotism into the management of hysterics. Albert Pitres, Paul Richer, Georges Gilles de la Tourette, Paul Sollier, Joseph Babinski, Sigmund Freud and Pierre Janet became the most famous of Charcot's collaborators on hysteria, either as 'guardians of the temple' (Richer, Gilles de la Tourette, who defended their mentor's concepts against Hippolyte Bernheim and the Nancy school in the dispute during the 1880-1890s), or in renewing the field in psychology (Janet and Freud, in the 1890s) or clinical neurology (Babinski in the 1900s). In 1908, a 'quarrel of hysteria' led several of Charcot's pupils into opposition with each other, from which Babinski was considered victorious against Charcot's successor Fulgence Raymond, despite the weaknesses of his theory on 'pithiatism'. During World War I, there was a new surge of interest in hysteria associated with war psycho-neuroses, and several students of Charcot became actively involved in medical military care (Sollier, Babinski, Gilbert Ballet, Achille Souques). Babinski's pupil Clovis Vincent developed a treatment called torpillage (torpedoing) against war hysteria, associating painful galvanic current discharges with 'persuasion', but this was dismissed after the soldiers, considering it as torture, rebelled. After World War I, the neurological and psychiatric interest in hysteria again faded away, and this condition largely went back to the no-man's land, where it had been before Charcot initiated his studies. A comprehensive look at the evolution of ideas on hysteria in the followers of Charcot shows that contrary to a common and artificially maintained view over the years, the modernity of several of his concepts remains remarkable, including: (1) his traumatic theory, which encompassed sexual factors nearly 20 years before Freud; (2) his evolution towards psychological and emotional issues, which opened the way for Janet and Freud, but unfortunately was largely ignored by Babinski; (3) his strong claim against Bernheim of the similarity of mental states in hypnotism and hysteria, which has recently been confirmed by functional magnetic resonance imaging; (4) his 'dynamic lesion' hypothesis, which now correlates well with neurophysiological mechanisms also demonstrated by functional imaging.

[1814]
Jules Bernard Luys in Charcot's penumbra.
Parent M, Parent A.
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Jules Bernard Luys (1828-1897) is a relatively unknown figure in 19th century French neuropsychiatry. Although greatly influenced by Jean-Martin Charcot (1825-1893), Luys worked in the shadow of the 'master of La Salpêtrière' for about a quarter of a century. When he arrived at this institution in 1862, he used microscopy and photomicrography to identify pathological lesions underlying locomotor ataxia and progressive muscular atrophy. He later made substantial contributions to our knowledge of normal human brain anatomy, including the elucidation of thalamic organization and the discovery of the subthalamic nucleus. Luys's name has long been attached to the latter structure (corps de Luys), which is at the center of our current thinking about the functional organization of basal ganglia and the physiopathology of
Parkinson's disease. As head of the Maison de santé d'Ivry, Luys developed a highly original view of the functional organization of the normal human brain, while improving our understanding of the neuropathological and clinical aspects of mental illnesses. In 1886, Luys left La Salpêtrière and became chief physician at La Charité hospital. Following Charcot, whom he considered as the father of scientific hypnotism, Luys devoted the last part of his career to hysteria and hypnosis. However, Luys ventured too deeply into the minefield of hysteria. He initiated experiments as unconventional as the distant action of medication, and became one of the most highly caricatured examples of the fascination that hysteria exerted upon neurologists as well as laypersons at the end of the 19th century.

[1815]
A randomized controlled trial of the effects of hypnosis with 3-D virtual reality animation on tiredness, mood, and salivary cortisol.
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Case studies suggest hypnosis with a virtual reality (VR) component may be an effective intervention; although few follow-up randomized, controlled trials have been performed comparing such interventions with standard hypnotic treatments. Thirty-five healthy participants were randomized to self-hypnosis with VR imagery, standard self-hypnosis, or relaxation interventions. Changes in sleep, cortisol levels, and mood were examined. Self-hypnosis involved 10- to 20-min. sessions visualizing a healthy immune scenario. Trait absorption was also recorded as a possible moderator. Moderated regression indicated that both hypnosis interventions produced significantly lower tiredness ratings than relaxation when trait absorption was high. When trait absorption was low, VR resulted in significantly higher engagement ratings, although this did not translate to demonstrable improvement in outcome. Results suggest that VR imagery may increase engagement relative to traditional methods, but further investigation into its potential to enhance therapeutic efficacy is required.

[1816]
Hypnotic responsiveness: expectancy, attitudes, fantasy proneness, absorption, and gender.
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This study examines the effect of providing information linking participants’ attitudes toward hypnosis with later hypnotic performance. Using total scale scores from McConkey's Opinions About Hypnosis scale, as well as subscale scores, the authors found a weak association between attitudes and performance among 460 student participants; however, the correlation was unaffected by prehypnotic information specifically connecting attitudes and performance. A brief, 3-item measure of hypnotic expectancies generated the strongest correlation with hypnotic responsiveness. The authors also found that the association between fantasy proneness and hypnotizability was unaffected by the order of scale administration. Finally, the study highlighted gender differences across measures of fantasy proneness, absorption, expectancy, and hypnotizability.

[1817]
On the history of dissociative identity disorders in Germany: the doctor Justinus Kerner and the girl from Orlach, or possession as an "exchange of the self".
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The history of hypnosis is closely linked to the theme of possession; one such link is that the forerunner of hypnosis, animal magnetism, replaced exorcism in 1775 when Franz Anton Mesmer testified against Father Johann Joseph Gassner's exorcism. Modern authors have noted remarkable similarities between states of possession and dissociation. The treatment of possession by animal magnetism and exorcism represents the special romantic-magnetic therapy of the German medical doctor Justinus Kerner in the early 19th century. This article describes the man, his methods, and his thinking and presents one of his most famous case studies, the girl from Orlach, which, by today's standards, was a true case of dissociative identity disorder (DID). This article describes how contemporary principles of treatment were used and controversial issues about the nature and causes of DID were discussed 175 years ago.

[1818]
Do standards for the design and reporting of nonpharmacological trials facilitate hypnotherapy studies?
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The design and quality of 30 recent hypnotherapy trials (years 2000-2008) were assessed using the checklist for
evaluating a report of nonpharmacological treatment (CLEAR NPT). Randomization was adequately reported in 53% of studies. The masking of participants and care providers is not feasible in hypnotherapy studies. Assessor masking is rarely introduced in randomized, controlled trials (27%). Reporting and quality of published hypnotherapy trials need to be improved. Investigators may consider using CLEAR NPT to evaluate study quality but attention should be paid to document intervention adherence, standardization of cointerventions, participant and care-provider expectations and beliefs, and, finally, hypnotizability.


Fifteen adults with multiple sclerosis were given 16 sessions of treatment for chronic pain that included 4 sessions each of 4 different treatment modules: (a) an education control intervention; (b) self-hypnosis training (HYP); (c) cognitive restructuring (CR); and (d) a combined hypnosis-cognitive restructuring intervention (CR-HYP). The findings supported the greater beneficial effects of HYP, relative to CR, on average pain intensity. The CR-HYP treatment appeared to have beneficial effects greater than the effects of CR and HYP alone. Future research examining the efficacy of an intervention that combines CR and HYP is warranted.


This study aimed to characterize the neural networks involved in patients with chronic low-back pain during hypoanalgesia. PET was performed in 2 states of consciousness, normal alertness and hypnosis. Two groups of patients received direct or indirect analgesic suggestion. The normal alertness state showed activations in a cognitive-sensory pain modulation network, including frontotemporal cortex, insula, somatosensory cortex, and cerebellum. The hypnotic state activated an emotional pain modulation network, including frontotemporal cortex, insula, caudate, accumens, lenticular nuclei, and anterior cingulate cortex (ACC). Direct suggestion activated cognitive processes via frontal, prefrontal, and orbitofrontal cortices, while indirect suggestion activated a widespread and more emotional network including frontal cortex, anterior insula, inferior parietal lobule, lenticular nucleus, and ACC. Confirmed by visual analog scale data, these results suggest that chronic pain modulation is greater with hypnosis, which enhances both activated networks.


This article describes a study that used hypnosis to temporarily re-create mirrored-self misidentification, which is the delusional belief that the person one sees in the mirror is a stranger. Following a hypnotic suggestion to see a stranger in the mirror, high hypnotizable subjects described seeing a stranger with physical characteristics different to their own. Whereas subjects’ beliefs about seeing a stranger were clearly false, they had no difficulty generating sensible reasons to explain the stranger’s presence. The authors tested the resilience of this belief with clinically inspired challenges. Although visual challenges (e.g., the hypnotist appearing in the mirror alongside the subject) were most likely to breach the delusion, some subjects maintained the delusion across all challenges. Findings are discussed in light of the dominant theory of delusions and highlight the advantages of using hypnosis to explore delusional beliefs.


Hypnotic induction and relaxation strategies are discussed as helpful resources for plastic surgery nurses in providing optimal patient care. An overview of the history and context of these strategies is provided along with descriptions of
specific techniques to assist patients to relax when receiving potentially painful procedures. The techniques discussed include mindful focus, focused breathing, body scan, progressive relaxation, and guided imagery. Additional resources are provided for nurses seeking further training.

A practice-based comparison of brief cognitive behavioural treatment, two kinds of hypnosis and general anaesthesia in dental phobia.
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BACKGROUND: A practice-based study was carried out to assess the comparative effectiveness and acceptability of standardised hypnosis, hypnosis with individualised imagery, cognitive behavioural treatment (CBT) and general anaesthesia (GA) in the treatment of dental phobia. METHODS: A 4-group design was used with 4 repeated measurement occasions. Of an initial total of 137 dental phobics, 77 completed the study with sample sizes of between 14 and 29 patients in the 4 groups. Participants completed questionnaires of dental anxiety at the beginning of the trial, before and after the first dental appointment and again before the second dental appointment a week later. RESULTS: Standardised hypnosis evidenced a significantly higher rate of premature termination of treatment than CBT. The completer analysis showed a significant reduction of dental anxiety after CBT and individualised hypnosis compared to the GA condition. The intent-to-treat analysis showed significant improvement only after CBT. CONCLUSIONS: The results suggest that CBT is the treatment of choice in dental phobia when taking both effectiveness and acceptability into account.

The Potential Role of a Self-Management Intervention for Ulcerative Colitis: A Brief Report From the Ulcerative Colitis Hypnotherapy Trial.
Keefer L, Kiebles JL, Kwiatek MA, Palsson O, Taft TH, Martinovich Z, Barrett TA.

Inflammatory bowel diseases (IBD) are chronic inflammatory illnesses marked by unpredictable disease flares, which occur spontaneously and/or in response to external triggers, especially personal health behaviors. Behavioral triggers of flare may be responsive to disease self-management programs. We report on interim findings of a randomized controlled trial of gut-directed hypnotherapy (HYP, n = 19) versus active attention control (CON, n = 17) for quiescent ulcerative colitis (UC). To date, 43 participants have enrolled; after 5 discontinuations (1 in HYP) and 2 exclusions due to excessive missing data, 36 were included in this preliminary analysis. Aim 1 was to determine the feasibility and acceptability of HYP in UC. This was achieved, demonstrated by a reasonable recruitment rate at our outpatient tertiary care clinic (20%), high retention rate (88% total), and our representative IBD sample, which is reflected by an equal distribution of gender, an age range between 21 and 69, recruitment of ethnic minorities (âˆ’20%), and disease duration ranging from 1.5 to 35 years. Aim 2 was to estimate effect sizes on key clinical outcomes for use in future trials. Effect sizes (group Â— at 20 weeks) were small to medium for IBD self-efficacy (.34), Inflammatory Bowel Disease Questionnaire (IBDQ) total score (.41), IBDQ bowel (.50), and systemic health (.48). Between-group effects were observed for the IBDQ bowel health subscale (HYP > CON; p = .05) at 20 weeks and the Short Form 12 Health Survey Version 2 (SF-12v2) physical component (HYP > CON; p < .05) at posttreatment and 20 weeks. This study supports future clinical trials testing gut-directed HYP as a relapse prevention tool for IBD.

Complementary and alternative medicine for pain: an evidence-based review.
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Pain is one of the most prevalent conditions for which patients seek medical attention. Additionally, the number of patients who utilize complementary and alternative medicine as a treatment of pain either in lieu of, or concurrent with, standard conventional treatments continues to grow. While research into the mechanisms, side effect profiles, and efficacies of these alternative therapies has increased in recent years, much more remains unknown and untested. Herein, we review the literature on complementary and alternative medicine for pain, with particular emphasis on evidence-based assessments pertinent to the most common alternative therapies, including acupuncture, herbal therapy, massage therapy, hypnosis, tai chi, and biofeedback.

Management of menopausal symptoms in breast cancer patients.
Loibl S, Lintemans A, DieudonnÃ© AS, Neven P.
In breast cancer patients, menopausal symptoms such as hot flashes, urogenital problems, musculoskeletal symptoms and cognitive dysfunction are common, regardless of age at diagnosis. They affect quality of life and systemic therapy will worsen this. Endocrine and/or chemotherapy may induce temporary or permanent ovarian failure and can exacerbate these symptoms. Hormone therapy (HT) has been studied in breast cancer survivors, but safety has been questioned. The HABITS trial investigating estrogen-based HT, as well as the LIBERATE trial investigating tibolone, found a reduction in disease-free survival for those treated. Alternative strategies are needed, as menopause symptoms may reduce compliance with breast cancer treatments. This article reviews recently published strategies to tackle menopausal problems in breast cancer patients. Antidepressants may help with hot flashes. Acupuncture and hypnosis can also be used but the evidence is conflicting. For urogenital problems vaginal moisturizers or topical estrogens can be employed. A musculoskeletal syndrome induced by aromatase inhibitors (AIs) is frequently encountered and currently there are no effective treatment strategies. Bisphosphonates reduce AI-induced bone resorption and can also increase disease-free and overall survival. Standard-dose endocrine and chemotherapy are associated with a decline in cognitive function.

[1827]
Effectiveness of CAM therapy: understanding the evidence.
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By definition, complementary and alternative medicine (CAM) attempts to diagnose and treat illnesses in unconventional ways. CAM has been classified as: (1) alternative medical systems (eg, traditional Chinese medicine [including acupuncture], naturopathic medicine, ayurvedic medicine, and homeopathy); (2) biologic-based therapies (eg, herbal, special dietary, and individual biologic treatments); (3) energy therapies (eg, Reiki, therapeutic touch, magnet therapy, Qi Gong, and intercessory prayer); (4) manipulative and body-based systems (eg, chiropractic, osteopathy, and massage); and (5) mind-body interventions (eg, meditation, biofeedback, hypnotherapy, and the relaxation response). This review focuses on how to assess the effectiveness of CAM therapies for chronic musculoskeletal pains, emphasizing the role of specific and nonspecific analgesic mechanisms, including placebo.

[1828]
Behavioral interventions may prolong remission in patients with inflammatory bowel disease.
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Inflammatory Bowel Diseases (IBDs) are chronic, relapsing and remitting gastrointestinal conditions with no known cure. Previous studies have linked behavioral factors, including stress and medication adherence, to relapse. PURPOSE: We sought to determine the effect of participation in a behavioral self-management program on incidence of flare within 12 months following behavioral intervention when compared to the natural history of flare incidence prior to program participation. RESULTS: Results from a 2-level regression model indicated that those participants in the treatment group were 57% less likely to flare in the following 12 months (compared to 18% in the control group). The decline in "flare odds" was about 2 times greater in treatment versus controls (OR=0.52, t(34)=2.07, p<0.05). Office visits, ER visits, and disease severity (all p<0.05) were identified as moderators of flare risk. CONCLUSIONS: We have demonstrated 1) a statistical model estimating the likelihood of flare rates in the 12 months following a behavioral intervention for IBD (compared to a control condition), and 2) that the introduction of a behavioral intervention can alter the natural course of a chronic, relapsing and remitting gastrointestinal condition such as IBD.

[1829]
Dissociative tendencies and individual differences in high hypnotic suggestibility.
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INTRODUCTION: Inconsistencies in the relationship between dissociation and hypnosis may result from heterogeneity among highly suggestible individuals, in particular the existence of distinct highly suggestible subtypes that are of relevance to models of psychopathology and the consequences of trauma. This study contrasted highly suggestible subtypes high or low in dissociation on measures of hypnotic responding, cognitive functioning, and psychopathology. METHODS: Twenty-one low suggestible (LS), 19 low dissociative highly suggestible (LDHS), and 11 high dissociative highly suggestible (HDHS) participants were administered hypnotic suggestibility scales and completed measures of free recall, working memory capacity, imagery, fantasy-proneness, psychopathology, and exposure to stressful life events. RESULTS: HDHS participants were more responsive to positive and negative hallucination suggestions and experienced
greater involuntariness during hypnotic responding. They also exhibited impaired working memory capacity, elevated pathological fantasy and dissociative symptomatology, and a greater incidence of exposure to stressful life events. In contrast, LDHS participants displayed superior object visual imagery.

CONCLUSIONS: These results provide further evidence for two highly suggestive subtypes: a dissociative subtype characterised by deficits in executive functioning and a predisposition to psychopathology, and a subtype that exhibits superior imagery and no observable deficits in functioning.

[1830]
Dissociation in hysteria and hypnosis: evidence from cognitive neuroscience.
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Jean-Martin Charcot proposed the radical hypothesis that similar brain processes were responsible for the unexplained neurological symptoms of 'hysteria', now typically diagnosed as 'conversion disorder' or 'dissociative (conversion) disorder', and the temporary effects of hypnosis. While this idea has been largely ignored, recent cognitive neuroscience studies indicate that (i) hypnotisability traits are associated with a tendency to develop dissociative symptoms in the sensorimotor domain; (ii) dissociative symptoms can be modelled with suggestions in highly hypnotisable subjects; and (iii) hypnotic phenomena engage brain processes similar to those seen in patients with symptoms of hysteria. One clear theme to emerge from the findings is that 'symptom' presentation, whether clinically diagnosed or simulated using hypnosis, is associated with increases in prefrontal cortex activity suggesting that intervention by the executive system in both automatic and voluntary cognitive processing is common to both hysteria and hypnosis. Nevertheless, while the recent literature provides some compelling leads into the understanding of these phenomena, the field still lacks well controlled systematically designed studies to give a clear insight into the neurocognitive processes underlying dissociation in both hysteria and hypnosis. The aim of this review is to provide an agenda for future research.

[1831]
[Possibilities of hypnosis and hypnosuggestive methods in oncology]. [Article in Hungarian]
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Fear of death, pain, or the recurrence of the illness of tumor patients can narrow their attention to a point where a spontaneous altered state of consciousness occurs. In these cases hypnosis either in formal psychotherapy or embedded into the everyday communication with the physician can effectively complement other already known medical and psychological techniques. Although numerous studies have reported the beneficial physical and mental changes induced by hypnosis, for a long time there were not enough research to affect evidence-based medicine. New studies meeting the most rigorous methodological standards, new reviews and the characteristics of hypnosis shown by neuroimaging techniques support the acceptance of this method. Hypnosis is used and studied with adult and child tumor patients alike mostly in the areas of anxiety, pain, nausea, vomiting, quality of life, mood amelioration, immune system and hot flushes. Most of the assays describe hypnosis as an empirically validated treatment technique that in most cases surpass attention diversion, coping trainings, cognitive behavior and relaxation techniques and other regular treatments. In this paper we review these observations.

[1832]
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Virtual reality (VR) has been used to manage pain and distress associated with a wide variety of known painful medical procedures. In clinical settings and experimental studies, participants immersed in VR experience reduced levels of pain, general distress/unpleasantness and report a desire to use VR again during painful medical procedures. Investigators hypothesize that VR acts as a nonpharmacologic form of analgesia by exerting an array of emotional affective, emotion-based cognitive and attentional processes on the body's intrinsic pain modulation system. While the exact neurobiological mechanisms behind VR's action remain unclear, investigations are currently underway to examine the complex interplay of cortical activity associated with immersive VR. Recently, new applications, including VR, have been developed to augment evidenced-based interventions, such as hypnosis and biofeedback, for the treatment of chronic pain. This article provides a comprehensive review of the literature, exploring clinical and experimental applications of VR for acute and chronic pain management, focusing specifically on current trends and recent developments. In addition, we propose mechanistic theories highlighting VR distraction and neurobiological explanations, and conclude with new directions in VR research, implications and clinical significance.
Prevalence of complementary medicine use in a phase 1 clinical trials program: The MD Anderson Cancer Center Experience.

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BACKGROUND: A key end point of early cancer clinical trials is the assessment of toxicities and their possible association with new experimental drugs. Therefore, the concurrent use of complementary and alternative medicine (CAM) in patients with advanced malignancies seen in a dedicated phase 1 clinic was evaluated. METHODS: An investigator-designed survey was anonymously completed by patients seen in the phase 1 clinic. Pharmacologic CAM included any oral, topical, or intravenous agent, including vitamins, dietary supplements, and herbal products. Nonpharmacologic CAM included prayer, meditation, hypnosis, massage, and acupuncture. RESULTS: Of the 404 patients approached about completing the CAM survey, 394 (98%) agreed to respond, and 309 (78%) surveys were returned. Of those 309 patients, 162 (52%) used 1 or more CAM. Of the 162 CAM users, 77% utilized pharmacologic CAM, 71% used nonpharmacologic CAM, and 48% used both modalities. The most frequent CAM used were vitamins (70%), prayer (57%), and herbal products (26%). CAM utilization was not significantly associated with race, age, level of education, employment, or income level but was used more by women than men (P < .01). There was no statistically significant association between the use of CAM and quality of life as perceived by patients. Of the CAM users, 43% of patients had been using CAM for >5 years. Only 5% reported having side effects from using CAM, whereas 23% did not fully disclose their CAM use to their physicians. CONCLUSIONS: CAM usage is common in patients with advanced malignancies seen in a phase 1 clinic. Cancer 2011. © 2011 American Cancer Society.

Differential frontal-parietal phase synchrony during hypnosis as a function of hypnotic suggestibility.

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Spontaneous dissociative alterations in awareness and perception among highly suggestible individuals following a hypnotic induction may result from disruptions in the functional coordination of the frontal-parietal network. We recorded EEG and self-reported state dissociation in control and hypnosis conditions in two sessions with low and highly suggestible participants. Highly suggestible participants reliably experienced greater state dissociation and exhibited lower frontal-parietal phase synchrony in the alpha2 frequency band during hypnosis than low suggestible participants. These findings suggest that highly suggestible individuals exhibit a disruption of the frontal-parietal network that is only observable following a hypnotic induction.

Tandem hypnosis with identical bulimic twins: case report.

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Hypnosis has been used in the treatment of bulimia nervosa from the early 1980s. Dissociation theory identified a certain subgroup of eating disordered patients with dissociative signs and symptoms. These patients react well to hypnotherapy. Simultaneous hypnosis (“tandem hypnosis”) in the treatment of two female 19-year-old monozygotic twins led to a very successful outcome after 6 sessions. During the therapy, attempts were made to work through the physical abuse the subjects suffered from their father. Hypnobehavioural methods were used and treatment was combined with five individual sessions. In the cases presented here, the subjects' traumatic history, their high hypnotic susceptibility, and the effectiveness of hypnotherapy seem to support the dissociative mechanism of symptom development. A systemic approach involving the integration of family therapeutic and hypnotherapeutical interventions proved to be useful. The role of these types of hypnotherapy interventions is still undervalued.

Solving crimes with hypnosis.

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Following a brief review of the literature on hypnosis and memory, this paper overviews the procedures that are used in conducting forensic hypnosis interviews. Ten forensic hypnosis cases are then described. These real-world cases are in stark contrast to research done in an artificial laboratory setting where the information to be recalled lacks personal relevance and was not associated with emotionally arousing situations. These cases illustrate how forensic hypnosis can result in obtaining important additional investigative leads which lead to the solving of crimes.

[1837]
The effects of encoding in hypnosis and post-hypnotic suggestion on academic performance.
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This study examined the relationship between proactive learning in hypnosis, post-hypnotic suggestion, and academic performance. Participants (N = 56) were randomly assigned to a control group or a treatment group. The treatment group was hypnotized and read a passage while in hypnosis. Concurrently, they were given a post-hypnotic suggestion, which attempted to aid recognition and performance on a test immediately following the hypnosis session. Both groups completed a multiple-choice test based on the aforementioned passage. An analysis of covariance discerned the effect of proactive learning and post-hypnotic suggestion on test performance, while controlling for the variance introduced by scholastic aptitude as measured by the ACT. Results indicated that the hypnosis sessions predicted significantly impaired test performance.

[1838]
Hypnosis in the treatment of Morgellons disease: a case study.
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Morgellons Disease is a condition involving painful skin lesions, fibrous growths protruding from the skin, and subcutaneous stinging and burning sensations, along with symptoms of anxiety, depression, fatigue, and memory and attention deficits. The etiological and physiological bases of these symptoms are unclear, making the diagnosis controversial and challenging to treat. There are currently no established treatments for Morgellons Disease. The following case example depicts treatment of a woman with Morgellons Disease using hypnotherapy. Data from this case example suggest that hypnotherapy is a promising intervention for the physical and psychological symptoms associated with Morgellons Disease.

[1839]
The relationship between hypnotizability, internal imagery, and efficiency of neurolinguistic programming.
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Subjective scoring and autonomic variables (heart rate, skin conduction span) were used to verify the reality of inner experience during recollection of emotionally neutral, positive, and negative past events in 19 high (HH) and 12 low (LH) hypnotizable subjects in hypnotic and nonhypnotic experimental sessions. Also, the influence of hypnotizability on the effectiveness of an imagery-based neurolinguistic programming (NLP) technique was evaluated. Results demonstrated that subjective scores of image vividness and emotional intensity were significantly higher in the HH subjects compared to LH in both sessions. The past-events recollection was followed by increased autonomic activity only in the HH subjects. The NLP procedure was followed by decreased negative emotional intensity in both groups, but autonomic activity decline was observed in the HH subjects and not in the LH.

[1840]
Hypnotizability, sleepiness, and subjective experience.
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The relationships between hypnotizability, sleepiness, and the subjective experience of hypnotic suggestions were investigated in 90 participants. Scores from the Harvard Group Scale of Hypnotic Susceptibility Form A (HGSHS:A), the Karolinska Sleepiness Scale (KSS), the Epworth Sleepiness Scale (ESS), the Pittsburgh Sleep Quality Index (PSQI), and our self-developed Questionnaire on Subjective Hypnotic Experiences (QSHE) were analyzed. Findings show that hypnotizability correlates with both habitual daytime sleepiness and instantaneous sleepiness after the hypnotic
procedure. Results also indicate that subjective self-evaluation of responses to hypnotic suggestions may be a useful tool in some cases when comparing with other subjectively rated scales, such as those concerning sleepiness.


A prospective, comparative study of a novel audio pillow with hypnotic text and relaxation music was conducted in 82 dental-implant surgery patients to relieve anxiety over a 6-month period. Visual analogue scales combined with the Aachen Dental Treatment Fear Inventory (AZI) questionnaire were used to quantify patients' subjective feelings of fear. Blood pressure, heart rate, and capillary oxygen partial pressure were measured before, during, and after surgery. The AZI scores decreased in the hypnotherapy group (n = 44) and increased slightly in the control group; scores were significantly different between the groups (p = .000). During surgery, the average diastolic blood pressure and heart rate decreased in the hypnotherapy group and increased in controls. Thus, this audio pillow with relaxation music showed anxiolytic effects in patients during dental implantation procedures.


Hypnosis can be seen as a guided induction of various states of consciousness. This article details a time-series analysis that visualized the electrophysiological state changes during a session as a correlate to the instructions. Sixty-four channels of EEG and peripheral physiological measures were recorded in 1 highly susceptible subject. Significant state changes occurred synchronously with specific induction instructions. Some patterns could be physiologically explained, such as sensorimotor desynchronization over the right hemispheric hand area during left arm levitation. There was a highly significant increase in broadband activity during the stepwise trance induction that may point to a deep hypnotic state. This study provides illustrated proof for the detectability of physiological state changes as correlates to different states of awareness, consciousness, or cognition during hypnosis.

[1843] Int J Clin Exp Hypn. 2011 Apr;59(2):146-64. Enhancing witness memory with techniques derived from hypnotic investigative interviewing: focused meditation, eye-closure, and context reinstatement. Wagstaff GF, Wheatcroft JM, Caddick AM, Kirby LJ, Lamont E. Department of Psychology, University of Liverpool, Eleanor Rathbone Building, Bedford Street South, Liverpool, UK. gwf@liverpool.ac.uk

Due to several well-documented problems, hypnosis as a forensic interviewing tool has been largely replaced by the cognitive interview; however, the latter is problematic in time and complexity. This article builds on previous research showing that some procedures used in traditional hypnotic forensic interviewing might still be useful in developing alternative procedures for use in investigative interviewing. Two experiments are described that include a focused meditation with eye-closure technique with similarities to conventional hypnotic induction but without the label of hypnosis. In the first, focused meditation was comparable to a context reinstatement, or revivification, technique in facilitating memory in children aged 6 to 7 without increasing errors or inflating confidence. In the second, when used in combination with context reinstatement, focused meditation was resistant to the effects of misleading information in adults. Implications are discussed.


[abstract NOT found]
Hypnotherapy: fact or fiction: a review in palliative care and opinions of health professionals.
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CONTEXT: Complementary medicine like hypnotherapy is often used for pain and palliative care. Health professionals vary in views about hypnotherapy, its utility, value, and attitudes. AIMS: To understand the opinions of health professionals on hypnotherapy. SETTINGS AND DESIGN: A semi-qualitative method to survey opinions of the health professionals from various disciplines attending a programme on hypnotherapy was conducted. MATERIALS AND METHODS: The survey form consisted of 32 statements about hypnosis and hypnotherapy. Participants were asked to indicate whether they agreed, disagreed, or were not sure about each statement. A qualitative feedback form was used to obtain further views about hypnotherapy. STATISTICAL ANALYSIS USED: Percentage, frequency distribution.
RESULTS: The sample consisted of 21 participants from various disciplines. Two-thirds of the participants gave correct responses to statements on dangerousness of hypnosis (90%), weak mind and hypnosis (86%), and hypnosis as therapy (81%). The participants gave incorrect responses about losing control in hypnosis (57%), hypnosis being in sleep (62%), and becoming dependent on hypnotist (62%). Participants were not sure if one could not hear the hypnotist one is not hypnotized (43%) about the responses on gender and hypnosis (38%), hypnosis leading to revealing secrets (23%).
CONCLUSIONS: Despite patients using complementary medicine services, often health professionals are unaware of the issues associated with these services. These myths may interfere in using hypnotherapy as a therapeutic tool in palliative care. It is important for health professionals to have an appropriate and evidence-based understanding about the complementary therapies including hypnotherapy.

Effect of hypnosis on pain and blink reflexes in patients with painful temporomandibular disorders.
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OBJECTIVE: This study contrasted the effect of hypnosis on self-reported pain and changes in a nociceptive brainstem reflex, the blink reflex (BR), in 39 women with temporomandibular disorder. METHODS: The patients were randomized to hypnosis or control (nonhypnotic relaxation). Pain intensity was assessed 3 times daily on a 0 to 10 numerical rating scale. BRs were elicited by electrical stimulation with a nociceptive-specific electrode and recorded before and after treatment at pain threshold (Ip) and supra threshold (2×Ip). RESULTS: Significant reduction of pain intensity was observed in the hypnosis group from 4.5±2.1 at baseline to 2.9±2.4 after treatment (P<0.001). The pain reduction was generally unrelated to changes in the BR, with the exception being a lowered ipsilateral R2 BR component at the right side supra threshold (P=0.034). CONCLUSIONS: Hypnosis thus seems to reduce complex temporomandibular disorder pain, most likely because of cortical changes with little, if any, involvement of brainstem reflex pathways.

Rapid hypnosis as an anaesthesia adjunct for evacuation of postpartum vulval haematoma.
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Hypnosis can be a useful therapeutic adjunct to pharmacological analgesia or anaesthesia in obstetrics. However, it is rarely considered a primary anaesthetic technique and is seldom employed in the acute surgical setting. Few obstetricians and anaesthetists currently utilise this technique in their clinical practice. We present a case report of a 34-year-old woman who successfully underwent evacuation of a large vulval haematoma using the simple hypnosis technique of ‘believed-in imagination’ as the principal anaesthetic technique with only minimal adjunctive pharmacological analgesia.

Brain correlates of hypnotic paralysis—a resting-state fMRI study.
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Hypnotic paralysis has been used since the times of Charcot to study altered states of consciousness; however, the underlying neurobiological correlates are poorly understood. We investigated human brain function during hypnotic paralysis using resting-state functional magnetic resonance imaging (fMRI), focussing on two core regions of the default
mode network and the representation of the paralysed hand in the primary motor cortex. Hypnotic suggestion induced an observable left-hand paralysis in 19 participants. Resting-state fMRI at 3T was performed in pseudo-randomised order awake and in the hypnotic condition. Functional connectivity analyses revealed increased connectivity of the precuneus with the right dorsolateral prefrontal cortex, angular gyrus, and a dorsal part of the precuneus. Functional connectivity of the medial frontal cortex and the primary motor cortex remained unchanged. Our results reveal that the precuneus plays a pivotal role during maintenance of an altered state of consciousness. The increased coupling of selective cortical areas with the precuneus supports the concept that hypnotic paralysis may be mediated by a modified representation of the self which impacts motor abilities.

[1849]
Efficacy of hypnosisguided imagery in fibromyalgia syndrome--a systematic review and meta-analysis of controlled trials. Bernardy K, FAber N, Klose P, HAeuser W.
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BACKGROUND: Recent systematic reviews on psychological therapies of fibromyalgia syndrome (FMS) did not consider hypnosisguided imagery (H/GI). Therefore we performed a systematic review with meta-analysis of the efficacy of H/GI in FMS. METHODS: We screened http://ClinicalTrials.gov, Cochrane Library, MEDLINE, PsycINFO and SCOPUS (through December 2010). (Quasi-) randomized controlled trials (CTs) comparing H/GI with controls were analyzed. Outcomes were pain, sleep, fatigue, depressed mood and health-related quality of life (HRQOL). Effects were summarized using standardized mean differences (SMD). RESULTS: Six CTs with 239 subjects with a median of 9 (range 7-12) H/GI-sessions were analysed. The median number of patients in the H/GI groups was 20 (range 8-26). Three studies performed follow-ups. H/GI reduced pain compared to controls at final treatment (SMD -1.17 [95% CI -2.21, -0.13]; p = 0.03). H/GI did not reduce limitations of HRQOL at final treatment (SMD -0.90 [95% CI -2.55, 0.76]; p = 0.29) compared to controls. Effect sizes on fatigue, sleep and depressed mood at final treatment and follow-up and on pain and HRQOL at follow-up were not calculated because of limited data available. The significant effect on pain at final treatment was associated with low methodological and low treatment quality. CONCLUSION: Further studies with better treatment quality and adequate methodological quality assessing all key domains of FMS are necessary to clarify the efficacy of H/GI in FMS.

[1850]
You may (not always) experience what you expect: in search for the limits of the placebo and nocebo effect. Crombez G, Wiech K.
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[abstract NOT found]

[1851]
Induction of nocebo and placebo effects on itch and pain by verbal suggestions.
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Physical complaints, such as pain, can be effectively reduced by placebo effects through induction of positive expectations, or increased by nocebo effects through induction of negative expectations. In the present study, verbally induced nocebo and placebo effects on itch were experimentally investigated for the first time. In part 1, the role of verbal suggestions in inducing nocebo effects on itch and pain was investigated. All subjects received the same somatosensory quantitative sensory testing stimuli, that is, mechanical and electrical stimuli and application of histamine, and verbal suggestions to manipulate expectations regarding the stimuli. The suggestions were designed to produce either high expectations for itch (itch nocebo) or pain (pain nocebo) or low expectations for itch (itch nocebo control) or pain (pain nocebo control). Results showed that high itch and pain expectations resulted in higher levels of itch and pain, respectively. When comparing nocebo effects, induced by verbal suggestions, results were more pronounced for itch than for pain. In part 2, verbal suggestions designed to produce a placebo effect on itch (itch placebo) or pain (pain placebo), or neutral suggestions (itch placebo control and pain placebo control) were given regarding a second application of histamine and compared with the first application applied in part 1. Results of placebo effects only showed a significantly larger decrease in itch in the itch placebo condition than in the pain placebo condition. In conclusion, we showed for the first time that nocebo and possibly placebo responses can be induced on itch by verbal suggestions.

[1852]
Professional heresy: Edmund Gurney (1847-88) and the study of hallucinations and hypnotism.
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[abstract NOT found]

[1853]
The sociocognitive and dissociation theories of hypnosis: toward a rapprochement.
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In this introductory article to a special issue on the sociocognitive perspective of hypnosis, the authors contrast two influential hypnosis theories—the sociocognitive and dissociation perspectives—and argue that recent developments in sociocognitive theory (i.e., response set theory) and in the broader field of cognitive psychology pertaining to nonconscious information processing and goal-directed action make possible a rapprochement between theoretical accounts that have vied for attention and empirical support.

[1854]
The impact of hypnotic suggestibility in clinical care settings.
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Hypnotic suggestibility has been described as a powerful predictor of outcomes associated with hypnotic interventions. However, there have been no systematic approaches to quantifying this effect across the literature. This meta-analysis evaluated the magnitude of the effect of hypnotic suggestibility on hypnotic outcomes in clinical settings. PsycINFO and PubMed were searched from their inception through July 2009. Thirty-four effects from 10 studies and 283 participants are reported. Results revealed a statistically significant overall effect size in the small to medium range ($r = .24$; 95% Confidence Interval = -0.28 to 0.75), indicating that greater hypnotic suggestibility led to greater effects of hypnosis interventions. Hypnotic suggestibility accounted for 6% of the variance in outcomes. Smaller sample size studies, use of the SHCS, and pediatric samples tended to result in larger effect sizes. The authors question the usefulness of assessing hypnotic suggestibility in clinical contexts.

[1855]
The altered state issue: dead or alive?
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Theoretical positions on the altered-state issue are viewed on a continuum rather than a dichotomy. While differences between some pairs of positions have little or no substantive interest, others are important to understanding the nature of hypnotic phenomena. Recent brain imaging data from the University of Hull are reviewed with respect to their implications concerning the existence and functional significance of the hypothesized hypnotic state.

[1856]
Does neuroimaging of suggestion elucidate hypnotic trance?
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Contemporary studies in the cognitive neuroscience of attention and suggestion shed new light on the underlying neural mechanisms that operationalize these effects. Without adhering to important caveats inherent to imaging of the living human brain, however, findings from brain imaging studies may enthrall more than explain. Scholars, practitioners, professionals, and consumers must realize that the influence words exert on focal brain activity is measurable but that these measurements are often difficult to interpret. While recent brain imaging research increasingly incorporates variations of suggestion and hypnosis, correlating overarching hypnotic experiences with specific brain substrates remains tenuous. This article elucidates the mounting role of cognitive neuroscience, including the relative merits and intrinsic limitations of neuroimaging, in better contextualizing trance-like concepts.

[1857]
Clinical pearls gleaned from pediatric hypnosis.
Anbar RD.

[abstract NOT found]

[1858]
Attending to suggestion and trance in the pediatric history and physical examination: a case study.
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Obtaining complete information lies at the heart of accurate diagnosis in all healthcare fields. Extracting information is a time-honored purpose of the history and physical examination. Practitioners may not be aware that these functions also provide opportunities to impart positive verbal and nonverbal suggestions. Paying attention to language promotes patient self-mastery and helps forge a therapeutic alliance for successful outcomes. Principles taught in hypnosis workshops can also help the practitioner avoid negative, undermining suggestions that could diminish diagnostic and therapeutic effectiveness.

[1859]
Childhood anxiety, worry, and fear: individualizing hypnosis goals and suggestions for self-regulation.
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Determining hypnosis goals and specific suggestions for childhood anxiety, worry, and fear can be enhanced by a developmental psychopathology perspective. This article examines underlying causal risk factors that guide a focused assessment and individualized interventions, targeting self-regulation of emotional, cognitive, behavioral, and psychophysiological arousal and reactivity. The author summarizes current knowledge about childhood anxiety disorders and outlines a hypnotic approach when encountering anxious children and youth, including strategies to use spontaneous trance states and enhance underdeveloped resources (e.g. locus of control, discrimination of realistic risk appraisal, coping capacities).

[1860]
Chronic daily headache: helping adolescents help themselves with self-hypnosis.
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Although the evidence is clear that hypnosis has been an effective treatment for recurrent headaches in children, review of the literature revealed no previous reports of hypnosis for youth with the condition of chronic daily headache. Two adolescents with continuing chronic daily headaches were taught self-hypnosis through careful attention to individual strengths and finding the hypnotic elements within the clinical encounters. Self-reports of intensity, frequency, and duration of headaches described substantial benefit from learning and practicing self-hypnosis after little to no benefit from pharmacologic and other nonpharmacologic therapies. These results and analogous success with several other adolescents with chronic daily headache support the further use of self-hypnosis training for this condition. As a self-regulation technique that is quickly and easily learned by most young people, self-hypnosis training holds considerable promise for effectively treating and perhaps preventing chronic daily headaches in children and adolescents.

[1861]
Treatment of psychological factors in a child with difficult asthma: a case report.
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Difficult asthma is defined as the persistence of asthma symptoms, abnormal pulmonary function showing airway obstruction, and continued requirement for short-acting bronchodilator therapy, despite adequate treatment with inhaled corticosteroids. It calls for a thorough evaluation of the patient to look into alternate and complicating diagnoses. The authors report a case of a 9-year-old patient with difficult asthma who failed to respond to conventional therapy. Although it was recognized that he had a number of potential medical complicating factors including allergies, chronic sinusitis, and gastroesophageal reflux, a psychological intervention using hypnosis ultimately appeared to help alleviate his symptoms completely. Thus, psychological evaluation and intervention should be considered early in the course of management of a patient with difficult asthma, because it may help avoid time-consuming and expensive investigations of potential complicating factors, and it may yield rapid improvement in the patient’s clinical condition.
Chronic abdominal pain is a common pediatric condition affecting 20% of the pediatric population worldwide. Most children with this disorder are found to have no specific organic etiology and are given the diagnosis of functional abdominal pain. Well-designed clinical trials have found hypnotherapy and guided imagery to be the most efficacious treatments for this condition. Hypnotic techniques used for other somatic symptoms are easily adaptable for use with functional abdominal pain. The author discusses 2 contrasting hypnotic approaches to functional abdominal pain and provides implications for further research. These approaches may provide new insights into this common and complex disorder.

The role of parents in the use of hypnosis with their children raises many questions worthy of consideration. A survey of the literature reveals that this important topic has not been given the attention or depth it deserves. The author looks at (a) how, when, and whether to incorporate parents in the treatment of their children; (b) how to address attachment and trance between parent and child; (c) engaging parents in their own hypnotic abilities beginning as early as the birthing experience; and (d) improving parenting skills such as teaching parents to pay attention to their use of language with their children in order to shift patterns of communication from unproductive to useful. In addition, the author explores the ways to invite, teach, support and interact with the family system of parent and child in our hypnotic work.

Mind-body interventions during pregnancy for preventing or treating women's anxiety. Marc I, Toureche N, Ernst E, Hodnett ED, Blanchet C, Dodin S, Njoya MM. Département de pédiatrie, Université Laval, Centre Hospitalier Universitaire de Quêbec, 2705 boulevard Laurier, Quêbec, Canada, G1V 4G2.

BACKGROUND: Anxiety during pregnancy is a common problem. Anxiety and stress could have consequences on the course of the pregnancy and the later development of the child. Anxiety responds well to treatments such as cognitive behavioral therapy and/or medication. Non-pharmacological interventions such as mind-body interventions, known to decrease anxiety in several clinical situations, might be offered for treating and preventing anxiety during pregnancy. OBJECTIVES: To assess the benefits of mind-body interventions during pregnancy in preventing or treating women's anxiety and in influencing perinatal outcomes. SEARCH STRATEGY: We searched the Cochrane Pregnancy and Childbirth Group's Trials Register (30 November 2010), MEDLINE (1950 to 30 November 2010), EMBASE (1974 to 30 November 2010), the National Center for Complementary and Alternative Medicine (NCCAM) (1 December 2010), ClinicalTrials.gov (December 2010) and Current Controlled Trials (1 December 2010), searched the reference lists of selected studies and contacted professionals and authors in the field. SELECTION CRITERIA: Randomized controlled trials, involving pregnant women of any age at any time from conception to one month after birth, comparing mind-body interventions with a control group. Mind-body interventions include: autogenic training, biofeedback, hypnotherapy, imagery, meditation, prayer, auto-suggestion, tai-chi and yoga. Control group includes: standard care, other...
pharmacological or non-pharmacological interventions, other types of mind-body interventions or no treatment at all.

DATA COLLECTION AND ANALYSIS: Three review authors independently assessed trials for inclusion all assessed risk of bias for each included study. We extracted data independently using an agreed form and checked it for accuracy.

MAIN RESULTS: We included eight trials (556 participants), evaluating hypnotherapy (one trial), imagery (five trials), autogenic training (one trial) and yoga (one trial). Due to the small number of studies per intervention and to the diversity of outcome measurements, we performed no meta-analysis, and have reported results individually for each study. Compared with usual care, in one study (133 women), imagery may have a positive effect on anxiety during labor decreasing anxiety at the early and middle stages of labor (MD -1.46; 95% CI -2.43 to -0.49; one study, 133 women) and (MD -1.24; 95% CI -2.18 to -0.30). Another study showed that imagery had a positive effect on anxiety and depression in the immediate postpartum period. Autogenic training might be effective for decreasing women's anxiety before delivering.

AUTHORS’ CONCLUSIONS: Mind-body interventions might benefit women's anxiety during pregnancy. Based on individual studies, there is some but no strong evidence for the effectiveness of mind-body interventions for the management of anxiety during pregnancy. The main limitations of the studies were the lack of blinding and insufficient details on the methods used for randomization.

[1867]
Preliminary study of relationships between hypnotic susceptibility and personality disorder functioning styles in healthy volunteers and personality disorder patients.
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BACKGROUND: Hypnotic susceptibility is one of the stable characteristics of individuals, but not closely related to the personality traits such as those measured by the five-factor model in the general population. Whether it is related to the personality disorder functioning styles remains unanswered. METHODS: In 77 patients with personality disorders and 154 healthy volunteers, we administered the Stanford Hypnotic Susceptibility Scale: Form C (SHSSC) and the Parker Personality Measure (PERM) tests. RESULTS: Patients with personality disorders showed higher passing rates on SHSSC Dream and Posthypnotic Amnesia items. No significant correlation was found in healthy volunteers. In the patients however, SHSSC Taste hallucination (β=0.26) and Anosmia to Ammonia (β=-0.23) were significantly correlated with the PERM Borderline style; SHSSC Posthypnotic Amnesia was correlated with the PERM Schizoid style (β=0.25) but negatively the PERM Narcissistic style (β=-0.23). CONCLUSIONS: Our results provide limited evidence that could help to understand the abnormal cognitions in personality disorders, such as their hallucination and memory distortions.

[1868]
[Prefrontal cortex mediated control of expectations in placebo analgesia].
[Article in German]
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Expectations and beliefs modulate the experience of pain, which is particularly evident in placebo analgesia. The dorsolateral prefrontal cortex (DLPFC) has been associated with pain regulation and with the generation, maintenance and manipulation of cognitive representations. In a heat-pain paradigm, we employed non-invasive low-frequency repetitive transcranial magnetic stimulation (rTMS) to transiently disrupt left and right DLPFC function or used the TMS device itself as a placebo, before applying an expectation-induced placebo analgesia. The results demonstrated that placebo significantly increased pain threshold and pain tolerance. While rTMS did not affect pain experience, it completely blocked placebo analgesia. These findings suggest that expectation-induced placebo analgesia is mediated by symmetric prefrontal cortex function. Possible implications for medical practice and clinical trial research will be discussed in the article.

[1869]
[Relaxation techniques for chronic pain].
[Article in German]
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Relaxation techniques are an integral part of the psychological therapy of chronic pain and follow very different objectives. These techniques lead to muscular and vegetative stabilization, serve as distraction from pain, to build up the internal focus of control and thus to improve self-efficacy. Additional targets are improvement of body awareness and stress management, shielding from sensory stimuli and recurrence prevention of migraine as well a sleeping aid. The most commonly used and best studied method is progressive muscle relaxation which has a good compliance because it is easy to learn and has a high plausibility for patients.
[Complementary medicine--the facts].
[Article in Hebrew]
Grossman E.

The popularity of complementary medicine in the western world continues to grow. Complementary medicine has a wide scope of topics including acupuncture, hypnosis, meditation, chiropractic manipulation, tai chi, yoga, botanical and herbal supplements and many other undefined modalities such as copper bracelets, magnets, holy water etc. For most modalities the mechanism of action is unknown and the evidence of benefit is poor. Some modalities such as acupuncture, hypnosis and tai chi may improve pain and other subjective complains. It seems that most of the beneficial effects of complementary medicine are placebo effects. Complementary treatment may be associated with side effects and should not be an alternative to the conventional medicine. Complementary medicine can be used as an adjunct to the conventional medicine and should be used in full agreement with and under the supervision of the attending physician. Patients should be informed about the existing evidence and what to expect from complementary medicine. Further meticulous research should be conducted to expand our knowledge in complementary medicine.

[Cholinergic anti-inflammatory pathway of some non-pharmacological therapies of complementary medicine: possible implications for treatment of rheumatic and autoimmune diseases].
[Article in Hebrew]
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Rheumatologic and autoimmune diseases are among foremost diseases for which patients seek complementary and integrative medicine options. Therefore, physicians should be informed on the advances in research of these therapies, in order to be able to discuss possible indications and contraindications for these treatment modalities with their patients. This review summarizes several therapeutic modalities of complementary medicine that may be involved in the cholinergic anti-inflammatory pathway. The analysis of systematic reviews of acupuncture for rheumatic conditions has concluded that the evidence is sufficiently sound to warrant positive recommendations of this therapy for osteoarthritis, low back pain and lateral elbow pain. There is relatively strong evidence to support the use of hypnosis in pain treatment, such as in cases of fibromyalgia. A recent controlled study that evaluated tai-chi in fibromyalgia has reported reductions in pain, improvements in mood, quality of Life, self efficacy and exercise capacity. There is also cumulative evidence that acupuncture, hypnosis and tai-chi may decrease the high frequency of heart rate variability, suggesting enhancement of vagus nerve activity. Hence, it has been hypothesized that these modalities might impact the cholinergic anti-inflammatory pathway to modulate inflammation. Further clinical and basic research to confirm this hypothesis should be performed in order to validate integration of these therapies in comprehensive treatment for some inflammatory and autoimmune diseases.

Psychosocial issues in cancer pain.
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Cancer pain is a complex and multidimensional experience that affects and is affected by psychological and social factors. This article reviews recent research that points to a number of key psychosocial factors associated with pain, including psychological distress, coping, and social support, as well as the impact of socioeconomic factors on barriers to pain management. We also review recent research suggesting that psychosocial interventions, including education, coping-skills training, and hypnosis, may be useful adjuncts to medical management of pain. Clinical implications and recommendations for future research are discussed.

The efficacy of hypnosis as an intervention for labor and delivery pain: a comprehensive methodological review.
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This paper presents a comprehensive methodological review of research on the efficacy of hypnosis for reducing labor and delivery pain. To be included, studies were required to use a between-subjects or mixed model design in which hypnosis was compared with a control condition or alternative intervention in reducing labor pain. An exhaustive search of the PsycINFO and PubMed databases produced 13 studies satisfying these criteria. Hetero-hypnosis and self-hypnosis were consistently shown to be more effective than standard medical care, supportive counseling, and childbirth education.
classes in reducing pain. Other benefits included better infant Apgar scores and shorter Stage 1 labor. Common methodological limitations of the literature include a failure to use random assignment, to specify the demographic characteristics of samples, and to use a treatment manual.


BACKGROUND: The use of complementary and alternative medicine (CAM) in paediatric populations is common yet, to date, there has been no synthesis of the evidence of its effectiveness in that population. This overview of systematic review evaluates the evidence for or against the effectiveness of CAM for any childhood condition. METHODS: Medline, AMED and Cochrane were searched from inception until September 2009. Reference lists of retrieved articles were hand-searched. Experts in the field of CAM were contacted. No language restrictions were applied. RESULTS: 17 systematic reviews were included in this overview, covering acupuncture, chiropractic, herbal medicine, homeopathy, hypnotherapy, massage and yoga. Results were unconvincing for most conditions although there is some evidence to suggest that acupuncture may be effective for postoperative nausea and vomiting, and that hypnotherapy may be effective in reducing procedure-related pain. Most of the reviews failed to mention the incidence of adverse effects of CAMs. CONCLUSIONS: Although there is some encouraging evidence for hypnosis, herbal medicine and acupuncture, there is insufficient evidence to suggest that other CAMs are effective for the treatment of childhood conditions. Many of the systematic reviews included in this overview were of low quality, as were the randomised clinical trials within those reviews, further reducing the weight of that evidence. Future research in CAM for children should conform to the reporting standards outlined in the CONSORT and PRISMA guidelines.


The treatment of pain in palliative care requires specific expertise. "Complementary" methods, such as hypnosis or "Toucher-Massage", for example, not only have an effect on the prevention and treatment of pain, but also contribute to the overall support of the patient.

[1877] J Vis Commun Med. 2011 Sep;34(3):104-12. Imagery, colour and illness: a review. Carruthers HR. Department of Medical Illustration, University Hospital of South Manchester NHS Foundation Trust, Manchester, UK. Helen.carruthers@uhsm.nhs.uk

This paper reviews research on the role of colour and imagery in relation to illness and examines how this might improve communication between the sufferer and those treating or caring for them. It describes a method by which colour can be related to situations such as an individual's mood and how this might be used to predict response to treatment. Furthermore, it provides evidence that documenting the imagery of an illness might give insight into the patients' fears and concerns about their condition as well as helping non-sufferers to understand what they are going through.

Awareness during general anesthesia occurs when patients recall events or sensations during their surgeries, although the patients should have been unconscious at the time. Anesthesiologists are cognizant of this phenomenon, but few discussions occur outside the discipline. This narrative review summarizes the patient recollections, psychological sequelae, treatment and follow-up of psychological consequences, as well as incidence and etiology of awareness during general anesthesia. Recalled memories include noises, conversations, images, mental processes, feelings of pain and/or paralysis. Psychological consequences include anxiety, flashbacks, and posttraumatic stress disorder diagnosis. Limited discussion for therapeutic treatment after an anesthesia awareness experience exists. The incidence of anesthesia awareness ranges from 0.1 to 0.2% (e.g., 1-2/1000 patients). Increased recognition of awareness during general anesthesia within the psychological/counseling community, with additional research focusing on optimal therapeutic treatment, will improve the care of these patients.

[1879]
Combined therapy using acupressure therapy, hypnotherapy, and transcendental meditation versus placebo in type 2 diabetes.
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Type 2 diabetes is one of the most widespread diseases in the world. The main aim of this research was to evaluate the effect of combined therapy using acupressure therapy, hypnotherapy, and transcendental meditation (TM) on the blood sugar (BS) level in comparison with placebo in type 2 diabetic patients. We used "convenience sampling" for selection of patients with type 2 diabetes; 20 patients were recruited. For collection of data, we used an identical quasi-experimental design called "nonequivalent control group." Therapy sessions each lasting 60-90 min were carried out on 10 successive days. We prescribed 2 capsules (containing 3 g of wheat flour each) for each member of the placebo group (one for evening and one for morning). Pre-tests, post-tests, and follow-up tests were conducted in a medical laboratory recognized by the Ministry of Health and Medical Education of Iran. Mean BS level in the post-tests and follow-up tests for the experimental group was reduced significantly in comparison with the pre-tests whereas in the placebo group no changes were observed. Combined therapy including acupressure therapy, hypnotherapy, and TM reduced BS of type 2 diabetic patients and was more effective than placebo therapy on this parameter.

[1880]
Hypnosis within a psychospiritual approach in the case of a woman diagnosed with dystonia.
Benoff-Nadel P.

This case report describes a psychospiritual intervention utilizing hypnosis with a client seeking help for problems with involuntary movement of the right arm and hand, accompanied by a great deal of pain. Doctors had diagnosed her condition as dystonia with the presumption that it was primarily physical in nature. She came to Carolinas Integrative Health seeking an integrative approach to her problem, one that brings together conventional and complementary medicine. The client was referred to the author by the Medical Director for a mind/body/spirit approach, including hypnosis. Initial evaluation suggested there might be a psychogenic component to the problem. The client also revealed a spiritual worldview, theistic in nature. Utilizing hypnosis, together with the process the author calls "Centering in Self," the client's spiritual beliefs and resources were accessed and utilized in bringing about resolution of pain and almost complete cessation of involuntary movements.

[1881]
The application of autogenic training in counseling center for mother and child in order to promote breastfeeding.
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The aim of this study was to investigate whether mothers with newborn children, the usage of autogenic training with advice on breastfeeding effect on: the decision and the duration of breastfeeding, increase maternal confidence and support. It was assumed that the above result in a higher percentage of mothers who exclusively breastfed baby during the first six months of child's life. The survey was conducted in the Association "For a healthy and happy childhood"-Counseling center for mother and child, in Bjelovar in 2010. The Counseling center was attended by 100 nursing mothers with children aged up to two months. They randomly went to the study or control group. Mothers of both groups were advised to successful breastfeeding. Study group has practiced autogenic training until the child's age of six months. In parallel, by using psychotherapeutic interview and specific questionnaires we collected data on the somatic, psychological and social situation of the mother, discovered mother's mental changes (anxiety, depression) that were treated. The results at the end of the study confirm the initial expected benefits from the application of autogenic training. Mothers of the study group were significantly more emotionally balanced with a higher self-esteem. Autogenous training with the advices for successful breastfeeding conducted in this counseling center contributed in significantly higher rate of
breastfeeding children up to six months of life, improved mental and physical health of mother and child and their peculiar relationship.

[1882]
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BACKGROUND: Decrease of chest pain perception under placebo conditions has been frequently observed. The aim of this study was to examine whether placebo-induced chest pain improvement could be the result of changes in coronary blood flow. We, therefore, performed an experiment to investigate whether a verbal suggestion (VS) integrated in a cardiologic procedure has an impact on diameters of coronary arteries. METHODS: A total of 30 chest pain patients with normal diagnostic angiograms were assigned to a VS or a control group (CG). Saline solution was administered intracoronarily to both groups. The VS group received a standardized VS, implying coronary vasodilation. The CG remained without VS. Coronary end points were the changes in percentage diameter stenosis, Minimal lumen diameter and reference diameter of the index coronary segment before and 60 seconds after the administration of saline. Furthermore, changes in hemodynamics, psychological distress, and chest pain perception were recorded. RESULTS: The VS led to coronary vasoconstriction in comparison with CG (change in mean percentage diameter stenosis Å± SD 3.2% Å± 6.3% vs -1.7% Å± 6.8%, P = .062; change in mean minimal lumen diameter Å± SD -0.18 Å± 0.32 mm vs 0.06 Å± 0.23 mm, P = .029, no relevant change in the reference diameter). At the same time, the degree of chest pain perception was significantly reduced in the VS group (-0.7 Å± 1.3) compared with the CG (0.3 Å± 1.3), P = .024. CONCLUSION: The findings of this study suggest that a VS results in a biological alteration within coronary arteries. Contrary to expectation, the VS led to vasoconstriction, whereas chest pain perception decreased.

[1883]
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The authors have brought together and analysed texts about the history of the concept of hysteria. In these texts hysteria is fundamentally considered a disease of organic origin (of the womb), and, in the Middle Age, evidence of demonic possession. From the XVII century onwards, apart from the etiopathogenic concepts, also taken into consideration are aspects connected to the differential diagnosis with other similar entities and the therapy used each period. Even, in subsequent centuries, authors such as Sydenham, who consider hysteria to be a multidimensional entity, are rare. Empiricism has contributed to discoveries in biology and physiology, both general and of the nervous system itself, and given birth to the formulation of the Spinal Irritation Theory and Reflex Theory. These theories have led to strictly organic treatment of hysteria, in the same way that hysterectomies were performed to alleviate somatic symptoms connected to this disease. The introduction of hypnosis in medical practice, with Charcot in XIX century, allowed for the element of suggestion to be observed (a non organic element) which accompanies the symptoms of hysteria. Two of his disciples, Janet and Freud, would define and isolate psychic mechanisms in the symptoms of hysteria: Dissociation of the consciousness (Janet) and Conversion (Freud). The last one developed a therapeutic method of a psychological nature for hysteria. The therapeutic implications and the pertinence of the distinction between unspecific somatization or functional (of somatic origin) somatization and somatization linked to disassociation mechanisms and conversion (psychic origin) are discussed as well as the evolution of international classification systems of somatization and the questions posed by the algorithms chosen for the cataloguing of symptoms. A revision of the relevant empirical studies about the association of somatization with depressive and anxiety disorders, within the general population, is made. The characteristics that permeate the clinical descriptions of somatoform disorders (whose validity criteria remain weak) and are not integrated within the diagnostic criteria for somatoform disorders are considered. We draw conclusions about the difficulties and consequences of the changes that some authors advocate in relation to the new classification system for somatoform syndromes.

[1884]
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Spontaneous dissociative alterations in awareness and perception among highly suggestible individuals following a
Hypnotic induction may result from disruptions in the functional coordination of the frontal-parietal network. We recorded EEG and self-reported state dissociation in control and hypnosis conditions in two sessions with low and highly suggestible participants. Highly suggestible participants reliably experienced greater state dissociation and exhibited lower frontal-parietal phase synchrony in the alpha2 frequency band during hypnosis than low suggestible participants. These findings suggest that highly suggestible individuals exhibit a disruption of the frontal-parietal network that is only observable following a hypnotic induction.


The following study describes theoretical foundations and practical application of Pavlov Sleep Therapy within the GDR in the 1950s and earlier 1960s. Implementing the sleeping treatment as a psychiatric therapy exemplifies how the ideological guideline to integrate Pavlov's teachings was converted into medical practice in the GDR. One of the protagonists of this approach was Dietfried MÄ¼ller-Hegemann in Leipzig. Although being successful with some diseases such as fatigue, its practical application ceased after several cases of death that were brought in connection with the sleep treatment. Indirectly this discontinuation of Pavlov Sleep Therapy also terminated MÄ¼ller-Hegemann's academic career.


Neglect patients are not aware of stimuli in the contralesional space. We aimed to simulate neglect-like behaviour in healthy participants, by asking them to orient their visuospatial attention in two conditions: non-hypnotic suggestion and post-hypnotic suggestion. Results showed that directing visuospatial attention to one side of space caused neglect of stimuli in the opposite side of space, but only when participants were under post-hypnotic suggestion. Furthermore, directing visuospatial attention to the right side of space caused more neglect of left-sided stimuli than directing visuospatial attention to the left side of space did for right-sided stimuli. We propose that post-hypnotic suggestion can be a useful tool for (de)activating neurocognitive mechanisms underlying visuospatial awareness, a function that is fundamental for our survival. The use of post-hypnotic suggestion could be applied to the study of many domains of cognitive neurosciences (e.g., neurocognitive rehabilitation).


Ego state therapy (EST) evolved from a psychodynamic understanding of personality as a product of an individual's ego states to a conceptualization of how ego-energized and object-energized elements are bound together to cope with a traumatic event. Neurobiological studies now substantiate Watkins's war neuroses conceptualizations. Because of their severity, trauma memories are encoded in the subcortical-subconscious brain regions that are accessed by the single-session manualized EST procedure but not by the popular cognitive-behavioral management therapies. The imprint of the trauma is not accessible or resolvable by such top-down verbal understanding or reframing; EST is a bottom-up therapy. Abreactive hypnosis facilitates ego state expression at physiologically and psychologically intense levels sufficient to activate subcortical processes to release affect in the presence of the therapist, who adds ego strength to the patient. This is followed by interpretation and reintegration. The result is a reconstructed personality that is adaptive and resilient.


There is increasing evidence that the hypnotic cure of warts (infection by the human papilloma virus or HPV) results from activation of an immune response, but whether this is cellular or systemic is unknown. The hypnosis can be by direct suggestion or analytical hypnotherapy when indicated. The evidence is reviewed, and 4 clinical cases suggesting cellular immune response are presented.
Dopaminergic mechanisms have been theorized to influence hypnotizability and sensorimotor gating. In this study, the authors investigated an association between sensorimotor gating, as measured by prepulse inhibition (PPI), and hypnotizability, as assessed by the Stanford Hypnotic Susceptibility Scale, Form C (SHSS:C). They found an inverse correlation between the SHSS:C and PPI. This finding, which replicates an earlier study, provides further evidence for a dopaminergic basis for hypnotizability and suggests additional avenues for research, including a method for possibly enhancing hypnotizability through pharmacological interventions.

The purpose of this pilot project was to test the feasibility of hypnosis as a preoperative intervention. The unique features of this study were: (a) use of a standardized nurse-delivered hypnosis protocol, (b) intervention administration immediately prior to surgery in the preoperative holding area, and (c) provision of hypnosis to breast cancer surgery patients receiving general anesthesia. A mixed-method design was used. Data collected from the intervention group and historical control group included demographics, symptom assessments, medication administration, and surgical, anesthesia, and recovery minutes. A semi-structured interview was conducted with the intervention group. A reduction in anxiety, worry, nervousness, sadness, irritability, and distress was found from baseline to postintervention while pain and nausea increased. The results support further exploration of the use of nurse-led preoperative hypnosis.

The authors of this prospective study initially hypothesized that hypnosis would lower the anxiety and pain associated with dental anesthesia. Thirty children aged 5 to 12 were randomly assigned to 2 groups receiving hypnosis (H) or not (NH) at the time of anesthesia. Anxiety was assessed at inclusion in the study, initial consultation, installation in the dentist’s chair, and at the time of anesthesia using the modified Yale preoperative anxiety scale (mYPAS). Following anesthesia, a visual analogue scale (VAS) and a modified objective pain score (mOPS) were used to assess the pain experienced. The median mYPAS and mOPS scores were significantly lower in the H group than in the NH group. Significantly more children in the H group had no or mild pain. This study suggests that hypnosis may be effective in reducing anxiety and pain in children receiving dental anesthesia.

EEG spectral power and coherence were analyzed under waking baseline condition in 19 high (HH) and 12 low (LH) hypnotizable subjects. In HH subjects, the theta1 and theta2 spectral power was higher than in LH. The major new finding of this study is that coherence between distributed brain regions was sharply elevated in HH subjects within the theta and alpha frequency bands. In contrast, spectral power and coherence of beta2 and gamma1 bands were higher in LH subjects as compared to HH subjects. However, the long distance coherence between frontal and posterior areas within beta-gamma frequency ranges was higher in HH subjects. It might be supposed that HH subjects are engaged in imaginal mental activity whereas LH ones are mainly engaged in linguistic activity. The neurophysiological basis of the obtained EEG differences is discussed.
The rate, intensity, and selectivity of hypnotic focused analgesia (HFA) were tested with dental pulp stimulation. Thirty-one healthy subjects were hypnotized, and hypnotic suggestions were given for anesthesia of the right mandibular arch. A posthypnotic suggestion of persisting analgesia was also given. The pain threshold of the first premolar was bilaterally measured before, during, and after hypnosis using a pulp tester. During hypnosis, the pain threshold increased significantly (p < .0001) for both sides. The posthypnotic right pain threshold was also significantly (p < .0015) higher than in the basal condition.

Hypnosis in the laboratory creates a window on psychopathology.
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The authors describe 3 studies in which hypnosis itself is not studied but instead used to create anomalous states in the laboratory that can be studied under controlled conditions. The 1st article is a comprehensive review of programmatic research using hypnosis to elicit and study clinically relevant delusions. The 2nd article reviews studies comparing the brain activity of hysterical/dissociative patients with nonpatients hypnotized and given suggestions for sensory-motor and cognitive anomalies typical of the clinical syndromes. The authors conclude that the hypnosis analogues are relevant and revealing. The 3rd article describes a single experiment using hypnosis to elicit distressing and intrusive memories, typical of acute anxiety disorders. Findings with hypnotic subjects are in keeping with those from patients suffering intrusive memories. Across all 3 papers, hypnosis is shown to be a viable and helpful tool for experimental psychopathology.

Tactile massage and hypnosis as a health promotion for nurses in emergency care--a qualitative study.
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BACKGROUND: This study explores nursing personnel’s experiences and perceptions of receiving tactile massage and hypnosis during a personnel health promotion project. Nursing in a short term emergency ward environment can be emotionally and physically exhausting due to the stressful work environment and the high dependency patient care. A health promotion project integrating tactile massage and hypnosis with conventional physical activities was therefore introduced for nursing personnel working in this setting at a large university hospital in Sweden. METHODS: Four semi-structured focus group discussions were conducted with volunteer nursing personnel participants after the health promotion project had been completed. There were 16 participants in the focus groups and there were 57 in the health promotion intervention. The discussions were transcribed verbatim and analysed with qualitative content analysis. RESULTS: The findings indicated that tactile massage and hypnosis may contribute to reduced levels of stress and pain and increase work ability for some nursing personnel. The sense of well-being obtained in relation to health promotion intervention with tactile massage and hypnosis seemed to have positive implications for both work and leisure. Self-awareness, contentment and self-control may be contributing factors related to engaging in tactile massage and hypnosis that might help nursing personnel understand their patients and colleagues and helped them deal with difficult situations that occurred during their working hours. CONCLUSION: The findings indicate that the integration of tactile massage and hypnosis in personnel health promotion may be valuable stress management options in addition to conventional physical activities.

Thinking in circles: power and responsibility in hypnosis.
Musikantow R.

[abstract NOT found]
Circular poetics and the "hypnosis of hypnosis".
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[abstract NOT found]

Traditional and alert hypnosis for education: a literature review.
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In laboratory research, hypnotic suggestions have increased simple learning performance. There is also evidence that hypnosis may be used to increase higher level cognitive processes such as reading speed and listening comprehension. But using a traditional, relaxed, eyes-closed induction made it difficult to read and take tests and do other activities involved in independent academic performance. The subsequent development and refinement of an alert, eyes-open induction and appropriate suggestions made it possible for students to significantly increase reading comprehension and academic performance.

Treating persistent nausea of pregnancy with hypnosis: four cases.
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Persistent nausea of pregnancy is often caused by some unresolved emotional or psychological issue that can be rapidly resolved through hypnosis. Four cases of women who were nauseated throughout their pregnancy were treated with a brief form of hypnosis that used a psychodynamic investigation of the cause of the problem. David Cheek's ideomotor questioning was used to discover the reason for the disturbance; once uncovered, the solution was obvious and quick.

Hypnosis in pregnancy with intrauterine growth restriction and oligohydramnios: an innovative approach.
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The clinical application of hypnosis has been effective in obstetrics. Intrauterine growth restriction and oligohydramnios are dreaded complications of pregnancy that may result in preterm deliveries causing increased perinatal morbidity and mortality. In this longitudinal prospective study, clinical hypnosis was used in addition to the conventional medical management in such pregnancies. The perinatal outcome was compared with the control group wherein hypnosis was not used. The hypnosis group had a significantly shorter preterm delivery rate (p = .004) and fewer incidence of low birth weight babies (p = .009). Significantly reduced operative intervention in terms of lower rate of cesarean section (p = .008) was also observed in the experimental group. Hence, the use of clinical hypnosis as a viable adjunct to medical management is suggested to help to prevent neonatal morbidity and fetal loss. A multicenter randomized, controlled clinical trial is encouraged in this area.

Hypnotic complications from hypnotic play with 35-year follow-up studies.
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Although diverse cases on hypnosis and hypnotic complications have been reported, little on hypnotic play has been discussed. One exception that the author is aware of is a report by Orne (1965), which states that complications that arise from hypnotic play are minor in nature. Contrary to Orne's report, 2 clinical cases treated by the author were observed to have suffered from severe hypnotic complications over long periods of time after hypnotic play. In these cases, spontaneous rehypnotization, including dissociative symptoms, appeared and greatly disturbed the patients' academic as well as daily lives. Regressive symptoms and personality changes were also observed. When these cases were revisited 35 years later, however, none of those disturbances was reported to have lasted into the patients' adulthood. Both of these former patients were reported to be mentally and physically healthy, each living happily as the mother of 2 children.
The authors present empirical data on therapeutic hypnosis and brief psychotherapy as a 4-Stage Creative Process of focused attention and positive expectancy in professional training workshops of the American Society of Clinical Hypnosis, the National Institute for the Clinical Applications of Behavioral Medicine, and the Milton H. Erickson Foundation. The authors developed a brief protocol for assessing the 4-Stage Creative Process, which is the core dynamic of the Creative Psychosocial Genomic Healing Experience. They report that the 4-Stage Creative Process for resolving many psychological problems and symptomatic behavior in a satisfactory manner can be learned within 3 trials during 2-day professional workshops. The theory, research, and practice of private problem solving, stress reduction, and mind-body symptom resolution in professional and public settings is discussed. Immediate knowledge of results, positive peer support, and the development of new psychosocial skills in learning how to appropriately communicate live here-and-now novel and numinous experiences is an exhilarating exercise in creating new consciousness that facilitates the confidence and maturation of psychotherapists.

[1904] BMC Complement Altern Med. 2011 Oct 11;11:92. Hypnosis for hot flashes among postmenopausal women study: a study protocol of an ongoing randomized clinical trial. Elkins GR, Fisher WI, Johnson AK. Mind-Body Medicine Research Laboratory, Department of Psychology and Neuroscience, One Bear Place # 97334, Baylor University, Waco, TX, USA. Gary_Elkins@baylor.edu

BACKGROUND: Hot flashes are a highly prevalent problem associated with menopause and breast cancer treatments. The recent findings from the Women's Health Initiative have important implications for the significance of a non-hormonal, mind-body intervention for hot flashes in breast cancer survivors. Women who take hormone therapy long-term may have a 1.2 to 2.0 fold increased risk of developing breast cancer. In addition, it is now known that hormone therapy with estrogen and progestin is associated with increased risk of cardiovascular disease and stroke. Currently there are limited options to hormone replacement therapy as non-hormonal pharmacological agents are associated with only modest activity and many adverse side effects. Because of this there is a need for more alternative, non-hormonal therapies. Hypnosis is a mind-body intervention that has been shown to reduce self-reported hot flashes by up to 68% among breast cancer survivors, however, the use of hypnosis for hot flashes among post-menopausal women has not been adequately explored and the efficacy of hypnosis in reducing physiologically measured hot flashes has not yet been determined. METHODS/DESIGN: A sample of 180 post-menopausal women will be randomly assigned to either a 5-session Hypnosis Intervention or 5-session structured-attention control with 12 week follow-up. The present study will compare hypnosis to a structured-attention control in reducing hot flashes (perceived and physiologically monitored) in post-menopausal women in a randomized clinical trial. Outcomes will be hot flashes (self-report daily diaries; physiological monitoring; Hot Flash Related Daily Interference Scale), anxiety (State-Trait Anxiety Inventory; Hospital Anxiety and Depression Scale (HADS); anxiety visual analog scale (VAS rating); depression (Center for Epidemiologic Studies Depression Scale), sexual functioning (Sexual Activity Questionnaire), sleep quality (Pittsburgh Sleep Quality Index) and cortisol. DISCUSSION: This study will be the first full scale test of hypnosis for hot flashes; one of the first studies to examine both perceived impact and physiologically measured impact of a mind-body intervention for hot flashes using state-of-the-art 24 hour ambulatory physiological monitoring; the first study to examine the effect of hypnosis for hot flashes on cortisol; and the first investigation of the role of cognitive expectancies in treatment of hot flashes in comparison to a Structured-Attention Control. TRIAL REGISTRATION: This clinical trial has been registered with ClinicalTrials.gov, a service of the U.S. National Institutes of Health, ClinicalTrials.gov Identifier: NCT01293695.
in the brain during induction, maintenance, and emergence from anesthesia and which functional consequences this may have. Commonalities and differences between different groups of anesthetics in their action on neurotransmitter activity are discussed. We also review how general anesthetics affect the response dynamics of the neurotransmitter systems after sensory stimulation. More than 30 years of research have now yielded a complex picture of the effects of general anesthetics on brain neurotransmitter basal activity and response dynamics. It is suggested that analyzing the effects on neurotransmitter activity is the logical next step after protein interactions in a bottom-up analysis of anesthetic action in the brain on the way to a unifying view of anesthesia.

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Many dermatological disorders have a psychosomatic or behavioral aspect. Skin and brain continually interact through psychoneuroimmunendocrine mechanisms and through behaviors that can strongly affect the initiation or flaring of skin disorders. It is important to consider these mind-body interactions when planning treatments for specific skin disorders in individual patients. Mind-influencing therapeutic options that can enhance treatment of skin disorders include standard psychotropic drugs, alternative herbs and supplements, the placebo effect, suggestion, cognitive-behavioral methods, biofeedback, and hypnosis. When individual measures do not produce the desired results, combinations of drugs or addition of non-drug therapies may be more successful. Psychophysiological skin disorders may respond well to non-drug and drug therapies that counteract stress. Treatment of primary psychiatric disorders often results in improvement of associated skin disorders. Psychiatric disorders secondary to skin disorders may also require treatment. Therapeutic options for each of these are discussed.

A prospective, randomized trial of integrative medicine for women with ovarian cancer.
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OBJECTIVES: Despite increased use of integrative medicine in cancer therapy, little data exist on its efficacy. This prospective, randomized, pilot trial sought to evaluate the feasibility of combined modality integrative medicine (CM-IM) in women with ovarian cancer (OvCA) and evaluate its effects on quality of life (QoL), chemotherapy toxicity and immunologic profiles. METHODS: Women with newly diagnosed OvCA requiring chemotherapy were offered enrollment. Those randomized to the experimental arm received hypnosis, therapeutic massage and healing touch with each cycle of chemotherapy. The control arm received chemotherapy without CM-IM. All patients completed QoL questionnaires prior to cycles 1, 3 and 6, and 6-months after chemotherapy. Immunologic profiles were measured. Statistical analysis was based on intent-to-treat. Student's t-test and Fischer's exact-test were used to determine differences. RESULTS: Forty-three women enrolled. All women randomized to CM-IM were successfully treated. There were no statistical differences between the groups in age, stage, grade, histologic cell type, CA125 levels, or surgical cytoreductive status. There was no difference in overall QoL measurements. Re-hospitalization rates, treatment delays, anti-emetic use, and infection rates were similar. Immunologic profiles revealed no difference between arms for WBC or salivary IgA levels. Women receiving CM-IM had consistently higher levels of CD4, CD8 and NK cells, although this did not reach statistical significance. CONCLUSIONS: Prospective clinical evaluation of integrative medicine for women with gynecologic malignancy is feasible. This first, pilot study of CM-IM in gynecologic oncology demonstrated no improvement in QoL or chemotherapy toxicity. Integrative medicine-associated improvements in immunologic profiles warrant further investigation.

Hypnotherapy for treatment of overactive bladder: a randomized controlled trial pilot study.
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OBJECTIVES: The objective of the study was to obtain pilot data comparing hypnotherapy and behavioral therapy (hypnotherapy) to behavioral therapy alone (behavioral therapy) in overactive bladder (OAB) treatment. METHODS: Women with OAB were randomized to hypnotherapy or behavioral therapy treatments. Patient Global Impression of Improvement (PGI-I), the OAB-q Short Form (OAB-q SF) questionnaire, and voiding diaries were recorded, and within- and between-group differences were compared. RESULTS: Twenty women enrolled in and completed the study. Both hypnotherapy and behavioral therapy groups improved their mean number of voids (P = 0.005, P = 0.01, respectively) and their OAB-q SF distress scores (P = 0.002, P = 0.03). The hypnotherapy group had significant improvement in quality-of-life scores (P < 0.001), whereas the behavioral group did not (P = 0.05). Between-group comparisons showed
that the hypnotherapy group had superior PGI-I scores compared with the behavioral group (P < 0.009). The hypnotherapy group trended toward greater improvement in OAB-q quality-of-life scores compared with the behavioral therapy group (67% vs 42% improvement), although this did not reach statistical significance (P = 0.07). Number of voids and OAB-q SF distress scores improved in both groups with no difference between groups. CONCLUSIONS: Both groups improved with treatment. Hypnotherapy resulted in superior PGI-I scores compared with behavioral therapy. Voiding and OAB-q SF results trended toward greater improvement with hypnotherapy. As a pilot study, recruitment was underpowered to find statistical differences between groups’ voids and OAB scores. These findings support the need for an expanded trial that could likely show hypnotherapy to be superior in OAB treatment.

[1909]
Hypnosis for cataract surgery in an American Society of Anesthesiologists physical status IV patient.
Kiss G, Butler J.
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A 73-year-old morbidly obese female patient (weight 125 kg, height 156 cm) was scheduled for cataract surgery of her right eye. Due to a number of severe co-morbidities general anaesthesia was contraindicated. However the patient was very anxious and requested sedation if the procedure was to be undertaken under local anaesthesia. She responded very positively to the proposal of utilising perioperative hypnosis. Hypnotic induction was achieved with the heavy eyelid technique, putting the patient into trance within 30 seconds. Continuous relaxing suggestions as described by the patient herself the day before surgery were used to maintain the trance state. She later reported that she was not aware of being in the operating room, but experienced profound relaxation during the procedure. Perioperative hypnosis proved to be a satisfactory option for sedation in this high-risk patient and should be actively considered for similar easily suggestible patients who are undergoing minor surgery.

[1910]
Prevalence of complementary medicine use in a phase 1 clinical trials program: the MD Anderson Cancer Center Experience.
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BACKGROUND: A key end point of early cancer clinical trials is the assessment of toxicities and their possible association with new experimental drugs. Therefore, the concurrent use of complementary and alternative medicine (CAM) in patients with advanced malignancies seen in a dedicated phase 1 clinic was evaluated. METHODS: An investigator-designed survey was anonymously completed by patients seen in the phase 1 clinic. Pharmacologic CAM included any oral, topical, or intravenous agent, including vitamins, dietary supplements, and herbal products. Nonpharmacologic CAM included prayer, meditation, hypnosis, massage, and acupuncture. RESULTS: Of the 404 patients approached about completing the CAM survey, 394 (98%) agreed to respond, and 309 (78%) surveys were returned. Of those 309 patients, 162 (52%) used 1 or more CAM. Of the 162 CAM users, 77% utilized pharmacologic CAM, 71% used nonpharmacologic CAM, and 48% used both modalities. The most frequent CAM used were vitamins (70%), prayer (57%), and herbal products (26%). CAM utilization was not significantly associated with race, age, level of education, employment, or income level but was used more by women than men (P < .01). There was no statistically significant association between the use of CAM and quality of life as perceived by patients. Of the CAM users, 43% of patients had been using CAM for >5 years. Only 5% reported having side effects from using CAM, whereas 23% did not fully disclose their CAM use to their physicians. CONCLUSIONS: CAM usage is common in patients with advanced malignancies seen in a phase 1 clinic.

[1911]
Hypnosis: a twilight zone of the top-down variety Few have never heard of hypnosis but most know little about the potential of this mind-body regulation technique for advancing science.
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An early form of psychotherapy, hypnosis has been tarnished by a checkered history: stage shows, movies and cartoons that perpetuate specious myths; and individuals who unabashedly write ‘hypnotist’ on their business cards. Hypnosis is in the twilight zone alongside a few other mind-body exemplars. Although scientists are still unraveling how hypnosis works, little is mystical about this powerful top-down process, which is an important tool in the armamentarium of the cognitive scientist seeking to unlock topical conundrums.

[1912]
The dark side of testing memory: repeated retrieval can enhance eyewitness suggestibility.
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Eyewitnesses typically recount their experiences many times before trial. Such repeated retrieval can enhance memory retention of the witnessed event. However, recent studies (e.g., Chan, Thomas, & Bulevich, 2009) have found that initial retrieval can exacerbate eyewitness suggestibility to later misleading information—a finding termed retrieval-enhanced suggestibility (RES). Here we examined the influence of multiple retrieval attempts on eyewitness suggestibility to subsequent misinformation. In four experiments, we systematically varied the number of initial tests taken (between zero and six), the delay between initial testing and misinformation exposure (~30 min or 1 week), and whether initial testing was manipulated between- or within-subjects. University undergraduate students were used as participants. Overall, we found that eyewitness suggestibility increased as the number of initial tests increased, but this RES effect was qualified by the delay and by whether initial testing occurred in a within- or between-subjects manner. Specifically, the within-subjects RES effect was smaller than the between-subjects RES effect, possibly because of the influence of retrieval-induced forgetting/facilitation (Chan, 2009) when initial testing was manipulated within subjects. Moreover, consistent with the testing effect literature (Roediger & Karpicke, 2006), the benefits of repeated testing on later memory were stronger after a 1-week delay than after a 30-min delay, thus reducing the negative impact of RES in long-term situations. These findings suggest that conditions that are likely to occur in criminal investigations can either increase (repeated testing) or reduce (delay) the influence of RES, thus further demonstrating the complex relationship between eyewitness memory and repeated retrieval.

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The experience of pain and discomfort during orthodontic treatment is common. Pain is a subjective response to noxious stimuli, but it is also influenced by age, gender, previous pain experience, emotional factors and stress. The orthodontic treatments such as separation, placement of the arch wire, activation of the fix or removable appliances and debonding cause some degree of pain for the patient. In a prospective study 95% of the patients reported pain experience during orthodontic treatment. The periodontal pain caused by the combination of pressure, ischemia, inflammation and oedema. The pain starts within 4 hours, increases over the next 24 hours, and decrease within 7 days, so it may not be identified by the orthodontist at recall visit. The most common method to measure the intensity of the pain is the NRS (numerical rating scale), where patients can rate their pain intensity from 1 to 10 or 1 to 100. There are many modalities to control orthodontic pain, we can use different analgesic agents, soft-laser irradiation, transcutaneous electrical nerve stimulation and hypnotherapy. The aim of this review to provide an overview on discomfort and pain reaction during orthodontic treatments and discussion of the possible measurement and alleviation of pain.

The purpose of our study was to measure the relationship between performance on various attentional tasks and hypnotic susceptibility. Healthy volunteers (N=116) participated in a study, where they had to perform several tasks measuring various attention components in a waking state: sustained attention, selective or focused attention, divided attention and executive attention in task switching. Hypnotic susceptibility was measured in a separate setting by the Waterloo-Stanford Groups Scale of Hypnotic Susceptibility, Form C (WSGC). We found no significant correlation between any of the attentional measures and hypnotic susceptibility. Highly hypnotizables did not prove to be superior to or worse than the other individuals in any of the tests. These results do not support the neuropsychophysiological model of hypnosis, as they show no consistent relationship between hypnotic susceptibility and waking attentional performance.

OBJECTIVES: To report the frequency of Complementary and Alternative Medicine (CAM) use by a population of pregnant women in the UK. DESIGN: Four postal self-completion questionnaires completed at 8, 12, 18 and 32 weeks' gestation asked for written descriptions about the use of any treatments, pills, medicines, ointments, homeopathic medicines, herbal medicines, supplements, drinks and herbal teas. SETTING: An observational, population-based, cohort study of parents and children of 14,541 pregnant women residing within the former county of Avon in south-west England. Data was available for 14,115 women. RESULTS: Over a quarter (26.7%; n=3774) of women had used a CAM at least once in pregnancy, the use rising from 6% in the 1st trimester to 12.4% in the 2nd to 26.3% in the 3rd. Herbal teas were the most commonly reported CAM at any time in pregnancy (17.7%; n=2499) followed by homeopathic medicine (14.4%; n=2038) and then herbal medicine (5.8%; n=813). The most commonly used herbal product was chamomile used by 14.6% of women, the most commonly used homeopathic product was Arnica used by 3.1% of women. Other CAMs (osteopathy, aromatherapy, acupuncture/acupressure, Chinese herbal medicine, chiropractic, cranial sacral therapy, hypnosis, non-specific massage and reflexology) accounted for less than 1% of users. CONCLUSIONS: CAM use in pregnancy, where a wide range of CAMs has been assessed, has not been widely reported. Studies that have been conducted report varying results to this study (26.7%) by between 13.3% and 87% of pregnant women. Survey results will be affected by a number of factors namely the inclusion/exclusion of vitamins and minerals, the timing of data collection, the country of source, the number of women surveyed, and the different selection criteria of either recruiting women to the study or of categorising and identifying a CAM treatment or product.

[1916]
Interventions for sexual problems following treatment for breast cancer: a systematic review.
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Sexual functioning is an important element of quality of life. Many women experience sexual problems as a result of a breast cancer diagnosis and its treatment. Little is known about the availability and the effectiveness of interventions for sexual problems in this patient population. Six electronic databases were searched using Medical Subject Headings and keywords. Additional hand searching of the references of relevant papers was also conducted. The searches were conducted between October 2010 and January 2011. Papers were included if they evaluated interventions for sexual problems caused as a result of breast cancer or its treatment. Studies were only included if sexual function was reported using a patient-reported outcome questionnaire. Studies were excluded if sexual functioning was measured but improving sexual problems was not one of the main aims of the intervention. 3514 papers were identified in the initial search. 21 papers were selected for inclusion. Studies were of mixed methodological quality; 15 randomised trials were identified, many included small sample sizes and the use of non-validated questionnaires. Three main types of interventions were identified: Exercise (2), medical (2) and psycho-educational (17). The psycho-educational interventions included skills-based training such as problem-solving and communication skills, counselling, hypnosis, education and specific sex-therapies. Interventions were delivered to individual patients, patients and their partners (couple-based) and groups of patients. The widespread methodological variability hinders the development of a coherent picture about which interventions work for whom. Tentative findings suggest the most effective interventions are couple-based psycho-educational interventions that include an element of sexual therapy. More methodologically strong research is needed before any intervention can be recommended for clinical practice. Improved screening and classification of sexual problems will ensure interventions can be more effectively targeted to suit individual patient needs.

[1917]
IBS: Hypnotherapy--a wasted resource?
Whorwell PJ.
[abstract NOT found]

[1918]
Complementary and miscellaneous interventions for nocturnal enuresis in children.
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BACKGROUND: Nocturnal enuresis (bedwetting) is a socially disruptive and stressful condition which affects around 15% to 20% of five year olds, and up to 2% of young adults. OBJECTIVES: To assess the effects of complementary interventions and others such as surgery or diet on nocturnal enuresis in children, and to compare them with other interventions. SEARCH METHODS: We searched PubMed (1950 to June 2010), EMBASE (1980 to June 2010), the Traditional Chinese Medical Literature Analysis and Retrieval System (TCMLARS) (1984 to June 2010), Chinese Biomedical Literature Database (CBM) (1975 to June 2010), China National Knowledge Infrastructure (CNKI) (1979 to
Since hypnosis was popularly recognized in the nineteenth century, the phenomenon of hypnotizability has remained poorly understood. The capacity to increase hypnotizability has important implications because it may increase the number of people who can benefit from hypnotic interventions for psychological and medical conditions. Current theories emphasize that rapport between hypnotist and subject is pivotal to motivate the respondent to engage in strategies that enhance a range of social behaviors in animals and humans. This study tested the proposal that oxytocin administration, which enhances social bonding in humans, may enhance hypnotic responding by administering intranasal spray of oxytocin or placebo prior to hypnosis in 40 low hypnotizable male subjects. When low hypnotizable individuals were administered oxytocin via nasal spray, their level of hypnotic responding increased significantly compared to hypnotic responding levels prior to oxytocin administration. This is the first demonstration of a neurochemical basis for hypnotic responding, and points to a potential neural mechanism to explain hypnotizability.

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BACKGROUND: Irritable Bowel Syndrome (IBS) is a common gastro-intestinal disorder in primary and secondary care, characterised by abdominal pain, discomfort, altered bowel habits and/or symptoms of bloating and distension. In general the efficacy of drug therapies is poor. Hypnotherapy as well as Cognitive Behaviour Therapy and short Psychodynamic Therapy appear to be useful options for patients with refractory IBS in secondary care and are cost-effective, but the evidence is still limited. The IMAGINE-study is therefore designed to assess the overall benefit of hypnotherapy in IBS as well as comparing the efficacy of individual versus group hypnotherapy in treating this condition. METHODS/DESIGN: The design is a randomised placebo-controlled trial. The study group consists of 354 primary care and secondary care patients (aged 18-65) with IBS (Rome-III criteria). Patients will be randomly allocated to either 6 sessions of individual hypnotherapy, 6 sessions of group hypnotherapy or 6 sessions of educational supportive therapy in a group (placebo), with a follow up of 9 months post treatment for all patients. Ten hospitals and four primary care psychological practices in different parts of The Netherlands will collaborate in this study. The primary efficacy parameter is the responder rate for adequate relief of IBS symptoms. Secondary efficacy parameters are changes in the IBS symptom severity, quality of life, cognitions, psychological complaints, self-efficacy as well as direct and indirect costs of the condition. Hypnotherapy is expected to be more effective than the control therapy, and group hypnotherapy is expected not to be inferior to individual hypnotherapy. DISCUSSION: If hypnotherapy is effective and if there is no difference in efficacy between individual and group hypnotherapy, this group form of treatment could be offered to more IBS patients, at lower costs. TRIAL REGISTRATION NUMBER: ISRCTN: ISRCTN22888906.
OBJECTIVE: Current evidence supports the efficacy of hypnosis for reducing the pain associated with experimental stimulation and various acute and chronic conditions; however, the mechanisms explaining how hypnosis exerts its effects remain less clear. The hypothalamic-pituitary-adrenal (HPA) axis and pro-inflammatory cytokines represent potential targets for investigation given their purported roles in the perpetuation of painful conditions; yet, no clinical trials have thus far examined the influence of hypnosis on these mechanisms. DESIGN: Healthy participants, highly susceptible to the effects of hypnosis, were randomized to either a hypnosis intervention or a no-intervention control. Using a cold pressor task, assessments of pain intensity and pain unpleasantness were collected prior to the intervention (Pre) and following the intervention (Post) along with pain-provoked changes in salivary cortisol and the soluble tumor necrosis factor-α receptor II (sTNFαRII). RESULTS: Compared with the no-intervention control, data analyses revealed that hypnosis significantly reduced pain intensity and pain unpleasantness. Hypnosis was not significantly associated with suppression of cortisol or sTNFαRII reactivity to acute pain from Pre to Post; however, the effect sizes for these associations were medium-sized. CONCLUSIONS: Overall, the findings from this randomized controlled pilot study support the importance of a future large-scale study on the effects of hypnosis for modulating pain-related changes of the HPA axis and pro-inflammatory cytokines.

During the late nineteenth and early twentieth centuries, German medical hypnotists sought to gain a therapeutic and epistemological monopoly over hypnosis. In order to do this, however, these physicians were required to engage in a complex multi-dimensional form of boundary-work, which was intended on the one hand to convince the medical community of the legitimacy and efficacy of hypnosis and on the other to demarcate their use of suggestion from that of stage hypnotists, magnetic healers, and occultists. While the epistemological, professional, and legal boundaries that medical hypnotists erected helped both exclude lay practitioners from this field and sanitize the medical use of hypnosis, the esoteric interests, and sensational public experiments of some of these researchers, which mimicked the theatricality and occult interests of their lay competitors, blurred the distinctions that these professionals were attempting to draw between their "legitimate" medical use of hypnosis and the "illegitimate" lay and occult use of it.

Erotomania is the delusional belief that one is loved from afar by another person (the target). This study used hypnosis as a novel cognitive neuropsychological research tool to model erotomania. The authors developed 2 versions of a hypnotic erotomania suggestion and tested their impact by asking subjects to recall and interpret a story featuring ambiguous scenarios. They also challenged the delusion by asking subjects to justify their beliefs. The hypnotic erotomania suggestions successfully recreated the features of the clinical delusion for many high hypnotizable subjects. They believed that the target loved them, interpreted ambiguous information consistent with this belief and confabulated evidence in service of their delusion. Some also resisted all challenges to their delusion. These features are strikingly similar to clinical cases and highlight the value of using hypnosis to model clinical delusions. The authors also discuss some limitations of this approach.

This study (N = 37 with high, medium, and low hypnotizables) evaluated depth reports and EEG activity during both voluntary and hypnotically induced left-arm lifting with sLORETA functional neuroimaging. The hypnotic condition was associated with higher activity in fast EEG frequencies in anterior regions and slow EEG frequencies in central-parietal regions, all left-sided. The voluntary condition was associated with fast frequency activity in right-hemisphere central-
parietal regions and slow frequency activity in left anterior regions. Hypnotizability did not have a significant effect on EEG activity, but hypnotic depth correlated with left hemisphere increased anterior slow EEG and decreased central fast EEG activity. Hypnosis had a minimal effect on depth reports among lows, a moderate one among mediums, and a large one among highs. Because only left-arm data were available, the full role of the hemispheres remains to be clarified.

[1925]
Hypnotizability-related differences in written language.
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The study analyzed the writing products of subjects with high (highs) and low (lows) hypnotizability. The participants were asked to write short texts in response to highly imaginative scenarios in standard conditions. The texts were processed through computerized and manual methods. The results showed that the highs’ texts were more sophisticated due to a higher number of abstract nouns, more intense and imaginative due to a larger number of similes, metaphors, and onomatopoeias, and less detailed due to a higher nouns-to-adjecitives ratio. The differences in the use of abstract nouns and highly imageable expressions are discussed in relation to the preeminent left-hemisphere activity of highs during wakefulness and to a possibly different involvement of the precuneus, which is involved in hypnotic phenomena.

[1926]
The cognitive demands of hypnotic response.
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This study tests the proposal that hypnotic responding is effortless. The authors compared the responses of high and low hypnotizable participants (N = 70) in and out of hypnosis on a dual-task paradigm in which they were required to maintain hypnotic blindness during presentation of visual stimuli of varying salience intensities while simultaneously completing a secondary task. Whereas high hypnotizable participants in both hypnosis and wake conditions reported comparable levels of conviction in the hallucination suggestion, hypnotized highs performed poorer on the secondary task when the stimulus was present. Performance on the secondary task deteriorated when the visual stimulus was intensified. These findings contradict the notion that hypnotic response is not demanding on cognitive resources and suggest that increased effort is required to resolve the extent of conflict between reality and suggestion.

[1927]
Cerebral blood flow evaluation during the hypnotic state with transcranial Doppler sonography.
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Cerebral blood flow was measured in normal waking (alert relaxed mental imagery) and hypnotic states. Mean flow velocity (Vm) in the middle cerebral artery (MCA) was significantly increased in hypnosis (Condition II) from Condition I (5 minutes before hypnotic induction). Vm decreased in Condition III (hypnotic imagination). After hypnosis, Vm values returned to baseline. Pulsatility index values and resistive index values showed significant variations during sonographic monitoring between Conditions I and IV (5 minutes after the completion of hypnosis). Both values were significantly higher in Condition I than IV. These findings show that hypnotic status can modulate cerebral blood flow.

[1928]
Electromyographic investigation of hypnotic arm levitation: differences between voluntary arm elevation and involuntary arm levitation.
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Thirty-three volunteers were randomly exposed to 3 conditions: hypnotic arm levitation, holding up the arm voluntarily without hypnotosis, and imagined arm lifting without hypnosis. Trapezius, deltoid, extensor digitorum, flexor digitorum profundus, biceps brachii, and triceps brachii muscles were measured. Strain and muscle activity during lifting and holding up the right arm for 3 minutes were used as dependent variables. During hypnotic arm levitation, the total muscle activity was lower than during holding it up voluntarily (p < .01); the activity in the deltoid was 27% lower (p < .001). Without hypnosis, the muscle activity showed a positive correlation with strain. However, there was no such correlation in the hypnotic condition. Apparently, it is possible to reduce strain and to objectively measure muscle activity in an uplifted arm through hypnotic arm levitation.
Loin pain hematuria is characterized by chronic loin pain, hematuria, and dysuria. There are no known effective treatments for loin pain hematuria and longer term use of analgesics and surgical options are often ineffective or associated with negative side effects. This article reports on a 17-year-old female patient diagnosed with loin pain hematuria who presented with unilateral, uncontrolled loin pain following numerous unsuccessful attempts at controlling her symptoms with traditional medical interventions, including antibiotics, opioids, and renal denervation. The patient received 8 sessions of hypnotherapy. Baseline, endpoint, and follow-up measures administered included the General Health Questionnaire, Hospital Anxiety and Depression Scale, McGill Pain Questionnaire, Pain Discomfort Scale, and visual analogue measures of pain, academic interference, and social interference. At follow-up, results indicated clinically significant decreases in pain, anxiety, and depression with nearly complete remission of presenting symptoms.
INTRODUCTION: Mirrored-self misidentification is the delusional belief that one's reflection in the mirror is a stranger. According to Langdon and Coltheart's (2000) "two-factor" theory of monothematic delusions, the delusion can arise from deficits in face processing (Factor 1) and belief evaluation (Factor 2). This study gave participants separate hypnotic suggestions for these two factors to create a hypnotic analogue of the delusion. METHOD: Forty-six high hypnotizable participants received a hypnotic suggestion for either Factor 1 alone or for Factors 1 and 2, either with hypnosis (hypnosis condition) or without (wake condition). Participants were asked to look into a mirror and to describe what they saw. Participants who reported seeing a stranger in the mirror also received a series of challenges. RESULTS: Overall, 70% of participants in the hypnosis condition passed the delusion; only 22% of participants in the wake condition passed. Importantly, in hypnosis, the Factor 1 alone suggestion was just as effective in creating the delusion as the combined Factor 1 and Factor 2 suggestion. CONCLUSION: These results suggest that hypnotic suggestion can recreate the mirrored-self misidentification delusion from its component factors. Notably, the hypnotic context, itself known to disrupt belief evaluation, can act as Factor 2.


Inflammatory bowel diseases (IBD) are chronic inflammatory illnesses marked by unpredictable disease flares, which occur spontaneously and/or in response to external triggers, especially personal health behaviors. Behavioral triggers of flare may be responsive to disease self-management programs. We report on interim findings of a randomized controlled trial of gut-directed hypnotherapy (HYP, n = 19) versus active attention control (CON, n = 17) for quiescent ulcerative colitis (UC). To date, 43 participants have enrolled; after 5 discontinuations (1 in HYP) and 2 exclusions due to excessive missing data, 36 were included in this preliminary analysis. Aim 1 was to determine the feasibility and acceptability of HYP in UC. This was achieved, demonstrated by a reasonable recruitment rate at our outpatient tertiary care clinic (20%), high retention rate (88% total), and our representative IBD sample, which is reflected by an equal distribution of gender, an age range between 21 and 69, recruitment of ethnic minorities (∽20%), and disease duration ranging from 1.5 to 35 years. Aim 2 was to estimate effect sizes on key clinical outcomes for use in future trials. Effect sizes (group × time at 20 weeks) were small to medium for IBD self-efficacy (.34), Inflammatory Bowel Disease Questionnaire (IBDQ) total score (.41), IBDQ bowel (.50), and systemic health (.48). Between-group effects were observed for the IBDQ bowel health subscale (HYP > CON; p = .05) at 20 weeks and the Short Form 12 Health Survey Version 2 (SF-12v2) physical component (HYP > CON; p < .05) at posttreatment and 20 weeks. This study supports future clinical trials testing gut-directed HYP as a relapse prevention tool for IBD.


INTRODUCTION: The present study was performed to evaluate the efficacy of Ericksonian hypnosis in reducing the impact of tinnitus on patients’ quality of life. PATIENTS AND METHODS: A controlled prospective longitudinal study was designed. The severity of tinnitus was assessed with Tinnitus Handicap Inventory (THI) before hypnotherapy and then 1 week, 1 month, 3 months, and 6 months after therapy. Health Survey SF-36 was used to assess health-related quality of life before and after hypnotherapy. Thirty-nine patients with severe idiopathic subjective tinnitus were enrolled in the study. RESULTS: The mean SD age of the patients was 44.5 +/- 12.5 years, ranging from 21 to 65 years; 48% were female. Mean THI scores assessed at the beginning and 4 times after commencement of therapy were evaluated. The changes in THI scores were significant. Health Survey SF-36 was assessed separately. The greatest increases were seen in physical role followed by emotional role difficulty. CONCLUSION: The preliminary results of our study demonstrated the effectiveness of Ericksonian hypnosis in the study group.

In the present study, the authors factor-analyzed responses from 1,141 American undergraduate students to the Valencia Scale of Attitudes and Beliefs Toward Hypnosis-Client Version. They obtained an 8-factor solution accounting for 66% of the total variance in responses. A confirmatory factor analysis indicated acceptable fit of their model and those reported earlier by Carvalho et al. (2007) and Capafons, Mendoza, et al. (2008) using Portuguese and international samples, respectively. Unlike previous factor analyses of the scale, the authors obtained an independent clusters solution. Distinctions between the authors’ model and those reported previously are discussed.

[1937]
Hypnosis to alleviate the symptoms of ciguatera toxicity: a case study.
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Ciguatera toxicity is a poisoning from consuming reef fish that had fed on dinoflagellates such as Gambierdiscus toxicus found along coral reefs. The toxin is oil soluble, odorless, colorless, tasteless, heat stable, and is concentrated in larger carnivorous fish such as amberjack, barracuda, eel, grouper, red snapper, sea bass, and Spanish mackerel. Onset of symptoms is usually within 6-12 hours after ingestion. Gastrointestinal symptoms lasting 1-2 days include abdominal pain, nausea, vomiting, and diarrhea. Neurological symptoms may persist for weeks or several months or—rarely—years and include circumoral and extremity paresthesias, temperature sensation reversal, itching, weakness, ataxia, and others. A patient with burning hands and feet who had not found relief using other methods had diagnosis of ciguatera toxicity assisted by hypnotically refreshed memory followed by rapid relief with hypnotic suggestions in 1 session and remained free of symptoms.

[1938]
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This case series evaluated the use of virtual reality hypnosis (VRH) for the treatment of pain associated with multiple fractures from traumatic injuries. VRH treatment was administered on 2 consecutive days, and pain and anxiety were assessed each day before and after VRH treatment as well as on Day 3, which was 24 hours after the second treatment session. Pain reduction from baseline to Day 3 was from 70% to 30%, despite opioid analgesic use remaining stable. The subjective pain reduction reported by patients was encouraging, and the results of this case series suggest the importance of further study of VRH with larger samples using randomized controlled trials.

[1939]
Hypnotic intervention in a 7-year-old thumbsucker: a case study.
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Thumbsucking is a common habit among younger children. Usually, the child outgrows this habit by age 6. When a child over the age of 6 continues to suck his or her thumb, it can be a cause of potential harm due to peer pressure, ridicule, and shunning. It can also lead to malocclusions requiring eventual orthodontic interventions. In this case study, the author demonstrates a hypnotic intervention in a 7-year-old girl. Validation of her habit and imaging a role model sucking her thumb were employed in trance. Using this approach, the child was able to end her dependence on thumbsucking in 1 session.

[1940]
Hypnotic relaxation vs amitriptyline for tension-type headache: let the patient choose.
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BACKGROUND: Although both pharmacological and behavioral interventions may relieve tension-type headache, data are lacking regarding treatment preference, long-term patient compliance, and feasibility of behavioral intervention in a standard neurological outpatient clinic setting. OBJECTIVE: To describe patient choice, long-term compliance, and clinical outcome in a neurological clinic setting where patients are given the choice of the approach they wish to pursue. DESIGN: Patients presenting to the headache clinic with a diagnosis of tension-type headache that justified prophylactic
therapy (frequent episodic tension-type headache or chronic tension-type headache) were given the choice of amitriptyline (AMT) treatment or hypnotic relaxation (HR), and were treated accordingly. Patients were given the option to cross-over to the other treatment group at each visit. HR was performed during standard length neurology clinic appointments by a neurologist trained to perform hypnosis (Y.E.). Follow-up interviews were performed between 6 and 12 months following treatment initiation to evaluate patient compliance, changes in headache frequency or severity, and quality-of-life parameters. RESULTS: Ninety-eight patients were enrolled, 92 agreed to receive prophylactic therapy of some kind. Fifty-three (57.6%) patients chose HR of which 36 (67.9%) actually initiated this treatment, while 39 (42.4%) chose pharmacological therapy with AMT of which 25 (64.1%) patients actually initiated therapy. Patients with greater analgesic use were more likely to opt for AMT (P=.0002). Eleven of the patients initially choosing AMT and 2 of the patients initially choosing HR crossed over to the other group. Seventy-four percent of the patients in the HR group and 58% of patients in the AMT group had a 50% reduction in the frequency of headaches (P=.16). Long-term adherence to treatment with HR exceeded that of AMT. At the end of the study period, 26 of 47 patients who tried HR compared with 10 of 27 who tried AMT continued receiving their initial treatment. CONCLUSIONS: HR treatment was a more popular choice among patients. Patients choosing HR reported greater symptom relief than those choosing AMT and were found to have greater treatment compliance. Patients receiving HR were less likely to change treatments. HR practiced by a neurologist is feasible in a standard neurological outpatient clinic setting; HR training should be considered for neurologists involved in headache treatment. © 2011 American Headache Society.

[1941]
The art of suggestion: the use of hypnosis in dentistry.
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Hypnodontics, or the use of hypnosis in dentistry, is not widely used throughout the dental profession. Many patients seeking to use this therapy to help them access dental treatment are forced to seek treatment from non-clinically trained hypnotherapists. This article aims to explore what hypnosis is, its applications in dentistry and provide a brief insight into how these hypnotic concepts may be put to use in day-to-day dental practice.

[1942]
Relaxation versus fractionation as hypnotic deepening: do they differ in physiological changes?
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After rapid hypnotic induction, 12 healthy volunteers underwent hypnotic deepening with relaxation or with fractionation (without relaxation) in a random latin-square protocol. Electroencephalographic occipital alpha activity was measured, low-resolution brain electromagnetic tomography was performed, and hemodynamics (stroke volume, heart rate, cardiac output, mean arterial blood pressure, forearm arterial flow and resistance) were monitored in basal conditions and after deepening. After relaxation, both forearm flow (-18%) and blood pressure (-4%) decreased; forearm resistance remained unchanged. After fractionation, a forearm flow decrease comparable to that recorded after relaxation was observed, but blood pressure remained unchanged, leading to an increase of forearm resistance (+51%). Central hemodynamics did not change. Alpha activity increased in the precuneus after fractionation only. In conclusion, both relaxation and fractionation have vasoconstrictor effects, but fractionation is also associated with an increase in peripheral resistance.

[1943]
An itinerant mesmerist.
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Mesmerism had its roots in late 18th century France, but it was not until the 1830s in Britain that it was systematically applied to the problem of pain. The application of mesmerism in the clinical setting was extremely contentious and it was with some relief that doctors turned to the far more consistent results of chemical anaesthesia. However, though mesmerism were superseded by chemical anaesthetic agents in many areas of application, mesmerism continued to have a life during the second half of the 19th century. In the 1850s, the decade following the introduction of ether and chloroform, Dr John Elliotson established the London Mesmeric Infirmary, in which he used mesmerism both therapeutically and for pain relief, and established a training programme for apprentice mesmerists. In the mid-1890s on the other side of the globe, Mr Newham Waterworth travelled from Tasmania up the east coast of Australia, performing public demonstrations of mesmerism for pain relief during dental extractions. The first of these took place in Hobart in 1890, more than 40 years after many in Britain had declared mesmerism dead. The extractions were performed by respected dentists and, according to witnesses, Waterworth's mesmerism produced the same effects of insensibility to pain as ether and chloroform. With an examination of the continued application of mesmerism after the advent of professional hypnosis...
chemical anaesthesia, this paper will focus on the work of Newham Waterworth in the 1890s and speculate as to why mesmerism might have resurfaced to some appeal in the Australian colonies in this period.

[1944]
Building false memories without suggestions.
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People can come to remember doing things they have never done. The question we asked in this study is whether people can systematically come to remember performing actions they never really did, in the absence of any suggestion from the experimenter. People built LEGO vehicles, performing some steps but not others. For half the people, all the pieces needed to assemble each vehicle were laid out in order in front of them while they did the building; for the other half, the pieces were hidden from view. The next day, everyone returned for a surprise recognition test. People falsely and confidently remembered having carried out steps they did not; those who saw all the pieces while they built each vehicle were more likely to correctly remember performing steps they did perform but equally likely to falsely remember performing steps they did not. We explain our results using the source monitoring framework: People used the relationships between actions to internally generate the missing, related actions, later mistaking that information for genuine experience.

[1945]
Meditation over medication for irritable bowel syndrome? On exercise and alternative treatments for irritable bowel syndrome.
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Complimentary alternative treatment regimens are widely used in irritable bowel syndrome (IBS), but the evidence supporting their use varies. For psychological treatment options, such as cognitive behavioral therapy, mindfulness, gut-directed hypnotherapy, and psychodynamic therapy, the evidence supporting their use in IBS patients is strong, but the availability limits their use in clinical practice. Dietary interventions are commonly included in the management of IBS patients, but these are primarily based on studies assessing physiological function in relation to dietary components, and to a lesser degree upon research examining the role of dietary components in the therapeutic management of IBS. Several probiotic products improve a range of symptoms in IBS patients. Physical activity is of benefit for health in general and recent data implicates its usefulness also for IBS patients. Acupuncture does not seem to have an effect beyond placebo in IBS. A beneficial effect of some herbal treatments has been reported.

[1946]
Mind-body interventions for treatment of phantom limb pain in persons with amputation.
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Phantom limb pain (PLP) is a significant source of chronic pain in most persons with amputation at some time in their clinical course. Pharmacologic therapies for this condition are often only moderately effective and may produce unwanted adverse effects. There is growing empirical evidence of the therapeutic effectiveness of mind-body therapies for the relief of chronic pain; therefore, an exploration of their role in relieving amputation-related chronic pain is warranted. We undertook a focused literature review on mind-body interventions for patients with amputation who experience PLP. Because of study heterogeneity, only descriptive presentations of the studies are presented. Only studies of hypnosis, imagery, and biofeedback, including visual mirror feedback, were found: studies on meditation, yoga, and tai chi/qigong were missing from the literature. Few studies of specific mind-body therapies were dedicated to management of PLP, with the exception of mirror visual therapy. Overall, studies were largely exploratory and reflect considerable variability in the application of mind-body techniques, making definitive conclusions inadvisable. Nevertheless, the weight of existing findings indicates that a mind-body approach to PLP pain management is promising and that specific methods may offer either temporary or long-term relief, either alone or in combination with conventional therapies. The authors discuss the potential for usefulness of specific mind-body therapies and the relevance of their mechanisms of action to those of PLP, including targeting cortical reorganization, autonomic nervous system deregulation, stress management, coping ability, and quality-of-life. The authors recommend more and better quality research exploring the efficacy and mechanisms of action.

[1947]
Hypnosis is recognised in medicine as an effective complementary therapy. However, few qualitative data are available concerning the benefits it may bring. This qualitative exploratory study aimed to examine the contribution of hypnosis to the care of advanced cancer patients. Results demonstrate that hypnosis is an effective and efficient means of developing the resources of people suffering from serious illness. After an average of four hypnotherapy sessions, patients said they were able to locate previously unexploited resources within themselves and were able to become autonomous in the use of self-hypnosis. The major benefit reported concerned a reduction in anxiety. For patients experiencing anxiety about death, hypnosis allowed them, within a therapeutic environment perceived as safe, to explore different facets of their fears and to develop adaptive strategies. Aside from slight fatigue experienced during the sessions, no adverse side-effects were reported. In conclusion, this study exploring the effects of hypnosis allowed us to identify important benefits for patients suffering from advanced cancer. Consequently, replication on a larger scale is recommended in order to ascertain the extent to which it is possible to generalise from these results and in order better to define the characteristics of patients most likely to benefit from this therapy.

Irritable bowel syndrome (IBS) is a frequent and invalidating functional bowel disorder with entangled mechanisms. Its therapeutic approach is therefore complex. Classical therapies, prescribed alone or in combination in light of the predominant symptom, consist of antispasmodics, fibers, laxatives, anti diarrheals, and psychotropic agents. Other emerging pharmacological therapies, such as prokinetics, prosecretory or serotoninergic agents, bile acid modulators and antibiotics have been recently studied in clinical trials. Dietary measures can include reduction of short-chain poorly absorbed carbohydrates (FODMAPs) and gluten restriction. Assessment of food allergy can be proposed in a subgroup of IBS patients. Complementary and alternative medicine therapies, that are generally low cost and safe, appear to be appreciated by patients. Probiotics have demonstrated action on the gut microbiote modulation, and may be helpful in a subset of patients. Peppermint oil has an established visceral analgesic effect. Hypnotherapy represents an original, global and effective approach. Finally, education, reassurance and listening to the patient, leading to a solid therapeutic relationship, represents an essential backdrop of remedy or diet effectiveness.

The concept of dissociation was developed in the late 19th century by Pierre Janet for conditions of "double consciousness" in hypnosis, hysteria, spirit possession and mediumship. He defined dissociation as a deficit in the capacity of integration of two or more different "systems of ideas and functions that constitute personality", and suggested that it can be related to a genetic component, to severe illness and fatigue, and particularly to experiencing adverse, potentially traumatizing events. By the late 20th century, various and often contradictory concepts of dissociation were suggested, which were either insufficient or exceedingly including when compared to the original idea. Currently, dissociation is used to describe a wide range of normal and abnormal phenomena as a process in which behaviour, thoughts and emotions can become separated one from another. A complete presentation of mechanisms involved in dissociation is still unknown. Scientific research on basic processes of dissociation is derived mainly from studies of hypnosis and post-traumatic stress disorder. Given the controversies in modern concepts of dissociation, some researchers and theorists suggest return to the original understanding of dissociation as a basic premise for the further development of the concept of dissociation.

OPINION STATEMENT: Treatment of violent behaviors in sleep depends on the underlying condition and a correct identification of the causative disorder is mandatory. After eliminating possible precipitating factors, pharmacological treatment is often required to control violent sleep behaviors. Although no drugs are specifically approved for the
treatment of parasomnias and placebo-controlled trials are lacking in these patient populations, clonazepam is considered the drug of choice in the management of both Non-REM and REM parasomnias. Benzodiazepines may cause unwanted side effects especially in older individuals and tolerance is sometime observed. Melatonin and pramipexole may represent alternative options in REM sleep behavior disorder. Hypnosis therapy may be considered in arousal disorders when pharmacological treatment is contraindicated or ineffective. Management of nocturnal frontal lobe epilepsy include a first-step pharmacological approach with antiepileptic drugs (eg, carbamazepine, oxcarbazepine or other drugs effective on partial seizures), but surgical options may be considered in drug refractory patients. The published evidence for the efficacy of various treatments relies mostly upon case series or case reports.

[1951]
Virtual reality exposure therapy and hypnosis for flying phobia in a treatment-resistant patient: a case report.
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Flying phobia is a problem that affects a significant portion of the population. There are a number of therapeutic approaches but no one is universally accepted as the gold standard. One therapy is hypnosis. A recent addition to the armamentarium is virtual reality exposure (VRE) therapy. Both therapies are short-term and compare favorably to in vivo desensitization. Heretofore a combination of both approaches has not been reported. This article presents a case of a 50-year-old woman with a hypnotherapy intervention to fly that was refractory to traditional methods including pharmacotherapy, systematic desensitization, and cognitive behavioral therapy but was successfully treated using VRE therapy and hypnosis as the primary modalities. This treatment was supplemented by other approaches. The rationale for this multimodal therapy and possible mechanisms involved are discussed.

[1952]
Clinical hypnosis before external cephalic version.
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Three to four percent of full-term singleton pregnancies present themselves as breech deliveries. External cephalic version (ECV) is a procedure to try to turn a breech fetus to cephalic by externally maneuvering the fetus through the maternal abdomen. This trial examines a clinical hypnosis intervention against standard medical care of women before ECV. A total of 78 women, who received a hypnosis intervention prior to ECV, had a 41.6% (n = 32) successful ECV, whereas the control group of 122, who had similar baseline characteristics, had a 27.3% (n = 33) successful ECV procedure (p < 0.05). This trial found that a relaxation technique with the help of clinical hypnosis was successful at increasing the likelihood of a successful ECV procedure.

[1953]
Menopause. 2012 Oct 22. [Epub ahead of print]
Clinical hypnosis in the treatment of postmenopausal hot flashes: a randomized controlled trial.
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OBJECTIVE: The use of estrogen and progesterone to manage vasomotor symptoms (ie, hot flashes and night sweats) has declined because of concerns about their risks, and there is an increased interest in alternate, effective, and low-risk treatments. This study reports the results of a randomized controlled trial of clinical hypnosis for treating vasomotor symptoms among postmenopausal women. METHODS: This is a randomized, single-blind, controlled, clinical trial involving 187 postmenopausal women reporting a minimum of seven hot flashes per day (or at least 50 hot flashes a week) at baseline between December 2008 and April 2012. Eligible participants received five weekly sessions of either clinical hypnosis or structured-attention control. Primary outcomes were hot flash frequency (subjectively and physiologically recorded) and hot flash score assessed by daily diaries on weeks 2 to 6 and week 12. Secondary outcomes included measures of hot flash-related daily interference, sleep quality, and treatment satisfaction. RESULTS: In a modified intent-to-treat analysis that included all randomized participants who provided data, reported subjective hot flash frequency from baseline to week 12 showed a mean reduction of 55.82 (74.16%) hot flashes for the clinical hypnosis intervention versus a mean reduction of 12.89 (17.13%) hot flashes for controls (P < 0.001; 95% CI, 36.15-49.67). The mean reduction in hot flash score was 18.83 (80.32%) for the clinical hypnosis intervention as compared with 3.53 (15.38%) for controls (P < 0.001; 95% CI, 12.60-17.54). At 12-week follow-up, the mean reduction in physiologically monitored hot flashes was 5.92 (56.86%) for clinical hypnosis and 0.88 (9.94%) for controls (P < 0.001; 95% CI, 2.00-5.46). Secondary outcomes were significantly improved compared with controls at 12-week follow-up: hot flash-related interference (P < 0.001; 95% CI, 2.74-4.02), sleep quality (P < 0.001; 95% CI, 3.65-5.84), and treatment satisfaction (P < 0.001; 95% CI, 7.79-8.59). CONCLUSIONS: Compared with structured-attention control, clinical hypnosis results in...
significant reductions in self-reported and physiologically measured hot flashes and hot flash scores in postmenopausal women.

[1954]

A 4-year old boy presented severe obstructive sleep apnoea due to complete nasal obstruction secondary to cherubism. Because of anticipatory anxiety due to numerous surgical interventions, medical hypnosis was proposed to facilitate non-invasive continuous positive pressure ventilation (CPAP) acceptance. CPAP by means of an oral interface was completely accepted after three hypnosis sessions and resulted in the correction of his obstructive sleep apnea (OSA) syndrome. This report highlights the benefit of medical hypnosis in facilitating CPAP acceptance as well as the efficacy of mouthpiece ventilation in a severe form of cherubism with complete nasal obstruction. Pediatri Pulmonol. © 2012 Wiley Periodicals, Inc.

[1955]

[1956]
Hypnosis versus diazepam for embryo transfer: a randomized controlled study. Catoire P(1), Delaunay L, Dannappel T, Baracchini D, Marcadet-Fredet S, Moreau O, Pacaud L, Przyrowski D, Marret E.
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Levitas et al. (2006) showed in a cohort study that hypnosis during embryo transfer (ET) increased pregnancy ratio by 76%. In order to evaluate hypnosis during ET in a general population, the authors performed a randomized prospective controlled study comparing diazepam (usual premedication) administered before ET plus muscle relaxation versus hypnosis plus placebo in 94 patients. Additionally, the authors studied anxiety pre and post ET. Anxiety scores were not different in the two groups before and after ET. No difference in pregnancy and birth ratio was found in the two groups. Hypnosis during ET is as effective as diazepam in terms of pregnancy ratio and anxiolytic effects, but with fewer side effects and should be routinely available.

[1957]
Focused suggestion with somatic anchoring technique: rapid self-hypnosis for pain management. Donatone B.
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This article details a self-hypnosis technique designed to teach patients how to manage acute or chronic pain through directed focus. The focused suggestion with somatic anchoring technique has been used with various types of pain, including somatic pain (arthritis, post-injury pain from bone breaks, or muscle tears), visceral pain (related to irritable bowel disease), and neuropathic pain (related to multiple sclerosis). This technique combines cognitive restructuring and mindfulness meditation with indirect and direct suggestions during hypnosis. The case examples demonstrate how the focused suggestion with somatic anchoring technique is used with both acute and chronic pain conditions when use of long-term medication has been relatively ineffective.

[1958]
Long-term success of GUT-directed group hypnosis for patients with refractory irritable bowel syndrome: a randomized controlled trial.
OBJECTIVES: Gut-directed hypnotherapy (GHT) in individual sessions is highly effective in the treatment of irritable bowel syndrome (IBS). This study aimed to assess the long-term effect of GHT in group sessions for refractory IBS.

METHODS: A total of 164 patients with IBS (Rome-III-criteria) were screened, and 100 refractory to usual treatment were randomized 1:1 either to supportive talks with medical treatment (SMT) or to SMT with GHT (10 weekly sessions within 12 weeks). The primary end point was a clinically important improvement on several dimensions of daily life (assessed by IBS impact scale) after treatment and 12-month follow-up. The secondary end point was improvement in general quality of life (QOL; Medical Outcome Study Short-Form-36), psychological status (Hospital Anxiety Depression Scale) and reduction of single IBS symptoms. Analysis was by intention to treat. RESULTS: A total of 90 patients received allocated intervention. After treatment, 28 (60.8%) out of 46 GHT patients and 18 (40.9%) out of 44 SMTs improved (absolute difference 20.0%; 95% confidence interval (CI): 0-40.2%; P=0.046); over 15 months, 54.3% of GHT patients and 25.0% of controls improved (absolute difference 29.4%; 95% CI 10.1-48.6%; P=0.004). GHT with SMT improved physical and psychological well being significantly more than SMT alone (P<0.001). Gender, age, disease duration and IBS type did not have an influence on the long-term success of GHT. CONCLUSIONS: GHT improves IBS-related QOL, is superior to SMT alone, and shows a long-term effect even in refractory IBS.

Hypnotherapy: first line treatment for children with irritable bowel syndrome?
Whorwell PJ.

[ABSTRACT NOT FOUND]

Rutten JM(1), Reitsma JB, Vlieger AM, Benninga MA.

OBJECTIVES: Gut directed hypnotherapy (HT) is shown to be effective in adult functional abdominal pain (FAP) and irritable bowel syndrome (IBS) patients. We performed a systematic review to assess efficacy of HT in paediatric FAP/IBS patients. METHODS: We searched Medline, Embase, PsychINFO, Cumulative Index to Nursing and Allied Health Literature databases and Cochrane Central Register of Controlled Trials for randomised controlled trials (RCT) in children with FAP or IBS, investigating efficacy of HT on the following outcomes: abdominal pain scores, quality of life, costs and school absenteeism. RESULTS: Three RCT comparing HT to a control treatment were included with sample sizes ranging from 22 to 52 children. We refrained from statistical pooling because of low number of studies and many differences in design and outcomes. Two studies examined HT performed by a therapist, one examined HT through self-exercises on audio CD. All trials showed statistically significantly greater improvement in abdominal pain scores among children receiving HT. One trial reported benefits sustained after 1 year of follow-up. One trial reported statistically significant improvement in quality of life in the HT group. Two trials reported significant reductions in school absenteeism after HT. CONCLUSIONS: Therapeutic effects of HT seem superior to standard medical care in children with FAP or IBS. It remains difficult to quantify exact benefits. The need for more high quality research is evident.

Boosting human learning by hypnosis.
Nemeth D(1), Janacek K, Polner B, KovacsZA.

OBJECTIVES: Human learning and memory depend on multiple cognitive systems related to dissociable brain structures. These systems interact not only in cooperative but also sometimes competitive ways in optimizing performance. Previous studies showed that manipulations reducing the engagement of frontal lobe-mediated explicit attentional processes could lead to improved performance in striatum-related procedural learning. In our study, hypnosis was used as a tool to reduce...
the competition between these 2 systems. We compared learning in hypnosis and in the alert state and found that hypnosis boosted striatum-dependent sequence learning. Since frontal lobe-dependent processes are primarily affected by hypnosis, this finding could be attributed to the disruption of the explicit attentional processes. Our result sheds light not only on the competitive nature of brain systems in cognitive processes but also could have important implications for training and rehabilitation programs, especially for developing new methods to improve human learning and memory performance.

[1962]
Keeping the balance—an overview of mind-body therapies in pediatric oncology.
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This overview aims to give a brief introduction for clinicians in the wide field of Mind-Body Therapies (MBTs), to summarize the current research status of MBTs in pediatric oncology and to mention challenges for future goals. Most used techniques (relaxation, hypnosis, yoga, massage, MBSR, eurythmy) will be described and efficacy will be discussed. MBTs are an enhancement of conventional medicine to motivate the patient to participate in his recovery. Most MBTs are of low risk and are accessible for patients and their families in nearly all stadium of cancer therapy. Positive results include increased self-confidence and a more optimistic view in coping with the illness. We encourage clinicians to be more aware of the promising field of MBTs and its use in pediatric oncology. Copyright © 2012 Elsevier Ltd. All rights reserved.

[1963]
Tranceformations: hypnosis in brain and body.
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In this review, the role of hypnosis and related psychotherapeutic techniques are discussed in relation to the anxiety disorders. In particular, anxiety is addressed as a special form of mind/body problem involving reverberating interaction between mental and physical distress. The history of hypnosis as a therapeutic discipline is reviewed, after which neurobiological evidence of the effect of hypnosis on modulation of perception in the brain. Specific brain regions involved in hypnosis are reviewed, notably the dorsal anterior cingulate gyrus and the dorsolateral prefrontal cortex. The importance of hypnotizability as a trait, stable variability in hypnotic responsiveness, is discussed. Analogies between the hypnotic state and dissociative reactions to trauma are presented, and the uses of hypnosis in treating posttraumatic stress disorder, stressful situations, and phobias as well as outcome data are reviewed. Effects of hypnosis on control of somatic processes are discussed, and then effects of psychosocial support involving Supportive-Expressive Group Therapy and hypnosis on survival time for cancer patients are evaluated. The evidence indicates an important role for hypnosis in managing anxiety disorders and anxiety related to medical illness. © 2013 Wiley Periodicals, Inc.

[1964]
[Effects of hypnosis in dental care].
[Article in French]
Jugé C(1), Tubert-Jeannin S.
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OBJECTIVE: Hypnosis is widely used in medicine and dentistry, but many practitioners still consider it as a mysterious technique. Thus, a systematic review was conducted to assess the effects of hypnosis during dental treatment.
METHODS: A literature search was conducted on PubMed (1981-2012) to retrieve references, written in French or English, reporting controlled clinical studies that have evaluated any type of hypnosis. The quality of included studies was assessed by evaluating randomisation, blindness and drop-outs. The effects of hypnosis on anxiety, physiological parameters, patients' behaviour or pain were analysed descriptively. RESULTS: The electronic search retrieved 556 references. Nine studies, generally characterized by low methodological quality, were selected. Results indicated that hypnosis has significant positive effects on anxiety, pain, behaviour and physiological parameters when it is compared...
with no treatment. When hypnosis is compared with other psychological treatment such as cognitive behavioral therapy (CBT), the effects on anxiety and behaviour are almost identical with an advantage for CBT. Individualized hypnosis brings more benefits than standardized hypnosis with audio recordings. CONCLUSION: This review demonstrated the effectiveness of hypnosis but the poor quality of the clinical studies and the multiplicity of evaluation outcomes limit the level of evidence. It is therefore necessary to conduct further clinical studies to confirm the effects of hypnosis during dental treatments. Copyright © 2013 Elsevier Masson SAS. All rights reserved.

[1965]
Mind-body therapies--use in chronic pain management.
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BACKGROUND: Chronic pain is a common presentation to general practice. OBJECTIVE: This article explores the role of the mind in the experience of pain and describes how mind-body techniques can be used in the management of chronic pain. DISCUSSION: The mind, emotions and attention play an important role in the experience of pain. In patients with chronic pain, stress, fear and depression can amplify the perception of pain. Mind-body approaches act to change a person's mental or emotional state or utilise physical movement to train attention or produce mental relaxation. They are occasionally used as a sole treatment, but more commonly as adjuncts to other therapies. Mind-body approaches include progressive muscle relaxation, meditation, laughter, mindfulness based approaches, hypnosis, guided imagery, yoga, biofeedback and cognitive behavioural therapy. Studies have shown that mind-body approaches can be effective in various conditions associated with chronic pain, however levels of evidence vary. Group delivered courses with healthcare professional input may have more beneficial effects than individual therapy. General practitioners are well placed to recommend or learn and provide a range of mind-body approaches to improve outcomes for patients with chronic pain.

[1966]
Clinical hypnosis in the treatment of postmenopausal hot flashes: a randomized controlled trial.
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OBJECTIVE: The use of estrogen and progesterone to manage vasomotor symptoms (ie, hot flashes and night sweats) has declined because of concerns about their risks, and there is an increased interest in alternate, effective, and low-risk treatments. This study reports the results of a randomized controlled trial of clinical hypnosis for treating vasomotor symptoms among postmenopausal women. METHODS: This is a randomized, single-blind, controlled, clinical trial involving 187 postmenopausal women reporting a minimum of seven hot flashes per day (or at least 50 hot flashes a week) at baseline between December 2008 and April 2012. Eligible participants received five weekly sessions of either clinical hypnosis intervention versus a mean reduction of 12.89 (17.13%) hot flashes for controls (P < 0.001; 95% CI, 36.15-49.67). The mean reduction in hot flash score was 18.83 (80.32%) for the clinical hypnosis intervention as compared with 3.53 (15.38%) for controls (P < 0.001; 95% CI, 12.60-17.54). At 12-week follow-up, the mean reduction in physiologically monitored hot flashes was 5.92 (56.86%) for clinical hypnosis and 0.88 (9.94%) for controls (P < 0.001; 95% CI, 2.00-5.46). Secondary outcomes were significantly improved compared with controls at 12-week follow-up: hot flash-related interference (P < 0.001; 95% CI, 2.74-4.02), sleep quality (P < 0.001; 95% CI, 3.65-5.84), and treatment satisfaction (P < 0.001; 95% CI, 7.79-8.59). CONCLUSIONS: Compared with structured-attention control, clinical hypnosis results in significant reductions in self-reported and physiologically measured hot flashes and hot flash scores in postmenopausal women.

[1967]
The rise and fall of forensic hypnosis.
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This paper examines the fortunes of the controversial use of hypnosis to 'enhance' autobiographical memories in postwar America. From the 1950s through the early 1980s, hypnosis became increasingly popular as a means to exhume information thought to be buried within the mind. This practice was encouraged by lay understandings of memory drawn from a material culture full of new recording devices (motion pictures, tape and then video recorders); and during the years when the practice was becoming most popular and accepted, academic psychologists developed a contrary, reconstructive, account of memory that was put to use in a series of battles meant to put an end to hypnotic recall. But popular commitment to the idea of permanent memory 'recordings' sustained the practice and the assumptions about memory and self that were associated with it, and in the face of a culture of academic psychology fully committed to the idea of 'reconstructive', malleable memory, a tidal wave of 'enhanced' memories swept America in the late 1980s and 1990s, in the so-called 'memory wars'. These, in turn, provoked academic psychologists to research the claims and counter claims central to the memory wars. The paper will also make an argument about the importance of lay knowledge in the psychological sciences explored in this paper: that popular psychological beliefs played a significant, even formative role in defining the nature of forensic psychological expertise, and also the framing of elite academic psychological research. Copyright © 2012. Published by Elsevier Ltd.

[1968]
Self-hypnosis for coping with labour pain: a randomised controlled trial.
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OBJECTIVE: To estimate the use of epidural analgesia and experienced pain during childbirth after a short antenatal training course in self-hypnosis to ease childbirth. DESIGN: Randomised, controlled, single-blinded trial using a three-arm design. SETTING: Aarhus University Hospital Skejby in Denmark during the period July 2009 until August 2011. POPULATION: A total of 1222 healthy nulliparous women. METHOD: Use of epidural analgesia and self-reported pain during delivery was compared in three groups: a hypnosis group receiving three 1-hour lessons in self-hypnosis with additional audiorecordings to ease childbirth, a relaxation group receiving three 1-hour lessons in various relaxation methods and mindfulness with audiorecordings for additional training, and a usual care group receiving ordinary antenatal care only. MAIN OUTCOME MEASURES:
Primary outcome: Use of epidural analgesia. Secondary outcomes included self-reported pain. RESULTS: There were no between-group differences in use of epidural analgesia-31.2% (95% confidence interval [95% CI] 27.1-35.3) in the hypnosis group, 29.8% (95% CI 25.7-33.8) in the relaxation group and 30.0% (95% CI 24.0-36.0) in the control group. No statistically significant differences between the three groups were observed for any of the self-reported pain measures. CONCLUSION: In this large randomised controlled trial of a brief course in self-hypnosis to ease childbirth, no differences in use of epidural analgesia or pain experience were found across study groups. Before turning down self-hypnosis as a method for pain relief, further studies are warranted with focus on specific subgroups. © 2012 The Authors BJOG An International Journal of Obstetrics and Gynaecology © 2012 RCOG.

[1969]
The functional anatomy of suggested limb paralysis.
Deeley Q(1), Oakley DA, Toone B, Bell V, Walsh E, Marquand AF, Giampietro V, Brammer MJ, Williams SC, Mehta MA, Halligan PW.
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Suggestions of limb paralysis in highly hypnotically suggestible subjects have been employed to successfully model conversion disorders, revealing similar patterns of brain activation associated with attempted movement of the affected limb. However, previous studies differ with regard to the executive regions involved during involuntary inhibition of the affected limb. This difference may have arisen as previous studies did not control for differences in hypnosis depth between conditions and/or include subjective measures to explore the experience of suggested paralysis. In the current study we employed functional magnetic resonance imaging (fMRI) to examine the functional anatomy of left and right upper limb movements in eight healthy subjects selected for high hypnotic suggestibility during (i) hypnosis (NORMAL) and (ii) attempted movement following additional left upper limb paralysis suggestions (PARALYSIS). Contrast of left upper limb motor function during NORMAL relative to PARALYSIS conditions revealed greater activation of contralateral M1/S1 and ipsilateral cerebellum, consistent with the engagement of these regions in the completion of movements. By contrast, two significant observations were noted in PARALYSIS relative to NORMAL conditions. In conjunction with reports of attempts to move the paralysed limb, greater supplementary motor area (SMA) activation was observed, a finding consistent with the role of SMA in motor intention and planning. The anterior cingulate cortex (ACC, BA 24) was also significantly more active in PARALYSIS relative to NORMAL conditions - suggesting that ACC (BA 24) may be implicated in involuntary, as well as voluntary inhibition of prepotent motor responses. Copyright © 2012 Elsevier Ltd. All
Cognitive hypotheses of hypnotic phenomena have proposed that executive attentional systems may be either inhibited or overactivated to produce a selective alteration or disconnection of some mental operations. Recent brain imaging studies have reported changes in activity in both medial (anterior cingulate) and lateral (inferior) prefrontal areas during hypnotically induced paralysis, overlapping with areas associated with attentional control as well as inhibitory processes. To compare motor inhibition mechanisms responsible for paralysis during hypnosis and those recruited by voluntary inhibition, we used electroencephalography (EEG) to record brain activity during a modified bimanual Go-Nogo task, which was performed either in a normal baseline condition or during unilateral paralysis caused by hypnotic suggestion or by simulation (in two groups of participants, each tested once with both hands valid and once with unilateral paralysis). This paradigm allowed us to identify patterns of neural activity specifically associated with hypnotically induced paralysis, relative to voluntary inhibition during simulation or Nogo trials. We used a topographical EEG analysis technique to investigate both the spatial organization and the temporal sequence of neural processes activated in these different conditions, and to localize the underlying anatomical generators through minimum-norm methods. We found that preparatory activations were similar in all conditions, despite left hypnotic paralysis, indicating preserved motor intentions. A large P3-like activity was generated by voluntary inhibition during voluntary inhibition (Nogo), with neural sources in medial prefrontal areas, while hypnotic paralysis was associated with a distinctive topography activity during the same time-range and specific sources in right inferior frontal cortex. These results add support to the view that hypnosis might act by enhancing executive control systems mediated by right prefrontal areas, but does not produce paralysis via direct motor inhibition processes normally used for the voluntary suppression of actions. Copyright © 2012 Elsevier Ltd. All rights reserved.
consciousness and, if so, whether it is causally related to responsiveness to suggestion. Evidence from brain imaging studies has been used to support claims for various altered state hypotheses, without resolving the debate. The designs of many neuroimaging studies confound the induction of hypnosis with the suggestions that can be given in or out of hypnosis, thus rendering them incapable of resolving the controversy. Brain imaging studies that do not have this confound support the hypothesis that hypnotic inductions produce changes in brain activity, but also indicate that these changes are not required for the experience of hypnotic suggestions or their neural correlates. The data remain equivocal as to whether there is a causal relation between the changes in brain activity produced by hypnotic inductions and those produced by other suggestions. It also remains uncertain whether the changes in activation produced by hypnotic inductions reflect a uniquely hypnotic state as opposed to more mundane processes. Copyright © 2012 Elsevier Ltd. All rights reserved.

[1973]
The mirror neuron system under hypnosis - brain substrates of voluntary and involuntary motor activation in hypnotic paralysis.
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INTRODUCTION: The neurobiological basis of non-organic movement impairments is still unknown. As conversion disorder and hypnotic states share many characteristics, we applied an experimental design established in conversion disorder to investigate hypnotic paralysis. METHODS: Movement imitation and observation were investigated by functional magnetic resonance imaging (fMRI) in 19 healthy subjects with and without hypnotically induced paralysis of their left hand. Paralysis-specific activation changes were explored in a multivariate model and functional interdependencies of brain regions by connectivity analysis. RESULTS: Hypnotic paralysis during movement imitation induced hypoactivation of the contralateral sensorimotor cortex (SMC) and ipsilateral cerebellum and increased activation of anterior cingulate cortex (ACC), frontal gyrus and insula. No paralysis-specific effects were revealed during movement observation. CONCLUSIONS: Hyperactivation of ACC, middle frontal gyrus (MFG), and insula might reflect attention (MFG), conflict-detection (ACC) and self-representation processes (insula) during hypnotic paralysis. The lack of effects in movement observation suggests that early motor processes are not disturbed due to the transient nature of the hypnotic impairment. Copyright © 2012. Published by Elsevier Ltd.

[1974]
Neuro-hypnotism: prospects for hypnosis and neuroscience.
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The neurophysiological substrates of hypnosis have been subject to speculation since the phenomenon got its name. Until recently, much of this research has been geared toward understanding hypnosis itself, including the biological bases of individual differences in hypnotizability, state-dependent changes in cortical activity occurring with the induction of hypnosis, and the neural correlates of response to particular hypnotic suggestions (especially the clinically useful hypnotic analgesia). More recently, hypnosis has begun to be employed as a method for manipulating subjects' mental states, both cognitive and affective, to provide information about the neural substrates of experience, thought, and action. This instrumental use of hypnosis is particularly well-suited for identifying the neural correlates of conscious and unconscious perception and memory, and of voluntary and involuntary action. Copyright © 2012 Elsevier Ltd. All rights reserved.

[1975]
Hypnosis in the right hemisphere.
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Speculations about the neural substrates of hypnosis have often focused on the right hemisphere (RH), implying that RH damage should impair hypnotic responsiveness more than left-hemisphere (LH) damage. The present study examined the performance of a patient who suffered a stroke destroying most of his LH, on slightly modified versions of two hypnotizability scales. This patient was at least modestly hypnotizable, as indicated in particular by the arm rigidity and
age regression items, suggesting that hypnosis can be mediated by the RH alone - provided that the language capacities normally found in the LH remain available. A further study of 16 patients with unilateral strokes of the LH or RH found no substantial differences in hypnotizability between the two groups. Future neuropsychological studies of hypnosis might explore the dorsal/ventral or anterior/posterior dichotomies, with special emphasis on the role of prefrontal cortex. Copyright © 2012 Elsevier Ltd. All rights reserved.

[1976]
The neurophenomenology of neutral hypnosis.
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INTRODUCTION: After a hypnotic induction, medium and highly hypnotizable individuals often report spontaneous alterations in various dimensions of consciousness. Few studies investigating these experiences have controlled for the inherent demands of specific hypnotic suggestions and fewer still have considered their dynamic properties and neural correlates. METHODS: We adopted a neurophenomenological approach to investigate neutral hypnosis, which involves no specific suggestion other than to go into hypnosis, with 37 individuals of high, medium, and low hypnotizability (Highs, Mediums, and Lows). Their reports of depth and spontaneous experience at baseline, following a hypnotic induction, and then after multiple rest periods were analyzed and related to EEG frequency band power and global functional connectivity. RESULTS: Hypnotizability was marginally associated with lower global functional connectivity during hypnosis. Perceived hypnotic depth increased substantially after the induction especially among Highs and then Mediums, but remained almost unchanged among Lows. In the sample as a whole, depth correlated moderately to strongly with power and/or power heterogeneity for the fast EEG frequencies of beta2, beta3, and gamma, but independently only among Highs. The spontaneous phenomenology of Lows referred primarily to the ongoing experiment and everyday concerns, those of Mediums to vestibular and other bodily experiences, and those of Highs to imagery and positive affect/exceptional experiences. The latter two phenomena were associated with lower global functional connectivity during hypnosis. Imagery correlated positively with gamma power heterogeneity and negatively with alpha1 power heterogeneity. Generally, the pattern of correlations for the Highs was the opposite of that for the Lows. CONCLUSIONS: Experienced hypnotic depth and spontaneous phenomena following a neutral hypnotic induction vary as a function of hypnotizability and are related to global functional connectivity and EEG band wave activity. Copyright © 2012 Elsevier Ltd. All rights reserved.

[1977]
The neurophenomenology of neutral hypnosis.
Cardeña E(1), Jönsson P, Terhune DB, Marcusson-Clavertz D.
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[1978]
The neurophenomenology of neutral hypnosis.
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BACKGROUND: Gut-directed hypnotherapy is an effective treatment option for irritable bowel syndrome (IBS). However, clinical observations suggest that patient satisfaction with hypnotherapy is not always associated with improvement in IBS symptoms. METHODS: We evaluated 83 patients with IBS treated with gut-directed hypnotherapy (1 h week⁻¹, 12 weeks). After the treatment period, patients reported their satisfaction with the treatment (ranging from 1 = not at all satisfied, to 5 = very satisfied) and completed questionnaires to assess IBS symptom severity, quality of life, cognitive function, sense of coherence, depression, and anxiety before and after treatment. KEY RESULTS: After hypnotherapy improved IBS symptom severity, quality of life, cognitive function, and anxiety were seen. Thirty patients (36%) were very satisfied with the treatment and 57 (69%) patients scored 4 or 5 on the patient satisfaction scale. Patient satisfaction was associated with less severe IBS symptoms and better quality of life after the treatment. In a multiple linear regression analysis, only the quality of life domain sexual relations was independently associated with patient satisfaction after hypnotherapy, explaining 22% of the variance. Using 25% reduction of IBS symptom severity to define an IBS symptom responder, 52% of the responders were very satisfied with hypnotherapy, but this was also true for 31% in the non-responder group. CONCLUSIONS & INFERENCES: Patient satisfaction with gut-directed hypnotherapy in IBS is associated with improvement of quality of life and gastrointestinal (GI) symptoms. However, other factors unrelated to GI symptoms also seems to be of importance for patient satisfaction, as a substantial proportion of patients without GI symptom improvement were also very satisfied with this treatment option. © 2012 Blackwell Publishing Ltd.

The power of belief and expectancy in understanding and management of depression.
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This article examines how beliefs can influence the definition, classification, understanding, and treatment of depression. It is organized in five parts: The first part critically reviews the definition of depression; the second part explores the medicalization of depression; the third part examines the role of the pharmaceutical industry in the promotion and marketing of antidepressant medications; the fourth part surveys the psychological therapies for depression and examines the role of expectancy in outcome; and the last part looks at the mechanisms involved in the placebo effect. A list of evidence-based strategies, including hypnosis, are discussed in the context of cognitive hypnotherapy for depression to illustrate how expectancy effect can be maximized in psychotherapy.

Enhancing placebo effects: insights from social psychology.
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Placebo effects are widely recognized as having a potent impact upon treatment outcomes in both medical and psychological interventions, including hypnosis. In research utilizing randomized clinical trials, there is usually an effort to minimize or control placebo effects. However, in clinical practice there may be significant benefits in enhancing placebo effects. Prior research from the field of social psychology has identified three factors that may enhance placebo effects, namely: priming, client perceptions, and the theory of planned behavior. These factors are reviewed and illustrated via a case example. The consideration of social-psychological factors to enhance positive expectancies and beliefs has implications for clinical practice as well as future research into hypnotic interventions.

Suggestion in the treatment of depression.
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Meta-analyses consistently reveal that most of the response to antidepressant treatment can be obtained by placebo, and the difference between response to the drug and the response to any treatment is not clinically significant for most individuals diagnosed with major depressive disorder. Furthermore, the best predictor of antidepressant efficacy is the response to placebo during the so-called placebo run-in period. It can also be shown that a significant portion of the placebo effect is expectancy. These data thus indicate that suggestion is a central factor in treating depression. Therefore, the use of hypnosis, which is based on suggestion, as a treatment adjunct can be expected to enhance
The uncertain position of lung tumor during radiotherapy compromises the treatment effect. To effectively control respiratory motion during radiotherapy of lung cancer without any side effects, a novel control scheme, hypnosis, has been introduced in lung cancer treatment. In order to verify the suggested method, six volunteers were selected with a wide range of distribution of age, weight, and chest circumference. A set of experiments have been conducted for each volunteer, under the guidance of the professional hypnotist. All the experiments were repeated in the same environmental condition. The amplitude of respiration has been recorded under the normal state and hypnosis, respectively. Experimental results show that the respiration motion of volunteers in hypnosis has smaller and more stable amplitudes than in normal state. That implies that the hypnosis intervention can be an alternative way for respiratory control, which can effectively reduce the respiratory amplitude and increase the stability of respiratory cycle. The proposed method will find useful application in image-guided radiotherapy.

Hypnosis has been used to provide psychological and physical comfort to individuals diagnosed with cancer for nearly 200 years. The goals of this review are: 1) to describe hypnosis and its components and to dispel misconceptions; 2) to provide an overview of hypnosis as a cancer prevention and control technique (covering its use in weight management, smoking cessation, as an adjunct to diagnostic and treatment procedures, survivorship, and metastatic disease); and 3) to discuss future research directions. Overall, the literature supports the benefits of hypnosis for improving quality of life during the course of cancer and its treatment. However, a great deal more work needs to be done to explore the use of hypnosis in survivorship, to understand the mediators and moderators of hypnosis interventions, and to develop effective dissemination strategies. Copyright © 2012 American Cancer Society, Inc.

Objective. Current evidence indicates that there is no single ideal treatment for fibromyalgia syndrome (FMS). First choice treatment options remain debatable, especially concerning the importance of complementary and alternative medicine (CAM) treatments. Methods. Three evidence-based interdisciplinary guidelines on FMS in Canada, Germany, and Israel were compared for their first choice and CAM-recommendations. Results. All three guidelines emphasized a patient-
tailored approach according to the key symptoms. Aerobic exercise, cognitive behavioral therapy, and multicomponent therapy were first choice treatments. The guidelines differed in the grade of recommendation for drug treatment. Anticonvulsants (gabapentin, pregabalin) and serotonin noradrenaline reuptake inhibitors ( duloxetine, milnacipran) were strongly recommended by the Canadian and the Israeli guidelines. These drugs received only a weak recommendation by the German guideline. In consideration of CAM-treatments, acupuncture, hypnosis/guided imagery, and Tai Chi were recommended by the German and Israeli guidelines. The Canadian guidelines did not recommend any CAM therapy.

Discussion. Recent evidence-based interdisciplinary guidelines concur on the importance of treatment tailored to the individual patient and further emphasize the need of self-management strategies (exercise, and psychological techniques).

[1985]  
Hypnosis as neurophenomenology.  
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Hypnosis research binds phenomenology and neuroscience. Here we show how recent evidence probing the impact of hypnosis and suggestion can inform and advance a neurophenomenological approach. In contrast to meditative practices that involve lengthy and intensive training, hypnosis induces profound alterations in subjective experience following just a few words of suggestion. Individuals highly responsive to hypnosis can quickly and effortlessly manifest atypical conscious experiences as well as override deeply entrenched processes. These capacities open new avenues for suspending habitual modes of attention and achieving refined states of meta-awareness. Furthermore, hypnosis research sheds light on the effects of suggestion, expectation, and interpersonal factors beyond the narrow context of hypnotic procedures. Such knowledge may help to further foster phenomenological interviewing methods, improve experiential reports, and elucidate the mechanisms of contemplative practices. Incorporating hypnosis and suggestion into the broader landscape of neurophenomenology, therefore, would likely help bridge subjective experience and third-person approaches to the mind.

[1986]  
[Acupuncture, animal magnetism, and French medical orthodoxy (1780-1830)].  
[Article in French]  
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Laboratoire S2HEP (Science et Société; Historicité, Education et Pratiques), Université Lyon 1, ENS LSH. ronald.guilloux@gmail.com  
This article analyses why the French phenomenon of acupuncture was confined to the 1810s-1820s. It argues that the French medical orthodoxy played a decisive role. First, we recount the history of the French reception of Japanese acupuncture from the late 17th century to the 1820s. Second, we go back to the animal magnetism trial to find some explanatory tools for the decline of French acupuncture. Third, we show that the oppositions to both therapies were not mere juxtapositions, but due to the growing strength of medical orthodoxy. Finally, we suggest a model of analysis of the French medical orthodoxy of the early 19th century through a set of multidimensional oppositions: anthropological (imagination/reason), epistemological (to heal/to explain), therapeutic (drug/fluid), nosological (organic disease/functional disease), and lastly, economic, moral and political oppositions (doctor/charlatan).

[1987]  
Clinical hypnosis and Patanjali yoga sutras.  
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(1)Department of Psychology, Christ University, Bangalore, India.  
The trance states in yoga and hypnosis are associated with similar phenomena like relaxation, disinclination to talk, unreality, misrepresentation, alterations in perception, increased concentration, suspension of normal reality testing, and the temporary nature of the phenomena. While some researchers consider yoga to be a form of hypnosis, others note that there are many similarities between the trance in yoga and the hypnotic trance. The present study aimed to find similarities between the trance states of hypnosis and Patanjali's yoga sutras. The trance states were compared with the understanding of the phenomena of trance, and the therapeutic techniques and benefits of both. An understanding of the concept of trance in Patanjali's yoga sutras was gained through a thematic analysis of the book Four Chapters on Freedom by Swami Satyananda Saraswati. This led to an understanding of the concept of trance in the yoga sutras. The obtained concepts were compared to the concepts of trance in hypnosis (obtained through the literature on hypnosis) to investigate whether or not there exist similarities. The findings of the study show that there are similarities between the
trance in hypnosis and the trance in Patanjali’s yoga sutras in the induction and deepening of the trance states in hypnosis and that of Samadhi, the phenomena present in hypnosis and the kinds of siddhis that are obtained through Samadhi, and the therapeutic techniques and the therapeutic process in Patanjali’s yoga sutra and hypnosis.

[1988]
The effects of hypnosis on anxiety, depression, fatigue, and sleepiness in people undergoing hemodialysis: a clinical report.
Untas A(1), Chauveau P, Dupré-Goudable C, Kolko A, Lakdja F, Cazenave N.
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This study investigated the effect of hypnosis on anxiety, depression, fatigue, and sleepiness in hemodialysis patients. Twenty-nine patients participated in the 15-day study. A single hypnosis session was performed on Day 8. Anxiety, depression, fatigue, and sleepiness were measured at baseline, on Day 8, and on Day 15 (HADS, MFI, ESS). Daily fatigue was also measured numerically. Anxiety, depression, and sleepiness significantly decreased after hypnosis. Weekly measures of fatigue remained stable; however, daily fatigue decreased.

[1989]
Hypnosis--there’s an app for that: a systematic review of hypnosis apps.
Sucala M(1), Schnur JB, Glazier K, Miller SJ, Green JP, Montgomery GH.
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(1)Department of Oncological Sciences, Icahn School of Medicine at Mount Sinai, New York, New York 10029-6574, USA. madalina.sucala@mssm.edu
This study systematically reviews the hypnosis apps available via iTunes that were compatible with iPhone or iPad. Of 1455 apps identified on iTunes, 407 met inclusion criteria and were further reviewed. Most common hypnosis app targets were weight loss (23%), boosting self-esteem (20%), and relaxation/stress reduction (19%); 83% of apps delivered hypnosis via audio track, and 37% allowed tailoring. Less than 14% of apps reported disclaimers. None of the apps reported having been tested for efficacy, and none reported being evidence based. Although apps have the potential to enhance hypnosis delivery, it seems as though technology has raced ahead of the supporting science. Recommendations from clinical researchers and policy makers are needed to inform responsible hypnosis app development and use.

[1990]
Phenomenological aspects of hypnotic interactions: the effect of kinship.
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This study analyzes the relationship of various measures of hypnosis as a function of kinship. Subjects with varying degrees of kinship (mono- and dizygotic twins, siblings, and parent-child pairs) participated. The Stanford Hypnotic Susceptibility Scale, Form A (SHSS:A), as well as other measures—including the Dyadic Interactional Harmony (DiH) and the Phenomenology of Consciousness Inventory (PCI)—were used with both subjects and hypnosis practitioners. Findings indicated that the phenomenological experience of hypnosis is not determined genetically. The subjects apparently evaluated the session as related to the degree of kinship. MZ twins-on the basis of reactive interactional pattern-evaluate the hypnotic interaction similarly. This was not true for SHSS:A scores or the phenomenological aspects of the state (PCI). These findings were interpreted within the sociopsychobiological model of hypnosis.

[1991]
The effective use of hypnosis in schizophrenia: structure and strategy.
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Many schizophrenia patients seek hypnosis when they have not improved with psychopharmacological therapy. However, there has been controversy regarding the use and effectiveness of hypnosis in schizophrenia. Hypnotherapeutic methods such as direct and indirect suggestions, psycho-strengthening suggestions and imagery, hypnoprojective restructuring, guidance, and neutralization of affect associated with delusions have been effective in selected highly hypnotizable
Details of the hypnotherapeutic structure and strategy used for managing delusions in schizophrenia are presented with representative cases.

Posthypnotic suggestion alters conscious color perception in an automatic manner.
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The authors studied whether a posthypnotic suggestion to see a brief, masked target as gray can change the color experience of a hypnotic virtuoso. The visibility of the target was manipulated by varying the delay between the target and the mask that followed it. The virtuoso's subjective reports indicated that her conscious color experience was altered already at short delays between the target and the subsequent mask. The virtuoso's objectively measured pattern of responding under posthypnotic suggestion could not be mimicked either by control participants nor the virtuoso herself. Due to posthypnotic amnesia, the virtuoso was unaware of suggestions given during hypnosis. Importantly, the virtuoso could not alter her color perception without a hypnotic suggestion. These results suggest that hypnosis can affect even a highly automatic process such as color perception.

An eye for an I: a 35-year-old woman with fluctuating oculomotor deficits and dissociative identity disorder.
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Physiologic changes, including neurological or pseudo-neurological symptoms, occur across identity states in dissociative identity disorder (DID) and can be objectively measured. The idea that dissociative phenomena might be associated with changes in brain function is consistent with research on the brain effects of hypnosis. The authors report a case of psycho-physiologic differences among 4 alter personalities manifested by a 35-year-old woman with DID. Differences in visual acuity, frequency of pendular nystagmus, and handedness were observed in this patient both when the alter personalities appeared spontaneously and when elicited under hypnosis. The authors consider several diagnostic possibilities for these findings and discuss whether prevailing treatment recommendations for DID patients could possibly be modified to ameliorate such visual and neurologic symptoms.

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Previous research has demonstrated that a hypnotic intervention can reduce hot flashes, a significant problem for some women. Based on the authors' previous research, the present study was developed to evaluate the feasibility of a guided self-hypnosis intervention for hot flashes. Thirteen postmenopausal women received 5 sessions of guided self-hypnosis in which all hypnotic inductions were recordings. Guidance regarding symptom monitoring, individualization of mental imagery, and practice of self-hypnosis were provided. Hot flashes were determined through diaries. Results indicated average frequency of hot flashes decreased by 72% (p < .001) and hot-flash scores decreased by 76% (p < .001) on average. Guided self-hypnosis reduced perceived hot flashes in the pilot study with postmenopausal women supporting the possible feasibility and potential benefit of the intervention.

An unanticipated allergic reaction to a hypnotic suggestion for anesthesia: a brief communication and commentary.
Guttman K(1), Ball TS.
Author information:
(1)Citrus College, Glendora, California, USA.
During a demonstration of hypnotically induced anesthesia and following a suggestion for a Novocain-like numbness, a totally unanticipated and dramatic swelling of 1 cheek appeared. The participant had forgotten to inform the psychologist that she had experienced the identical reaction to Novocain when she received an injection a few weeks earlier. The swelling was quickly removed by a countersuggestion based upon a simulated injection of the antidote previously administered by the dentist. This case report is relevant to current research and theorizing on the interaction of hypnosis with the immune system. The fact that it was retrospectively recognized as a single-case time-series B-A-B design significantly enhances its scientific value beyond that afforded by the traditional case report.

[1996]
The relationships between suggestibility, influenceability, and relaxability.
Polczyk R(1), Frey O, Szpitalak M.
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(1)Institute of Psychology, Jagiellonian University, Kraków, Poland. romuald.polczyk@uj.edu.pl

This research explores the relationships between relaxability and various aspects of suggestibility and influenceability. The Jacobson Progressive Muscle Relaxation procedure was used to induce relaxation. Tests of direct suggestibility, relating to the susceptibility of overt suggestions, and indirect suggestibility, referring to indirect hidden influence, as well as self-description questionnaires on suggestibility and the tendency to comply were used. Thayer's Activation-Deactivation Adjective Check List, measuring various kinds of activation and used as a pre- and posttest, determined the efficacy of the relaxation procedure. Indirect, direct, and self-measured suggestibility proved to be positively related to the ability to relax, measured by Thayer's subscales relating to emotions. Compliance was not related to relaxability. The results are discussed in terms of the aspects of relaxation training connected with suggestibility.

[1997]
Anxiety reduction using hypnotic induction and self-guided imagery for relaxation during dermatologic procedures.
Shenefelt PD.
Author information:
Department of Dermatology and Cutaneous Surgery, College of Medicine, University of South Florida, Tampa, FL 33612, USA. pshenefe@health.usf.edu

Many patients experience some degree of anxiety during dermatologic procedures. A prospective, randomized-control trial of hypnotic induction followed by self-guided imagery was conducted with patients in 3 groups: live induction, recorded induction, or control. By 20 minutes into the procedure, there was significantly reduced anxiety reported in the live-induction group compared with the control, whereas reported anxiety in the recorded-induction group was similar to that of the control group. All 13 in the live induction, 11 of the 13 in the recorded induction, and none of the 13 in the control group imagined scenes. The findings of this study suggest that live hypnotic induction followed by self-guided imagery can help to reduce anxiety experienced by many patients during dermatologic procedures.

[1998]
A comparison of the clinical effectiveness of various acupuncture points in reducing anxiety to facilitate hypnotic induction.
Lu DP(1), Lu GP.
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(1)University of Pennsylvania, Philadelphia, USA. dominicplu@gmail.com

This study determined if any acupuncture point (acupoint) known for its calming effects also aided hypnotic induction. Hypnosis was offered to 108 patients requiring minor surgical or dental procedures. All had a history of panic attacks and surgical or dental phobias that complicated or prevented treatment. Unpleasant intruding thoughts of imminent invasive treatments handicapped their ability to accept hypnotic induction; however, acupuncture therapy was proposed to the consenting patient to facilitate hypnotic induction and augment its effects. Each patient received one selected acupoint for acupuncture therapy. Of the 6 acupoints used (LI 4, H 7, SP 6, P 6, GV 24, and Ext-hn-21), GV 24 was best at enhancing hypnotic induction whereas LI 4 produced the best muscular relaxation and P 6 for reducing tension.

[1999]
Are highly hypnotizable people naturally aware of their hypnotic talents?
Implications for human potentialities.
Mohl JC.
Author information:
This article investigated the degree to which high hypnotizables are aware of their capability and assessed their ability to produce it without guidance from a hypnotist. Qualitative data suggest that most participants reported being surprised by their hypnotic responsiveness and the realness of the suggestions. Quantitative data tended to support this trend, in which participants had higher overall responsiveness scores, both objectively and subjectively, when the suggestions were given by a hypnotist compared to self-hypnosis. Though some were able to self-produce some hypnotic phenomena, all participants reported that it was easier to experience the suggested effects when given by the hypnotist. An explanation accounting for this finding, implications for future research, and limitations of the study are also provided.

[2000]
The vaded ego state and the invisible bridging induction.
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Abstract Ego state therapy is based on the assumption that personality is composed of parts. When people switch from 1 state to another, they take their ego identification with them, while their levels of affect, intellect, confidence, and skill change. A vaded ego state has become overwhelmed by fear or rejection such that when it becomes executive, it interferes with normal function and emotional stability. The angst these states carry are the root cause of psychological addictions, OCD, panic disorder, PTSD, a sense of unworthiness of love, extreme competitiveness, and much more. The invisible bridge is an induction technique that uses the somatic experience of the vaded state to provide a focus for hypnotic induction and a bridge to the original sensitizing event that vaded the previously normal state. This article contextualizes the vaded state within abnormal psychology and describes the invisible bridge induction.

[2001]
Nocturnal bruxism and hypnotherapy: a case study.
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This article describes a case study of a hypnotherapeutic treatment of nocturnal bruxism. The author saw the client for a total of 7 sessions. Hypnotherapy was interspersed with an exploration of tacit and initially denied hostility in the client's life as well as aspects of a somewhat difficult childhood. At the end, the bruxism had disappeared. Follow-up 1 year later indicated that the bruxism had not returned, and the client had become more assertive in her relations with others and had more exploratory activities in her life directions. The latter had not been dealt with in therapy. Thus, there appeared to be a "ripple effect" of successful therapy from one part of her life into its other aspects.

[2002]
The effects of hypnosis on an elite senior European tour golfer: a single-subject design.
Pates J.
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This study examined the effects of a hypnosis intervention on the performance and flow-state experiences of an elite senior European Tour golf professional. The experimental effect was assessed during 11 Senior European Tour golf events. Performance and flow data were analyzed using a single-subject design combined with a procedure to monitor the player's internal experience. The results indicated that the player's mean stroke average and mean flow scores increased from baseline to intervention. There were no overlapping data points between baseline and intervention conditions for both performance and flow-state scores. The qualitative data revealed hypnosis may positively control emotions, thoughts, feelings, and perceptions.

[2003]
Feasibility of clinical hypnosis for the treatment of Parkinson's disease: a case study.
Elkins G(1), Sliwinski J, Bowers J, Encarnacion E.
Author information:
Parkinson’s disease is a severe neurodegenerative disorder with a prevalence rate of approximately 1.6% in elderly Americans. This case study reports on a 51-year-old male Parkinson’s patient who received 3 weekly sessions of a hypnosis intervention, as well as instruction in self-hypnosis. Actigraphy was used to assess rest-tremor severity. Results revealed a 94% reduction in rest tremors following treatment. Self-reported levels of anxiety, depression, sleep quality, pain, stiffness, libido, and quality of life also showed improvements. The patient reported a high level of satisfaction with treatment. These findings suggest clinical hypnosis is potentially feasible and beneficial treatment for some Parkinson’s symptoms. Further investigation with diverse samples and an ambulatory monitoring device is warranted.

The effects of hypnosis on heart rate variability.
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Uslu et al. (2012) suggested that hypnotic status can modulate cerebral blood flow. The authors investigated the effects of hypnosis on heart rate variability (HRV). In women, HRV decreased during hypnosis. Posthypnotic values were higher compared to prehypnotic and hypnotic values. Women had highest HRV parameters in the posthypnotic condition. It appears that hypnosis can produce cardiac and cognitive activations. Hypnotherapy may be useful in some cardiac clinical conditions characterized by an autonomic imbalance or some cardiac arrhythmias.

Hypnosis for smoking cessation: group and individual treatment-a free choice study.
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Abstract Eighty-five smokers chose either a group or individual treatment using manualized hypnosis. Abstinence rates in group treatment at follow-up are 19.6% in comparison to 13.8% in individual treatment. This difference did not reach statistical significance. It is concluded that group treatment is as effective as the better established individual treatment and therefore can be seen as an alternative approach in smoking cessation using hypnosis.

Hypnotic tape intervention ameliorates stress: a randomized, control study.
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This study (N = 35) used a randomized control design, and participants were collected from a variety of groups. After evaluating their degree of stress and burnout, coping styles, general well-being, and hypnotizability, participants were matched by stress level and randomly assigned to an intervention or wait-list group. The intervention comprised an audio recording of a hypnotic induction accompanied by suggestions for progressive relaxation, imagery, and anchoring to be used for 2 weeks. The results show that, as compared with baseline and wait-list conditions, the hypnotic intervention had a medium-to-large beneficial effect on participants' experience of stress, burnout, and well-being. Some participants also decreased their use of the coping strategy escape-avoidance postintervention. Hypnotizability correlated significantly or marginally with some outcomes of the intervention, but only for 1 group.

Hypnosis for management of fibromyalgia.
Picard P(1), Jusseaume C, Boutet M, Dualé C, Mulliez A, Aublet-Cuvellier B.
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(1)CHU Clermont-Ferrand, Pain Clinic, France. ppicard@chu-clermontferrand.fr

This randomized, controlled trial contrasted the effects of 5 not-standardized sessions of hypnosis over 2 months in 59
women with fibromyalgia who were randomly assigned to treatment (n = 30) or a wait-list control group (n = 29). Patients in the treated group were encouraged to practice self-hypnosis. Fibromyalgia Impact Questionnaire (FIQ), MOS-Sleep Scale, Multidimensional Fatigue Inventory (MFI), Cognitive Strategy Questionnaire (CSQ), and Patient Global Impression of Change (PGIC) were administered at baseline, 3 months (M3), and 6 months (M6) after inclusion. Compared to the control, the hypnosis group reported better improvement on PGIC (p = .001 at M3, p = .01 at M6) and a significant improvement in sleep and CSQ dramatization subscale (both at M6).

[2008]
A cross-validation of two differing measures of hypnotic depth.
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Several sets of regression analyses were completed, attempting to predict 2 measures of hypnotic depth: the self-reported hypnotic depth score and hypnoidal state score from variables of the Phenomenology of Consciousness Inventory: Hypnotic Assessment Procedure (PCI-HAP). When attempting to predict self-reported hypnotic depth, an R of .78 with Study 1 participants shrunk to an r of .72 with Study 2 participants, suggesting mild shrinkage for this more attributional measure of hypnotic depth. Attempting to predict hypnoidal state (an estimate of trance) using the same procedure, yielded an R of .56, that upon cross-validation shrunk to an r of .48. These and other results suggest that, although there is some variance in common, the self-reported hypnotic depth score appears to be tapping a different construct from the hypnoidal state score.

[2009]
What motivates professionals to learn and use hypnosis in clinical practice?
Meyerson J(1), Gelkopf M, Golan G, Shahamorov E.
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The authors devised and validated a questionnaire assessing the various possible motivations for learning and using hypnosis and administered it to 125 Israeli psychologists, physicians, and dentists who study and/or use hypnosis in their clinical work. The results suggest that most professionals were motivated by a desire to improve their professional performance and that a majority of professionals were primarily influenced in their desire to learn hypnosis by colleagues in academically or clinically oriented settings.

[2010]
Flexibility in processing visual information: effects of mood and hypnosis.
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This quasi-experiment using a real/simulator model investigated differences in cognitive flexibility in high and low hypnotizable participants. Using the variables of hypnotizability (low/high), consciousness (nonhypnotized/hypnotized), mood (happy/sad), and visual-information processing (global/local), reaction times and target detection paradigms of the subjects were evaluated during both nonhypnotic and hypnotic states. Flexibility in cognitive processing was operationalized as the ability to overcome the typical global precedence and answer quickly about the nonprevalent local features. It was observed that the low hypnotizable participants were not influenced in their preference for the global or local dimension by any manipulated variable, whereas the high hypnotizables were more flexible.

[2011]
Group hypnotherapy for irritable bowel syndrome with long-term follow-up.
Gerson CD(1), Gerson J, Gerson MJ.
Author information:
(1)Mount Sinai School of Medicine, New York, New York 10023, USA. cgerson@yahoo.com

This study tested whether group gut-focused hypnotherapy would improve irritable bowel syndrome (IBS). Several possible outcome predictors were also studied. Before treatment, 75 patients completed a Symptom Severity Scale, a Mind-Body attribution questionnaire, and a Quality of Relationship Inventory (QRI). The symptom scale was completed posttreatment, 3, 6, and 12 months later. There was significant symptom reduction at each data point (p < .001). Sixty percent had a reduction of more than 50 points, indicative of clinical improvement. Initial severity score (p = .0004) and
QRI conflict (p = .057) were directly correlated with a response to hypnotherapy, while attribution of symptoms to mind (emotional) causation was inversely correlated (p = .0056). The authors conclude that group hypnotherapy is effective in patients with IBS.

[2012]
Randomised controlled trial of brief intervention with biofeedback and hypnotherapy in patients with refractory irritable bowel syndrome.
Dobbin A(1), Dobbin J, Ross SC, Graham C, Ford MJ.
Author information:
(1)School of Clinical Sciences and Community Health, University of Edinburgh, Edinburgh, UK. alastair@foundationforpositivementalhealth.com

Irritable bowel syndrome (IBS) is a common disorder associated with profoundly impaired quality of life and emotional distress. The management of refractory IBS symptoms remains challenging and non-pharmacological therapeutic approaches have been shown to be effective. We compared brief interventions with biofeedback and hypnotherapy in women referred by their GP with refractory IBS symptoms. Patients were randomised to one of two treatment groups, biofeedback or hypnotherapy, delivered as three one-hour sessions over 12 weeks. Symptom assessments were undertaken using validated, self-administered questionnaires. Two of the 128 consecutive IBS patients suitable for the study declined to consider nonpharmacological therapy and 29 patients did not attend beyond the first session. Of the 97 patients randomised into the study, 21 failed to attend the therapy session; 15 of 76 patients who attended for therapy dropped out before week 12 post-therapy. The mean (SD) change in IBS symptom severity score 12 weeks post-treatment in the biofeedback group was -116.8 (99.3) and in the hypnotherapy group -58.0 (101.1), a statistically significant difference between groups (difference=-58.8, 95% confidence interval [CI] for difference [-111.6, -6.1], p=0.029). In 61 patients with refractory IBS, biofeedback and hypnotherapy were equally effective at improving IBS symptom severity scores, total non-gastrointestinal symptom scores and anxiety and depression ratings during 24 weeks follow-up. Biofeedback may prove to be the more cost-effective option as it requires less expertise.

[2013]
Using elements of hypnosis prior to or during pediatric dental treatment.
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Most dental practitioners are familiar with pediatric patients expressing dental fear or anxiety. Occasionally, the dentist may encounter a situation where all behavioral techniques fail, while, for some reason, premedication or general anesthesia are contraindicated or rejected by the patient or his/her parents and a different approach is required. Hypnosis may solve the problem in some cases. The purpose of this study was to review the literature about techniques that use elements of hypnosis and hypnotic techniques prior to or during pediatric dental treatment. There is a limited amount of literature regarding the use of hypnosis and hypnotic elements in pediatric dentistry. Induction techniques, reframing, distraction, imagery suggestions, and hypnosis are identified, although mostly anecdotally, while there are very few structured controlled studies. Nevertheless, the advantages of using hypnotic elements and hypnosis in pediatric dentistry are evident.

[2014]
eCollection 2013.
Sensitivity and specificity of hypnosis effects on gastric myoelectrical activity.
Enck P(1), Hefner J(2), Herbert BM(3), Mazurak N(4), Weimer K(1), Muth ER(5), Zipfel S(1), Martens U(1).
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(2)Department of Internal Medicine II, University Hospital, Würzburg, Germany.
(3)Department of Health Psychology, Institute of Psychology and Education, University of Ulm, Ulm, Germany.
(4)Central Research Department, Ivano-Frankivsk National Medical University, Ivano-Frankivsk, Ukraine.
(5)Department of Psychology, Clemson University, Clemson, South Carolina, United States of America.

OBJECTIVES: The effects of hypnosis on physiological (gastrointestinal) functions are incompletely understood, and it is
unknown whether they are hypnosis-specific and gut-specific, or simply unspecific effects of relaxation. DESIGN: Sixty-two healthy female volunteers were randomly assigned to either a single session of hypnotic suggestion of ingesting an appetizing meal and an unappetizing meal, or to relax and concentrate on having an appetizing or unappetizing meal, while the electrogastrogram (EGG) was recorded. At the end of the session, participants drank water until they felt full, in order to detect EGG-signal changes after ingestion of a true gastric load. During both conditions participants reported their subjective well-being, hunger and disgust at several time points. RESULTS: Imagining eating food induced subjective feelings of hunger and disgust as well as changes in the EGG similar to, but more pronounced than those seen with a real gastric water load during both hypnosis and relaxation conditions. These effects were more pronounced when imagining an appetizing meal than with an unappetizing meal. There was no significant difference between the hypnosis and relaxation conditions. CONCLUSION: Imagination with and without hypnosis exhibits similar changes in subjective and objective measures in response to imagining an appetizing and an unappetizing food, indicating high sensitivity but low specificity.


Effects both of hypnotherapy and music therapy are originated from an attunement as supposed by the author. Either to a hypnotherapist's suggestions or to a piece of music one is able to be tuned in them. On one hand, the hypnotherapist's prosody, which can be called as melodic declamation seen as a musical phenomenon transmitting emotions. On the other hand, music has got emotional and visceral impacts. As a meeting points of these two methods four possibilities are shown by the author: 1. musical analogies of vitality affects ; 2. paternal and maternal archetypes in music; 3. analogies of coping in music; 4. corrections of psychological deficits by virtue of hypno- and music therapy with parallel used energy healing method. Finally, the author suggests, that hypnosis is regarded as an inductive method expressing its effect from outside to inside; music, however is likely to be employed as a deductive therapeutic tool, effecting from inside to outside.


Sound vibrations are viewed to play an important role in embryonic development. Before the cochlea evolves, the haptic and mechanic skin-receptors detect the amniotic fluid's pressure-waves produced by sounds in uterus. Touching and hearing are seen as primordial and the most relevant stimuli both of mother-fetus attunement and development of fetal nervous system. Man is attuned to environmental stimuli, mainly to human speaking since the embryonic period. Attunement is secured by energy zones (chakras) circling around body. It is considered to be base of our music capacity. Origin of hypnotic susceptibility is viewed as being in embryonic period as well. Movements, experiences supposed, bonding and communication patterns of both of fetus and hypnotized person are suggested to show similarities. Prenatal audio-somatosensory stimulating program facilitates newborn babies' cognitive, emotional and bonding capacities. As a matter of fact, by virtue of regressive fetus-like experiences, hypnotherapy contributes to the restart of personality development halted by trauma.


[ABSTRACT NOT FOUND]
The role of dental therapists in pharmacological and non-pharmacological treatment of anxious and phobic patients.

MacLeavey C.

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Salaried Primary Dental Care Service, Northamptonshire.

Dental Therapists are in a prime position to be involved with the management of anxious and phobic patients. They earn less than dentists and are therefore a more cost-effective way of providing specialised care for anxious patients. Dental Therapists can spend more time educating and acclimatising these patients, do most if not all of the patient's treatment, only referring back to the dentist for RCT, crown/bridgework/dentures and permanent extractions. Ultimately this means that the patient receives high quality continuity of care. Treating anxious and phobic patients is time-consuming but ultimately very rewarding. If handled correctly and sensitively the anxious and phobic patient will not always be anxious or phobic, in the same way that children won't always be children. Dental Therapists can now extend their duties to include Relative Analgesia. This should enhance their employability and role within the dental team especially in the management of anxious and phobic patients. Employing a therapist with a toolbox of techniques at their disposal can be seen as part of a long-term practice plan to ensure that anxious and phobic patients become rehabilitated, happy, compliant and loyal to the practice! In fact .... the sort of patients every dentist really wants to see.

[The hypnotherapist guides the patient towards his internal resources].
[Article in French]
Barbier E.

[ABSTRACT NOT FOUND]

Shell shock: Psychogenic gait and other movement disorders-A film review.
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BACKGROUND: The psychological pressure on soldiers during World War I (WWI) and other military conflicts has resulted in many reported cases of psychogenic gait as well as other movement disorders. In this paper, psychogenic movement disorders captured in the WWI film footage "War Neuroses" is reanalyzed. METHODS: Two movement disorders specialists re-examined film images of 21 WWI patients with various and presumed psychogenic manifestations, pre- and post treatment. The film was recorded by Arthur Hurst, a general physician with an interest in neurology. RESULTS: All 21 subjects were males, and all presented with symptoms relating to war trauma or a psychological stressor (e.g., being buried, shrapnel wounds, concussion, or trench fever). The most common presenting feature was a gait disorder, either pure or mixed with another movement disorder (15), followed by retrograde amnesia (2), abnormal postures (pure dystonia) (1), facial spasm (1), head tremor (1), "hyperthyroidism-hyperadrenalism" (1). Nineteen patients received treatment, and the treatment was identified in nine cases. In most cases, treatment was short and patients improved almost immediately. Occupational therapy was the most common treatment. Other effective methods were hypnosis (1), relaxation (1), passive movements (2), and probable "persuasion and re-education" (6). DISCUSSION: The high success rate in treating psychogenic disorders in Hurst's film would be considered impressive by modern standards, and has raised doubt in recent years as to whether parts of the film were staged and/or acted.

Complementary medicine and general practice in an urban setting: a decade on.
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(1)1Associate Research Fellow, Complementary Medicine, University of Exeter, Devon, UK.

Aim To conduct a follow-up survey ascertaining changes in usage, referral rate, beliefs and attitudes towards complementary and alternative medicine (CAM) during the last decade. BACKGROUND: In many countries, CAM use is reported to be substantial and increasing. METHODS: A questionnaire was posted to all GPs registered with the Liverpool Primary Care Trust. Respondents were asked whether they treat, refer, endorse or discuss eight common CAM therapies

Professional Hypnosis Databank - page 517 of 889 - by Alberto Torelli, hypnologist
and about their views on National Health Service (NHS) funding, effectiveness, CAM training needs and theoretical validity of each therapy. Comparisons were made between these results and those collected in 1999. Findings The response rate was low (32%) compared with the 1999 survey (52%). The main findings were similar to the most popular therapies still being acupuncture, hypnotherapy and chiropractic and the least being aromatherapy, reflexology and medical herbalism. GPs felt most comfortable with acupuncture, with greater belief in its theoretical validity, a greater desire for training and a greater support for acupuncture to receive NHS funding than for the other CAM therapies under question. Opinions about homeopathy had become less supportive. Overall, GPs were less likely to endorse CAMs than previously shown (38% versus 19%).

Oxytocin impedes the effect of the word blindness post-hypnotic suggestion on Stroop task performance.
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The ability to enhance sensitivity to relevant (post)hypnotic suggestions has implications for creating clinically informed analogues of psychological and neuropsychological conditions and for the use of hypnotic interventions in psychological and medical conditions. The aim of this study was to test the effect of oxytocin inhalation on a post-hypnotic suggestion that previously has been shown to improve the selectivity of attention in the Stroop task. In a double-blind placebo-controlled between-subjects study, medium hypnotizable individuals performed the Stroop task under normal conditions and when they had been given a post-hypnotic suggestion that they would perceive words as meaningless symbols. In line with previous research, Stroop interference was substantially reduced by the suggestion in the placebo condition. However, contrary to expectations, oxytocin impeded the effect of the word blindness suggestion on performance. The results are explained in terms of the requirement for the re-implementation of the word blindness suggestion on a trial-by-trial basis and the need to sustain activation of the suggestion between trials. The findings contrast with a recent study showing a beneficial effect of oxytocin on sensitivity to (post)hypnotic suggestions but are consistent with findings showing a detrimental effect of oxytocin on memory processes.

A systematic review of stress-management programs for medical students.
Shiralkar MT(1), Harris TB, Eddins-Folensbee FF, Coverdale JH.
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OBJECTIVE: Because medical students experience a considerable amount of stress during training, academic leaders have recognized the importance of developing stress-management programs for medical students. The authors set out to identify all controlled trials of stress-management interventions and determine the efficacy of those interventions. METHOD: The authors searched the published English-language articles on PsycINFO and PubMed, using a combination of the following search terms: stress-management, distress, burnout, coping, medical student, wellness. Both randomized, controlled trials and controlled, non-randomized trials of stress-management programs were selected and critically appraised. RESULTS: A total of 13 randomized, controlled trials or controlled, non-randomized trials were identified. Interventions included self-hypnosis, meditation, mindfulness-based stress-reduction, feedback on various health habits, educational discussion, changes in the length and type of curriculum, and changes in the grading system. Only one study was identified to be of very high quality, although several had described group differences at baseline, used blinding, had good follow-up, and used validated assessment tools. There was a wide heterogeneity of outcome measures used. Interventions that were supported by a reduction in stress and anxiety in medical students included mindfulness-based stress-reduction or meditation techniques, self-hypnosis, and pass/fail grading. CONCLUSIONS: Significant opportunities to advance educational research in this field exist by developing more high-quality studies with particular attention to randomization techniques and standardizing outcome measures.

Epub 2013 Jan 18.
Reconditioning the stress response with hypnosis CD reduces the inflammatory cytokine IL-6 and influences resilience: a pilot study.
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AIM: The aim of this investigation was to measure the impact of a self-administered hypnosis intervention on resilience and the inflammatory cytokine IL-6. METHOD: Over a period of 12 weeks, 11 participants listened to a self-administered hypnosis stress reduction program designed to recondition and improve participants’ emotional and physical reactions to perceived work and life stressors. Subjects were administered subjective measures of coping, resilience, and stress tolerance, as well as, IL-6, an objective blood measure of inflammatory activity. RESULTS: After 12 weeks, participants were observed to have a significantly lower IL-6 serum level from baseline. Further, participants reported a significant decrease in the use of negative appraisal coping (such as, self-deprecating statements, perfectionism, and catastrophic and pessimistic thinking), and an improvement in eating/nutritional habits following the intervention. Baseline eating/nutritional habits and threat minimization coping significantly predicted a change in serum IL-6 over the course of the intervention in stepwise hierarchical regression analyses. CONCLUSION: Pilot study provides support that a brief self-administered CD hypnosis stress reduction program can modify a physiological measure of inflammation (IL-6), and improve coping and resilience in the face of work and life stress. Copyright © 2012 Elsevier Ltd. All rights reserved.

[2025]
Are hypnobirthing techniques effective?
Graves K.

[ABSTRACT NOT FOUND]

[2026]
Pract Midwife. 2013 May;16(5):10-3.
Clinical hypnosis for labour and birth: a consideration.
Kenyon C.

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Labour pain is one of the most important factors in shaping women's experiences of birth. Choice around pharmacological relief can be complex. Clinical hypnosis is a non-pharmacological option which a number of women have chosen to use, often paying privately to do so. Self hypnosis allows women the opportunity to take control of this technique. Research findings relating to the therapy vary; some trials have found positive effects by way of a reduction in use of pharmacological pain relief, oxytocin use and shortened first stage of labour. Inclusion of the therapy as a means to invoke relaxation and counter the effects of stress and anxiety alone may be valid reasons for consideration of its use. This article outlines the framework used in clinical hypnosis and discusses some of the issues relating to the evidence base for it.

[2027]
[Hypnotherapist nurse, a speciality to promote].
[Article in French]
Etienne R.

Author information:
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Rémi Etienne is a nurse. Since 2007, he has been working in a cancer centre. Having taken a training course in hypnosis, he offers, in addition to his nursing practice, hypnosis as a form of pain relief.

[2028]
[A nosology for supernatural phenomena and the construction of the 'possessed' brain in the nineteenth century].
[Article in Portuguese]
Goncalves VP, Ortega F.

At the end of the twentieth century, supernatural phenomena such as so called trances and possession by spirits received a scientific classification, which includes the numerous diagnoses of the dominant psychiatry. At the end of the nineteenth century we can observe a process of scientific categorization of phenomena considered to have originated in superstition or popular imagination. In this work we show how trances and spiritual possession were studied by Franz Anton Mesmer and his followers when developing the concept of magnetism; by James Braid during the creation of his theory of hypnosis; and by Jean Martin Charcot, which marked the entry of hysteria into nosological classification. Despite the differences between these schools, we identify the use of the brain and cerebral metaphors as the foundation of theories
INTRODUCTION: Systemic conditions are considered limiting factors for surgical procedures under local anaesthesia in the oral cavity. All the pharmacological methods to control pain in patients have some disadvantages, such as side effects and extra costs for rehabilitation. Therefore, in such cases alternative treatment modalities are considered, such as hypnosis in dentistry. The aim of the present study was to evaluate the effect of hypnosis on haemorrhage, pain and anxiety during the extraction of third molars: a case-control study.

Abdeshahi SK(1), Hashemipour MA, Mesgarzadeh V, Shahidi Payam A, Halaj Monfared A.

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OBJECTIVE: Neuropsychiatric symptoms affect 37% of US adults and present in many important diagnoses including posttraumatic stress disorder, traumatic brain injury, and chronic pain. However, these symptoms are difficult to treat with standard treatments, and patients may seek alternative options. In this study, we examined the use of mind-body therapies by adults with neuropsychiatric symptoms. METHOD: We compared mind-body therapy use (biofeedback, energy healing, meditation, guided imagery, yoga, deep-breathing exercises, hypnosis, progressive relaxation therapy, qigong, and tai chi) between adults with and without neuropsychiatric symptoms (anxiety, depression, insomnia, headaches, memory deficits, attention deficits, and excessive daytime sleepiness) in the 2007 National Health Interview Survey (N = 23,393). Use of ≥ 1 of these therapies in the prior 12 months was the primary outcome of interest. We also examined prevalence and reasons for mind-body therapy use in adults with neuropsychiatric symptoms. We performed logistic regression to examine the association between neuropsychiatric symptoms and mind-body therapy use to adjust for sociodemographic and clinical factors. RESULTS: Adults with ≥ 1 neuropsychiatric symptom used mind-body therapies more than adults without symptoms (25.3% vs 15.0%, P < .001). Prevalence increased with increasing number of symptoms (21.5% for 1 symptom, 32.4% for ≥ 3 symptoms, P < .001); differences persisted after adjustment for potential confounders (odds ratios, 1.39 [95% CI, 1.26-1.53] and 2.48 [95% CI, 2.18-2.82]). Reasons for mind-body therapy use among adults with ≥ 1 symptom included the ineffectiveness or expense of conventional medicine (30.2%). Most adults (nearly 70%) with ≥ 1 symptom did not discuss their mind-body therapy use with a conventional provider.

CONCLUSIONS: Adults with ≥ 1 neuropsychiatric symptom use mind-body therapies frequently; more symptoms are associated with increased use. Future research is needed to understand the efficacy of these therapies. © Copyright 2013 Physicians Postgraduate Press, Inc.
two groups at 5- and 12-h post-operatively exhibited significant differences. In the hypnosis group, 10 patients (41.7%) took analgesic medication; in the local anaesthesia group, 22 patients (91.7%) took the analgesic medication (P = 0.0001). In other words, patients reported less pain when they were under hypnosis. CONCLUSION: The results of the study showed that hypnosis can effectively reduce anxiety, haemorrhage and pain. More studies are necessary to collect data on the effect of hypnosis on oral and maxillofacial surgeries. Copyright © 2012 European Association for Cranio-Maxillo-Facial Surgery. Published by Elsevier Ltd. All rights reserved.


[ABSTRACT NOT FOUND]


Hypnosis is a non-medication based approach used increasingly in hospitals. In oncology, practised by a trained nurse hypnotherapist, it represents a complementary medicine.


OBJECTIVE: Painful HIV distal sensory polyneuropathy (HIV-DSP) is the most common nervous system disorder in HIV patients. The symptoms adversely affect patients' quality of life and often diminish their capacity for independent self-care. No interventions have been shown to be consistently effective in treating the disorder. The purpose of the present study was to determine whether hypnosis could be a useful intervention in the management of painful HIV-DSP. METHOD: Participants were 36 volunteers with HIV-DSP who received three weekly training sessions in self-hypnosis. Participants were followed for pain and its sequelae for 7 weeks prior to the intervention, and for 7 weeks postintervention. Participants remained on the same standard-of-care pain regimen for the entire 17 weeks of the protocol. The primary outcome measure was the Short Form McGill Pain Questionnaire cale (SFMPQ) total pain score. Other outcome measures assessed changes in affective state and quality of life. RESULTS: Mean SFMPQ total pain scores were reduced from 17.8 to 13.2 (F[1, 35] = 16.06, P < 0.001). The reductions were stable throughout the 7-week postintervention period. At exit, 26 out of 36 (72%) had improved pain scores. Of the 26 who improved, mean pain reduction was 44%. Improvement was found irrespective of whether or not participants were taking pain medications. There was also evidence for positive changes in measures of affect and quality of life. CONCLUSION: Brief hypnosis interventions have promise as a useful and well-tolerated tool for managing painful HIV-DSP meriting further investigation. Wiley Periodicals, Inc.


[ABSTRACT NT FOUND]

This complex case illustrates how blurred the divide between body and mind can be. In a patient with refractory irritable bowel symptoms, the emergence of new social problems exacerbate both psychiatric (anxiety and depression) and physical symptoms. Treatment of the physical symptomatology consisted of acute hospital treatments initially and subsequent primary care consultations. Psychiatric treatment consists of psychopharmacological (venlafaxine and mirtazapine) and psychotherapeutic approaches (cognitive behavioural therapy initially, and clinical hypnosis). The objectives of psychiatric treatment were to stabilise symptoms, reduce hospital admissions and foster self-management. The gains of management are presented. Social difficulties encountered over the period of treatment were legal processes to gain custody of son, bereavement, financial difficulties occasioned by stoppage of welfare benefits and legal processes involved in welfare appeal. Importantly, the patient's perceptive of treatment and care is presented. Detrimental effects that current welfare reforms in the UK may have on health are highlighted.

Effect of hypnotherapy and educational intervention on brain response to visceral stimulus in the irritable bowel syndrome.
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Comment in

BACKGROUND: Gut-directed hypnotherapy can reduce IBS symptoms, but the mechanisms underlying this therapeutic effect remain unknown. AIM: To determine the effect of hypnotherapy and educational intervention on brain responses to cued rectal distensions in IBS patients. METHODS: Forty-four women with moderate-to-severe IBS and 20 healthy controls (HCs) were included. Blood oxygen level dependent (BOLD) signals were measured by functional Magnetic Resonance Imaging (fMRI) during expectation and delivery of high- (45 mmHg) and low-intensity (15 mmHg) rectal distensions. Twenty-five patients were assigned to hypnotherapy (HYP) and 16 to educational intervention (EDU). Thirty-one patients completed treatments and posttreatment fMRI. RESULTS: Similar symptom reduction was achieved in both groups. Clinically successful treatment (all responders) was associated with significant BOLD attenuation during high-intensity distension in the dorsal and ventral anterior insula (cluster size 142, P = 0.006, and cluster size 101, P = 0.005 respectively). Moreover HYP responders demonstrated a pre-post treatment BOLD attenuation in posterior insula (cluster sizes 59, P = 0.05) while EDU responders had a BOLD attenuation in prefrontal cortex (cluster size 60, P = 0.05). Pre-post differences for expectation conditions were almost exclusively seen in the HYP group. Following treatment, the brain response to distension was similar to that observed in HCs, suggesting that the treatment had a normalising effect on the central processing abnormality of visceral signals in IBS. CONCLUSIONS: The abnormal processing and enhanced perception of visceral stimuli in IBS can be normalised by psychological interventions. Symptom improvement in the treatment groups may be mediated by different brain mechanisms. Clinical trial number: NCT01815164. © 2013 John Wiley & Sons Ltd.

Somatosensory sensitivity in patients with persistent idiopathic orofacial pain is associated with pain relief from hypnosis and relaxation.
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OBJECTIVES: In a recent study hypnosis has been found to relieve persistent idiopathic orofacial pain. Quantitative sensory testing (QST) is widely used to evaluate somatosensory sensitivity, which has been suggested as a possible predictor of management outcome. The objectives of this study were to examine: (1) possible associations between clinical pain relief and baseline somatosensory sensitivity and (2) the effect of hypnosis management on QST parameters.
METHODS: Forty-one patients with persistent idiopathic orofacial pain completed this randomized controlled study in 1 of 2 groups: hypnosis (hypnotic analgesia suggestions) or control (relaxation). QST at 2 intraoral (pain region and contralateral mirror image region) and 3 extraoral (hand and both cheeks) sites was performed at baseline and after the hypnosis/control management, together with pressure pain thresholds and pressure pain tolerance thresholds determined bilaterally at the masseter and temporalis muscles, the temporomandibular joints, and the third finger. RESULTS: Degree
of pain relief was negatively correlated with a summary statistic of baseline somatosensory sensitivity (summed z-score), that is, high baseline somatosensory sensitivity was associated with low pain relief (r=-0.372, P=0.020). Hypnosis had no major effect on any QST measure compared with relaxation (P>0.063). CONCLUSIONS: High pain sensitivity at baseline may predict poor pain management outcome. In addition, despite clear clinical pain relief, hypnosis did not significantly or specifically influence somatosensory sensitivity. Future studies should further explore QST measures as possible predictors of different management response in orofacial pain conditions.


Hypnotic responding might be due to attenuated frontal lobe functioning after the hypnotic induction. Little is known about whether personality traits linked with frontal functioning are associated with responsiveness to hypnotic suggestions. We assessed whether hypnotic suggestibility is related to the traits of self-control and impulsivity in 154 participants who completed the Brief Self-Control Scale, the Self-Regulation Scale, the Barratt Impulsiveness Scale (BIS-11), and the Harvard Group Scale of Hypnotic Susceptibility (HGSHS:A). BIS-11 non-planning impulsivity correlated positively with HGSHS:A (Bonferroni-corrected). Furthermore, in the best model emerging from a stepwise multiple regression, both non-planning impulsivity and self-control positively predicted hypnotic suggestibility, and there was an interaction of BIS-11 motor impulsivity with gender. For men only, motor impulsivity tended to predict hypnotic suggestibility. Hypnotic suggestibility is associated with personality traits linked with frontal functioning, and hypnotic responding in men and women might differ. Copyright © 2013 Elsevier Inc. All rights reserved.

[2039] Nurs Stand. 2013 Jul 3-9;27(44):20. Recovery through suggestion. Pearce L. Nurse Helen Bremner established a hypnotherapy service for patients with irritable bowel syndrome in 2010. Despite achieving impressive results, funding was withdrawn in April this year.


OBJECTIVE: To examine the effect of a brief course in self-hypnosis for childbirth on duration of the labor and other birth outcomes. DESIGN: A randomized, controlled, single-blind trial. SETTING: Aarhus University Hospital Skejby, Denmark. POPULATION: A total of 1222 healthy nulliparous women. METHODS: A hypnosis group receiving three 1-h lessons in self-hypnosis with additional audio-recordings to ease childbirth, a relaxation group receiving three 1-h lessons in various relaxation methods and mindfulness with audio-recordings for additional training, and a usual-care group receiving only the usual antenatal care were compared. MAIN OUTCOME MEASURES: Duration of labor, birth complications, lactation success, caring for the child, and preferred future mode of delivery. RESULTS: No differences were found across the three groups on duration from arriving at the birth department until the expulsive phase of second stage of labor, the duration of the expulsive phase, or other birth outcomes. Fewer emergency and more elective cesarean sections occurred in the hypnosis group. No difference was seen across the groups for lactation success or caring for the child but fewer women in the hypnosis group preferred a cesarean section in future pregnancies because of fear of childbirth and negative birth experiences. CONCLUSIONS: Learning self-hypnosis to ease childbirth taught as a brief course failed to show any effects on duration of childbirth and other birth outcomes. © 2013 The Authors Acta Obstetricia et Gynecologica Scandinavica © 2013 Nordic Federation of Societies of Obstetrics and Gynecology.

Hageman JH, Frederick C.

The status of research in ego state therapy is examined against the backdrop of 20th and 21st century developments in the philosophy of science and the emerging recognition of the subjective as a vital element in all science. Attention is paid to the phenomenological method because until recently phenomenological studies have been the basis for the standards of care and training in ego state therapy as well as in many aspects of hypnotically facilitated psychotherapy. The importance of bringing an end to the "science wars" through the integration of the subjective and the objective, of phenomenological studies and evidence-based studies in ego state therapy and hypnosis research, is proposed.

[2042]
Evidence based abreactive ego state therapy for PTSD.
Barabasz A.

A single 5-6 hours manualized abreactive ego state therapy session has recently been subjected to two placebo-controlled investigations meeting evidence-based criteria. Ego state therapy was found to be a highly effective and durable treatment for posttraumatic stress disorder. Apparently, ego state therapy works because it is emotion focused, activates sub-cortical structures, and because the supportive, interpretive therapist reconstructs the patient's personality to be resilient and adaptive. In this article the author reviews the treatment procedures and presents the findings of both studies.

[2043]
The center core in ego state therapy and other hypnotically facilitated psychotherapies.
Frederick C.

Center core phenomena have been utilized in the practice of ego state therapy and other forms of hypnotically facilitated psychotherapy for nearly 40 years. Despite the frequency with which they are employed, many confusions, contradictions, and questions remain concerning them. In this article relevant center core phenomena literature is reviewed and an essential differentiation between two different kinds of center core phenomena is clarified. Psychodynamic explanations are offered for the therapeutic benefits of archetypal center core experiences such as inner strength and inner wisdom. The information provided offers clinicians a sturdier platform from which to decide whether to incorporate center core experiences into clinical practice. The persistent question of whether center core phenomena are ego states is revisited and addressed.

[2044]
Mending fences: repairing boundaries through ego state therapy.
Phillips M.

Ego state therapy has often been cited as an effective treatment to help repair fragmentation related to posttraumatic stress and dissociative disorders. This article explores how specialized work with ego states can help to clarify and strengthen internal and external boundaries, create greater boundary flexibility, and contribute to containment and self-regulation. Applications of direct and indirect hypnosis to repair boundary issues through ego state therapy are emphasized, and clinical case examples are used to illustrate results.

[2045]
Healing the wounded self: combining hypnotherapy with ego state therapy.
Alladin A.

The purpose of this article is to formulate a theoretical conceptualization for utilizing ego state therapy (EST) as an adjunct with cognitive hypnotherapy (CH) for depression. As the relationship between life events and onset of depression is very complex, it is not clear from current literature how stressors cause depressive symptoms. The notion of "wounded self," derived from the work of Wolfe (2005, 2006), is examined as a potential unifying concept for binding the role of risk factors in the precipitation of depression. By incorporating wounded self, the circular feedback model of depression, on which CH for depression is based, is expanded. This revised version provides conceptual and empirical underpinnings for integrating EST with CH in the management of depression.

[2046]
Ego state therapy and hypnosis.
Frederick C.

[ABSTRACT NOT FOUND]

[2047]
Hypnotherapy: a forgotten modality in managing chronic post-traumatic upper limb pain.
Mack P, Yam AK, Chin AY.

[ABSTRACT NOT FOUND]

[2048]
Medical hypnosis as a tool to acclimatize children to noninvasive positive pressure ventilation: a pilot study.
Delord V(1), Khirani S, Ramirez A, Joseph EL, Gambier C, Belson M, Gajan F, Fauroux B.
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BACKGROUND: Patient cooperation is crucial for the success of noninvasive positive pressure ventilation (NPPV). This study evaluated the efficacy of medical hypnosis to reduce anticipatory anxiety and acclimatization time in children who are candidates for long-term NPPV. METHODS: Medical hypnosis was performed by a trained nurse. The acclimatization time and long-term compliance with NPPV were evaluated. RESULTS: Hypnosis was performed in nine children aged 2 to 15 years. Seven children had a high level of anticipatory anxiety because of a tracheotomy since birth (n=2), a history of maxillofacial surgery (n=2), severe dyspnea because of lung disease (n=2), and morbid obesity and depression (n=1), and two children with obstructive sleep apnea failed standard NPPV initiation. The hypnosis techniques were based on distraction in the youngest patient and indirect or direct hypnotic suggestions in the older children to obtain a progressive psychocorporal relaxation. All patients accepted the interface and the NPPV after the first hypnosis session. A median of three sessions was needed for overnight (>6 h) NPPV acceptance. The 6-month compliance with NPPV was excellent, with a median use of 7.5 h per night. CONCLUSION: Medical hypnosis is an effective, safe, noninvasive, and inexpensive tool for reducing the anticipatory distress and acclimatization time for NPPV. This therapy is particularly useful in children with traumatic experiences, such as a tracheotomy or facial surgical procedures.

[2049]
Efficacy of hypnosis in adults undergoing surgery or medical procedures: a meta-analysis of randomized controlled trials.
Tefikow S(1), Barth J, Maichrowitz S, Beelmann A, Strauss B, Rosendahl J.
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This meta-analysis investigates the efficacy of hypnosis in adults undergoing surgical or medical procedures compared to standard care alone or an attention control. Through a comprehensive literature search N=34 eligible randomized controlled trials (RCTs) were included, comprising a total of 2597 patients. Random effects meta-analyses revealed positive treatment effects on emotional distress (g=0.53, CI 95% [0.37; 0.69]), pain (g=0.44, CI 95% [0.26; 0.61]), medication consumption (g=0.38, CI 95% [0.20; 0.56]), physiological parameters (g=0.10, CI 95% [0.02; 0.18]), recovery (g=0.25, CI 95% [0.04; 0.46]), and surgical procedure time (g=0.25, CI 95% [0.12; 0.38]). In conclusion, benefits of hypnosis on various surgically relevant outcomes were demonstrated. However, the internal validity of RCTs seems limited and further high methodological quality RCTs are needed to strengthen the promising evidence of hypnosis for adults undergoing surgery or medical procedures. Copyright © 2013 Elsevier Ltd. All rights reserved.

[2050]
A systematic review of complementary and alternative medicine interventions for the management of cancer-related fatigue.
Finnegan-John J(1), Molassiotis A, Richardson A, Ream E.
Fatigue, experienced by patients during and following cancer treatment, is a significant clinical problem. It is a prevalent and distressing symptom yet pharmacological interventions are used little and confer limited benefit for patients. However, many cancer patients use some form of complementary and alternative medicine (CAM), and some evidence suggests it may relieve fatigue. A systematic review was conducted to appraise the effectiveness of CAM interventions in ameliorating cancer-related fatigue. Systematic searches of biomedical, nursing, and specialist CAM databases were conducted, including Medline, Embase, and AMED. Included papers described interventions classified as CAM by the National Centre of Complementary and Alternative Medicine and evaluated through randomized controlled trial (RCT) or quasi-experimental design. Twenty studies were eligible for the review, of which 15 were RCTs. Forms of CAM interventions examined included acupuncture, massage, yoga, and relaxation training. The review identified some limited evidence suggesting hypnosis and ginseng may prevent rises in cancer-related fatigue in people undergoing treatment for cancer and acupuncture and that biofield healing may reduce cancer-related fatigue following cancer treatments. Evidence to date suggests that multivitamins are ineffective at reducing cancer-related fatigue. However, trials incorporated within the review varied greatly in quality; most were methodologically weak and at high risk of bias. Consequently, there is currently insufficient evidence to conclude with certainty the effectiveness or otherwise of CAM in reducing cancer-related fatigue. The design and methods employed in future trials of CAM should be more rigorous; increasing the strength of evidence should be a priority.

[Hypnotic suggestions may change the perceived color of objects. Given that chromatic stimulus information is processed rapidly and automatically by the visual system, how can hypnotic suggestions affect perceived colors in a seemingly immediate fashion? We studied the mechanisms of such color alterations by measuring electroencephalography in two highly suggestible participants as they perceived briefly presented visual shapes under posthypnotic color alternation suggestions such as "all the squares are blue". One participant consistently reported seeing the suggested colors. Her reports correlated with enhanced evoked upper beta-band activity (22 Hz) 70-120 ms after stimulus in response to the shapes mentioned in the suggestion. This effect was not observed in a control condition where the participants merely tried to simulate the effects of the suggestion on behavior. The second participant neither reported color alterations nor showed the evoked beta activity, although her subjective experience and event-related potentials were changed by the suggestions. The results indicate a preconscious mechanism that first compares early visual input with a memory representation of the suggestion and consequently triggers the color alteration process in response to the objects specified by the suggestion. Conscious color experience is not purely the result of bottom-up processing but it can be modulated, at least in some individuals, by top-down factors such as hypnotic suggestions.]
INTRODUCTION: Irritable Bowel Syndrome (IBS) is a common, chronic functional illness, which can greatly reduce patients' quality of life, and consumes healthcare resources. Standard treatments include dietary changes and medication, though these are often ineffective. RESEARCH: Clinical studies of hypnotherapy demonstrate improvement in symptoms and quality of life in over 80% of subjects with intractable IBS. Our experience of a nurse-led hypnotherapy service for IBS in a community setting provides evidence of comparable efficacy for symptom control, improved quality of life, reduced dependence on medication and improved general health measures. We address the challenges of setting up and maintaining the service in a changing healthcare environment. CONCLUSION: This model of care could act as a template for providers of gastroenterology and functional disease services wishing to provide IBS care. Copyright © 2013 Elsevier Ltd. All rights reserved.

Clinical reports and observations going back almost two centuries consistently indicate that hypnotherapy is an effective modality for the treatment of post traumatic stress disorder (PTSD). Pierre Janet was the first clinician to describe the successful initiation of stepwise hypnotic techniques in PTSD symptom reduction. Hypnotherapy may accelerate the formation of a therapeutic alliance and contribute to a positive treatment outcome. Hypnotic techniques may be valuable for patients with PTSD who exhibit symptoms such as anxiety, dissociation, widespread somatoform pain complaints and sleep disturbances. Hypnotic techniques may also facilitate the arduous tasks of working through traumatic memories, increasing coping skills, and promoting a sense of competency. In this review we will present guidelines for the stepwise implementation of hypnotherapy in PTSD. Since most data regarding the use of hypnotherapy in PTSD has been gathered from uncontrolled clinical observations, methodologically sound research demonstrating the efficacy of hypnotic techniques in PTSD is required for hypnotherapy to be officially added to the therapeutic armamentarium for this disorder.

Hypnosis uses the powerful effects of attention and suggestion to produce, modify and enhance a broad range of subjectively compelling experiences and behaviours. For more than a century, hypnotic suggestion has been used successfully as an adjunctive procedure to treat a wide range of clinical conditions. More recently, hypnosis has attracted a growing interest from a cognitive neuroscience perspective. Recent studies using hypnotic suggestion show how manipulating subjective awareness in the laboratory can provide insights into brain mechanisms involved in attention, motor control, pain perception, beliefs and volition. Moreover, they indicate that hypnotic suggestion can create informative analogues of clinical conditions that may be useful for understanding these conditions and their treatments.
Nocebo effects can be acquired by verbal suggestion, but it is unknown whether they can be induced through observational learning and whether they are influenced by factors known to influence pain perception, such as pain anxiety or pain catastrophizing. Eighty-five female students (aged 22.5 ± 4.4 years) were randomly assigned to one of three conditions. Participants in the control condition (CC) received information that an ointment had no effect on pain perception. Participants in the verbal suggestion condition (VSC) received information that it increased pain sensitivity. Participants in the social observational learning condition (OLC) watched a video in which a model displayed more pain when ointment was applied. Subsequently, all participants received three pressure pain stimuli (60 seconds) on each hand. On one hand, the ointment was applied prior to the stimulation. Numerical pain ratings were collected at 20-second intervals during pain stimulation. The participants filled in questionnaires regarding pain-related attitudes (Pain Anxiety Symptoms Scale, Pain Catastrophizing Scale, and Somatosensory Amplification Scale). Participants in the OLC showed higher pain ratings with than without ointment. Pain ratings within the CC and the VSC were at the same level with and without ointment. In the VSC, the pain ratings were higher than in the CC with and without ointment. The nocebo response correlated with pain catastrophizing but not with pain anxiety or somatosensory amplification. A nocebo response to pressure pain was induced by observational learning but not by verbal suggestion. This finding highlights the importance of investigating the influence of observational learning on nocebo hyperalgesia. Copyright © 2013 International Association for the Study of Pain. Published by Elsevier B.V. All rights reserved.

Nocebo response to pressure pain was induced by observational learning but not by verbal suggestion. This finding highlights the importance of investigating the influence of observational learning on nocebo hyperalgesia.

The effects of a medical hypnotherapy on clothing industry employees suffering from chronic pain.
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BACKGROUND: Problems associated with pain in several body regions due to work-related musculoskeletal disorders (WRMDs), repetitive movement and negative stress at work are quite common in many manufacturing industries of Latvia, int.al. clothing industry. The aim of this study was to evaluate efficiency of the psychotherapeutic intervention using medical hypnotherapy (MH) program for mind-body relaxation with pain-blocking imagery, cognitive restructuring of unpleasant physical and emotional experience. METHODS: 300 sewers and 50 cutters with chronic pain were involved in the study. Self-rated WRMDs symptoms, pain intensity and interference were assessed using the extended version of Nordic Musculoskeletal Questionnaire and Brief Pain Inventory Scale. Assessment of the functional state of muscles was carried out using myotonometric (MYO) measurements. Work heaviness degree was estimated via heart rate monitoring (HRM). The MH program was composed of cognitive hypnotherapy and self-hypnosis training. Sunnen Trance Scale was used to determine person's hypnotic susceptibility. Life quality assessment before and after MH program was carried out using Quality of Life Scale. RESULTS: At the beginning of MH program sessions both sewers and cutters reported on pain interference with general activities, mood, sleep, normal work, etc., but after MH the interference of pain significantly decreased. HRM data confirmed that work heaviness degree of sewers and cutters can be referred to as light and moderate work (energy expenditure for their tasks varies from 3.4 till 4.7 kcal/min). Using MYO measurements it was stated that before MH 22% of workers involved in the study fell under III MYO category indices, consequently, their muscle tone was increased, which is associated with muscular fatigue. After MH muscle tone remained within the normal range meaning that they were able to adapt to the existing workload (II MYO category) or fully relax (I MYO category). CONCLUSIONS: MH program including exercises-workouts, cognitive hypnotherapy and self-hypnosis training sessions is an effective method to decrease composite chronic pain intensity for sewers and cutters, as well as to decrease psychogenic tension and muscle fatigue (proved by objective measurements of muscles tone) and to increase the life quality.

Hypnosis for burn care was introduced in 2004 in the CHUV burn center showing great benefit for burned patients. Whereas advantages of hypnosis for the patient are well established, the impact on the medical staff remains poorly assessed. This manuscript reviews current attested benefits of hypnosis for patients, specially for burned patients. The results of a recent study assessing the impact of hypnosis on the staffs level of stress caused by burn treatment, will also be introduced.


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OBJECTIVES: To compare the efficacy of hypnotherapy versus gabapentin for the treatment of hot flashes in breast cancer survivors, and to evaluate the feasibility of conducting a clinical trial comparing a drug with a complementary or alternative method (CAM). DESIGN: Prospective randomised trial. SETTING: Breast health centre of a tertiary care centre. PARTICIPANTS: 15 women with a personal history of breast cancer or an increased risk of breast cancer who reported at least one daily hot flash. INTERVENTIONS: Gabapentin 900 mg daily in three divided doses (control) compared with standardised hypnotherapy. Participation lasted 8 weeks. OUTCOME MEASURES: The primary endpoints were the number of daily hot flashes and hot flash severity score (HFSS). The secondary endpoint was the Hot Flash Related Daily Interference Scale (HFRDIS). RESULTS: 27 women were randomised and 15 (56%) were considered evaluable for the primary endpoint (n=8 gabapentin, n=7 hypnotherapy). The median number of daily hot flashes at enrolment was 4.5 in the gabapentin arm and 5 in the hypnotherapy arm. HFSS scores were 7.5 in the gabapentin arm and 10 in the hypnotherapy arm. After 8 weeks, the median number of daily hot flashes was reduced by 33.3% in the gabapentin arm and by 80% in the hypnotherapy arm. The median HFSS was reduced by 33.3% in the gabapentin arm and by 85% in the hypnotherapy arm. HFRDIS scores improved by 51.6% in the gabapentin group and by 55.2% in the hypnotherapy group. There were no statistically significant differences between groups. CONCLUSIONS: Hypnotherapy and gabapentin demonstrate efficacy in improving hot flashes. A definitive trial evaluating traditional interventions against CAM methods is feasible, but not without challenges. Further studies aimed at defining evidence-based recommendations for CAM are necessary. TRIAL REGISTRATION: clinicaltrials.gov (NCT00711529).
One approach to hypnosis suggests that for hypnotic experience to occur frontal lobe activity must be attenuated. For example, cold control theory posits that a lack of awareness of intentions is responsible for the experience of involuntariness and/or the subjective reality of hypnotic suggestions. The mid-dorso-lateral prefrontal cortex and the ACC are candidate regions for such awareness. Alcohol impairs frontal lobe executive function. This study examined whether alcohol affects hypnotisability. We administered 0.8 mg/kg of alcohol or a placebo to 32 medium susceptible participants. They were subsequently hypnotised and given hypnotic suggestions. All participants believed they had received some alcohol. Participants in the alcohol condition were more susceptible to hypnotic suggestions than participants in the placebo condition. Impaired frontal lobe activity facilitates hypnotic responding, which supports theories postulating that attenuation of executive function facilitates hypnotic response, and contradicts theories postulating that hypnotic response involves enhanced inhibitory, attentional or other executive function. Copyright © 2013. Published by Elsevier Inc.

[2062]
Positive suggestion techniques in somatic medicine: A review of the empirical studies.
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INTRODUCTION: THERE IS AN EVER REOCCURRING QUESTION IN MEDICAL PRACTICE: Does the positive attitude and communication of the medical staff make any difference? AIM: Our aim is to present a comprehensive overview of the medically relevant effects of positive suggestions by reviewing the recent literature. METHODS: We will review the studies measuring the effects of suggestive communication of the past 20 years. In cases of studies presented in more details we quote from the suggestion scripts used in the study, too. RESULTS: Some of the reviewed papers report that positive suggestions lead to decreased pain and use of pain medication and positively affect physiological factors like bowel motility, blood pressure and bleeding during surgery as well. However, the literature also contains studies in which only partial or no positive effects were found. CONCLUSIONS: We emphasize further, more detailed investigation of positive suggestion techniques and its integration into the education of medical professionals.

[2063]
Suggestive techniques connected to medical interventions.
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The paper introduces a series of articles where several detailed clinical examples will be presented on the effectiveness of using suggestive techniques in various fields of interventional medicine. The aim of this series is to raise the attention to the patients heightened openness to suggestions. By recognizing the unavoidable nature of suggestive effects on one hand we can eliminate unfavourable, negative suggestions and on the other hand go on and consciously apply positive, helpful variations. Research materials, reviews and case study will describe the way suggestions can reduce anxiety and stress connected to medical intervention, improve subjective well-being and cooperation, and increase efficiency by reducing treatment costs.

[2064]
A right hemisphere safety backup at work: hypotheses for deep hypnosis, post-traumatic stress disorder, and dissociation identity disorder.
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Problem theory points to an a priori relation between six key problems of living, to which people have adapted through evolution. Children are guided through the problems one by one, learning to switch between them automatically and unawares. The first problem of raising hope of certainty (about the environment), is dealt with in the right hemisphere (RH). The second of raising hope of freedom (or power to control), is dealt with in the left hemisphere (LH). Here adventurousness and ignoring the goodness of outcomes potentially create recklessness. When uncertainty rises the RH
activates a backup with an override that substitutes immobility, takes over sensory inputs, but allows obedience to parental commands, and a cut-out that stops new work on the freedom problem. Support for the use of the backup by infants is found in the immobility that precedes the crying in strange conditions, and in childhood EEGs. The hypothesis that the backup is active in deep hypnosis imposes accord on findings that appear contradictory. For example it accounts for why observations during deep hypnosis emphasize the activity of the RH, but observations of responsive people not under hypnosis emphasize the activity of the LH. The hypothesis that the backup is active in post-traumatic stress disorder (PTSD) is supported by (a) fMRI observations that could reflect the cut-out, in that part of the precuneus has low metabolism, (b) the recall of motionlessness at the time of the trauma, (c) an argument that playing dead as a defence against predators is illogical, (d) the ease of hypnosis. With dissociative identity disorder (DID), the theory is consistent with up to six alters that have executive control and one trauma identity state where childhood traumas are re-experienced. Support for the cut-out affecting the trauma identity state comes from suppression of part of the precuneus and other parts of the parietal lobe when the trauma identity state is salient and a general script about a trauma is listened to. Support also comes from the ease of hypnosis. The cut-out acts independently of the override. It is linked to low metabolism at the same point in the left precuneus by evidence from all three conditions, hypnosis, PTSD and DID. The concept of dissociation is not required with any of the hypotheses. Copyright © 2013 Elsevier Ltd. All rights reserved.

[2065]
Nocturnal mouthpiece ventilation and medical hypnosis to treat severe obstructive sleep apnea in a child with cherubism.
Khirani S(1), Kadlub N, Delord V, Picard A, Fauroux B.
Author information:
(1)Inserm U 955 Pierre et Marie Curie-Paris 6 University, Paris, France.
A 4-year old boy presented severe obstructive sleep apnoea due to complete nasal obstruction secondary to cherubism. Because of anticipatory anxiety due to numerous surgical interventions, medical hypnosis was proposed to facilitate non-invasive continuous positive pressure ventilation (CPAP) acceptance. CPAP by means of an oral interface was completely accepted after three hypnosis sessions and resulted in the correction of his obstructive sleep apnea (OSA) syndrome. This report highlights the benefit of medical hypnosis in facilitating CPAP acceptance as well as the efficacy of mouthpiece ventilation in a severe form of cherubism with complete nasal obstruction. Copyright © 2012 Wiley Periodicals, Inc.

[2066]
A dream birth? Try hypnobirthing!
Graves K.

Hypnobirthing is often regarded as a method of pain relief without drugs. This is to miss the point, as it presupposes that pain is there in the first place. When a woman learns to release the preconceptions, fears and worries about birth that are endemic in our society, her experience of giving birth to her baby can be the most wonderful and empowering experience of her life. Mind and body working together can be a powerful and efficient combination. This is how birth is designed to be, as midwives and hospitals are beginning to discover. Thus hypnobirthing can provide a service that women want as well as save scarce NHS funds.

[2067]
Gut-directed hypnotherapy significantly augments clinical remission in quiescent ulcerative colitis.
Keefer L(1), Taft TH, Kiebles JL, Martinovich Z, Barrett TA, Palsson OS.
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BACKGROUND: Psychotherapy is not routinely recommended for in ulcerative colitis (UC). Gut-directed hypnotherapy (HYP) has been linked to improved function in the gastrointestinal tract and may operate through immune-mediated pathways in chronic diseases. AIMs: To determine the feasibility and acceptability of HYP and estimate the impact of HYP on clinical remission status over a 1-year period in patients with an historical flare rate of 1.3 times per year. METHODS: A total of 54 patients were randomised at a single site to seven sessions of gut-directed HYP (n = 26) or attention control (CON; n = 29) and followed for 1 year. The primary outcome was the proportion of participants in each condition that had remained clinically asymptomatic (clinical remission) through 52 weeks post treatment. RESULTS: One-way analysis of variance comparing HYP and CON subjects on number of days to clinical relapse favoured the HYP condition [F = 4.8 (1, 48), P = 0.03] by 78 days. Chi-squared analysis comparing the groups on proportion maintaining remission at 1 year was also significant [χ²(1) = 3.9, P = 0.04], with 68% of HYP and 40% of CON patients maintaining remission
for 1 year. There were no significant differences between groups over time in quality of life, medication adherence, perceived stress or psychological factors. CONCLUSION: This is the first prospective study that has demonstrated a significant effect of a psychological intervention on prolonging clinical remission in patients with quiescent ulcerative colitis (Clinical Trial # NCT00798642). © 2013 John Wiley & Sons Ltd.

[2068]
A review of the history of hypnosis through the late 19th century.
Hammond DC.

A review of the history of hypnosis through the late 19th century is provided in this article. The author offers an important review for practitioners of hypnosis preparing to take diplomate board examinations. Clinicians will also be enabled to trace the evolution of clinical methods, principles, and techniques.

[2069]
Symptoms as solutions: hypnosis and biofeedback for autonomic regulation in autism spectrum disorders.
Sugarman LI, Garrison BL, Williford KL.

The Autonomic Dysregulation Theory of autism posits that a phylogenetically early autonomic defect leads to overarousal and impairments in language and social engagement. Cognitive rigidity and repetitive behaviors manifest as mitigating efforts. Focusing on the implications of this premise may provide more productive therapeutic approaches than existing methods. It suggests that self-regulation therapy using hypnosis and biofeedback should be highly effective, especially for young people. Hypnotic strategies can utilize restrictive repetitive behaviors in trance as resources for comfort and control. Biofeedback training can be tailored to focus on autonomic regulation. The authors develop this theory and describe methods of integrating hypnosis and biofeedback that have been therapeutic for people with autism. Directions for future research to validate this approach are discussed.

[2070]
I-95 phobia treated with hypnotic systematic desensitization: a case report.
Iglesias A, Iglesias A, Iglesias A.

Systematic desensitization and hypnosis mediated therapy share empirical evidence of efficacy in the treatment of specific phobias. However, a review of the literature indicated there is limited documentation in the employment of these modalities for treating driving related phobias (DRP). This article reports on the use of hypnosis aided systematic desensitization (HASD) in the successful treatment of a case of non-accident related driving phobia, specifically manifested on Interstate 95 (I-95). The treatment consisted of 6 office sessions of HASD along with 14 in-vivo sessions where the patient performed multiple exposures/rehearsals of the behaviors that had been successfully mastered at the office visits. The results indicated that this patient with case of (DRP) was able to resume travel on I-95 at conclusion of treatment. The patient was symptom free at follow up 6 months later.

[2071]
The role of tactile support in arm levitation.
Peter B, Piesbergen C, Lucic K, Staudacher M, Hagl M.

How many persons need tactile support à la Milton H. Erickson to achieve arm levitation during hypnosis? How do these differ from those who do not need it? Hypnotic arm levitation was suggested three times consecutively to 30 medium suggestible students. Sixteen succeeded without any tactile support; 7 needed it one or two times; 5 needed it every time; and 2 achieved no arm levitation at all. Participants without any tactile support went more quickly into deeper hypnosis, experienced more involuntariness, less effort, and had higher electrodermal activity. This greater physiological activity seems necessary for hypnotic arm levitation as a form of "attentive hypnosis" in contrast to "relaxation hypnosis." A change in verbal suggestion from "imagine a helium balloon" to "leave levitation to your unconscious mind" revealed no differences. Several issues resulting from this exploratory arm levitation study are discussed. The idea of different proprioceptive-kinesthetic abilities is introduced and the profound need of co-creating an individual suggestion is emphasized.

[2072]
Placebo versus "standard" hypnosis rationale: attitudes, expectancies, hypnotic responses, and experiences.
Accardi M, Cleere C, Lynn SJ, Kirsch I.
In this study participants were provided with either the standard rationale that accompanies the Harvard Group Scale of Hypnotic Susceptibility: A (Shor & Orne, 1962) or a rationale that presented hypnosis as a nondeceptive placebo, consistent with Kirsch’s (1994) sociocognitive perspective of hypnosis. The effects of the placebo and standard rationales were highly comparable with respect to hypnotic attitudes; prehypnotic expectancies; objective, subjective, and involuntariness measures of hypnotic responding; as well as a variety of subjective experiences during hypnosis, as measured by the Phenomenology of Consciousness Inventory (Pekala, 1982). Differences among correlations were not evident when measures were compared across groups. However, indices of hypnotic responding were correlated with attitudes in the hypnosis but not the placebo condition, and, generally speaking, the link between subjective experiences during hypnosis and measures of hypnotic responding were more reliable in the placebo than the hypnosis group. Researcher findings are neutral with respect to providing support for altered state versus sociocognitive models of hypnosis.

[2073]
The nature and research on hypnosis and placebo effect.
Lankton S.

The gestural misinformation effect: skewing eyewitness testimony through gesture.
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The susceptibility of eyewitnesses to verbal suggestion has been well documented, although little attention has been paid to the role of nonverbal communication in misinformation. Three experiments are reported; in each, participants watched footage of a crime scene before being questioned about what they had observed. In Experiments 1 and 2, an on-screen interviewer accompanied identically worded questions with gestures that either conveyed accurate information about the scene or conveyed false, misleading information. The misleading gestures significantly influenced recall, and participants’ responses were consistent with the gestured information. In Experiment 3, a live interview was conducted, and the gestural misinformation effect was found to be robust; participants were influenced by misleading gestures performed by the interviewer during questioning. These findings provide compelling evidence for the gestural misinformation effect, whereby subtle hand gestures can implant information and distort the testimony of eyewitnesses. The practical and legal implications of these findings are discussed.

[2074]
Mind-body medicine for schizophrenia and psychotic disorders: a review of the evidence.
Helgason C(1), Sarris J.
Author information: (1)Saybrook University, School of Mind-Body Medicine, San Francisco, CA.

Over half of psychiatric patients use some kind of Complementary and Alternative Medicine, with Mind-Body Medicine (MBM) being the most commonly used collective modality. To date however, to our knowledge, no overarching review exists examining MBM for psychotic disorders. Thus the purpose of this paper is to present the first review in this area. A MEDLINE search was conducted of articles written in English from 1946 up to January 15, 2011 using a range of MBM and psychotic disorder search terms. Human clinical trials and, where available, pertinent meta-analyses and reviews were included in this paper. Forty-two clinical studies and reviews of MBMs were located, revealing varying levels of evidence. All studies included used MBMs as an adjunctive therapy to usual care, including medication. Overall, supportive evidence was found for music therapy, meditation and mindfulness techniques. Some positive studies were found for yoga and breathing exercises, general relaxation training, and holistic multi-modality MBM interventions. Due to insufficient data, a conclusion cannot be reached for hypnosis, thermal or EMG biofeedback, dance or drama therapy, or art therapy. No clinical trials were found for guided imagery, autogenic training, journal writing, or ceremony practices. For many techniques, the quality of research was poor, with many studies having small samples, no randomization, and no adequate control. While the above techniques are likely to be safe and tolerable in this population based on current data, more research is required to decisively assess the validity of applying many MBMs in the mainstream treatment of psychotic disorders.

[2075]
Hypnosis for the control of pain associated with external cephalic version: a comparative study.
Guittier MJ(1), Guillemin F, Farinelli EB, Irion O, Boulvain M, de Tejada BM.
Author information: (1) University of Applied Sciences Western Switzerland , Geneva, Switzerland .

OBJECTIVE: To assess the effectiveness of hypnosis to reduce pain and facilitate external cephalic version (ECV).
DESIGN: Cohort study. SETTING: Geneva University Hospitals, Switzerland. PARTICIPANTS: 63 women attempting ECV under hypnosis from 2010 to 2011 were compared with 122 women who received standard care
from 2005 through 2008. INTERVENTION: Immediately after the ECV attempt, both groups completed the same questionnaire evaluating the participants’ pain (visual analogue and verbal rating scales) and experience with the procedure. Physicians also completed a questionnaire that elicited their views on the effect of hypnosis on the intervention. A chi-squared test was used to compare differences in proportions, and the Mann-Whitney U test was used for differences in continuous variables. A thematic content analysis of the obstetricians’ responses to the open question regarding their experience of hypnotist accompaniment was also performed. OUTCOME MEASURES: Pain evaluated by women (visual analogue and verbal rating scales) and success rate of ECV. RESULTS: Pain intensity reported by women did not significantly differ between the hypnosis group and the standard care group (visual analogue scale score, 6.0 versus 6.3, respectively; p=.25; difference for verbal rating scale, p=.31). In 72% of cases, physicians reported that hypnosis facilitated the procedure. The success rates in both groups were not significantly different (30% with hypnosis compared with 38% without; p=.31). Most women in both groups found the ECV attempt painful and a source of anxiety but would undergo it again if necessary. CONCLUSION: Hypnosis accompaniment during ECV does not reduce pain intensity associated with the procedure or improve the probability of a successful version.

[2076]

Hypnosis has puzzled scientists for centuries, and particularly the reason why some people are prone to engaging in suggested experiences discordant with external reality. Absorption in internal experience is one key component of the hypnotic response. The neuropeptide oxytocin has been posited to heighten sensitivity to external cues, and it is possible that individual differences in oxytocin-related capacity to engage in external or internal experiences influences hypnotic response. To test this proposal, 185 Caucasian individuals provided saliva samples for analysis of polymorphisms in the oxytocin receptor gene, COMT, and independently completed standardized measures of hypnotizability and absorption. Participants with the GG genotype at rs53576 were characterized by lower hypnotizability and absorption scores than those with the A allele; there was no association between hypnotizability and COMT. These findings provide initial evidence that the capacity to respond to suggestions for altered internal experience is influenced by the oxytocin receptor gene, and is consistent with evidence that oxytocin plays an important role in modulating the extent to which people engage with external versus internal experiences. Copyright © 2013 Elsevier Ltd. All rights reserved.

[2077]

Towards the end of the nineteenth century, some Spanish physicians sought to legitimize hypnotherapy within medicine. At the same time, hypnotism was being popularized among the Spanish population through stage hypnosis shows. In order to extend the use of medical hypnotherapy, some physicians made efforts to demarcate the therapeutic use of hypnotic suggestion from its application for recreational purposes, as performed by stage hypnotists. However, in the eyes of some physicians, the first public session to legitimize hypnotherapy turned out to be a complete failure due to its similarities with a stage hypnosis performance. Apart from exploring this kind of hitherto little-known historical cases, we explore the role of spiritists in legitimizing medical hypnosis. At a time when Spanish citizens were still reluctant to accept hypnotherapy, the spiritists sponsored a charitable clinic where treatment using hypnosis was offered. We conclude that the clinic was effective in promoting the use of hypnotherapy, both among physicians as clinical practice, and as a medical treatment for patients from the less privileged classes of Spanish society.

[2078]
The first labor analgesia with drug was performed in late Meiji Period (1868-1912). Hypnosis also attracted attention as a method of labor analgesia in mid-Meiji Period. [Article in Japanese] Okutomi T(1).Author information: (1)Division of Obstetric Anesthesia, Center for Perinatal Medicine, Kitasato University Hospital, Sagamihara 252-0375.

Ether or chloroform, was in use for ambulatory surgery after 1861 in Japan. An inhalational anesthetic, especially chloroform, was administered for cesarean section in early Meiji Period (from 1868) up to 1897. According to an article in 1903, chloroform was recommended as a strategy for internal cephalic version. However, it is uncertain whether inhalational anesthetic had been utilized for vaginal deliveries before 1903. There is evidence that hypnosis had attracted attention as a method of labor analgesia around that time.
Purpose: The purpose of this study was to enhance our understanding of factors that influence help-seeking in people with inflammatory bowel disease (IBD)-related fecal incontinence (FI), and their needs or desire for continence services.

Subjects and Setting: We conducted a survey of FI in community-dwelling people with IBD, all members of a United Kingdom IBD charity, and received 3264 responses. As part of the study, we asked 3 questions about help-seeking for IBD-related FI to which respondents were able to give free-text responses. We analyzed the responses to these help-seeking questions, continuing until data saturation when no new themes emerged (617 free text comments analyzed, 19% of total respondents).

Methods: For the full survey, a mixed-methods design was used to collect and analyze quantitative and qualitative data. Qualitative (free-text) responses relating to help-seeking behavior reported in this article were analyzed using a thematic approach.

Results: Seventy-four percent of the total sample (2415 out of 3264 respondents) reported some degree of FI. Of these, only 38% (n = 927) reported seeking help for FI. In the data reported in this article (n = 617), only 13.5% reported seeking help for FI. Help was described as satisfactory, unsatisfactory, or alternative (acupuncture, counseling, hypnotherapy). Reasons for not seeking help included believing nothing could be done, not knowing who to ask, feeling too embarrassed, ashamed or dirty, and perceived lack of interest, sympathy, or understanding from health care professionals. Although respondents wanted to talk to "someone with specialist knowledge about incontinence" only 6 out of 617 (0.9%) reported awareness of specialist continence services. Standard treatments were rarely mentioned (n = 2). Respondents’ focus was on better management of FI rather than on cure.

Conclusions: Many people with IBD-related FI are not aware of the services or treatments that are available to help them manage this distressing problem, and most do not seek help, often due to embarrassment and lack of knowledge that help might be possible. Clinical staff could communicate their awareness for the potential for FI to occur by proactively asking about symptoms during clinic appointments to provide an opportunity for symptoms to be disclosed and described.

[2079]
Help-seeking for fecal incontinence in people with inflammatory bowel disease.
Norton C(1), Dibley L., Author information: (1)Christine Norton, PhD, King's College London, London, and Imperial College Healthcare NHS Trust the United Kingdom. Lesley Dibley, MPhil, King's College, London, the United Kingdom.

Purpose: The percentage of induced live birth has more than doubled from the 1990s to 2008. Induction of labour can either be based on medical indications, or performed as an elective procedure. A large range of pharmacological and non-pharmacological modalities are available for the induction of labour and the optimal method for labour induction is unknown. This article is aimed to examine literature on non-hormonal methods for labour induction, published from January 2012 to May 2013. Recent Findings: Eleven studies were identified in our search and included into the review. Foley balloon catheter appears to be more cost-effective and commonly used non-hormonal technique for induction of labour, although further meta-analysis is required in this area. Currently, there is not enough evidence to support routine use in all women for labour induction among other methods including amniotomy, acupuncture, sexual intercourse, isosorbide mononitrate, hypnosis, castor oil and breast stimulation. The latest three studies suggest that amniotomy may increase need for oxytocin augmentation during labour induction. Summary: Many non-hormonal methods for labour induction still require further evidence to support their use within the clinical setting. Balloon catheter seems to be a more widely accepted non-hormonal method that has been supported by various literatures.

[2080]
Non-hormonal methods for induction of labour.
Lim CE(1), Ng RW, Xu K.
Author information: (1)Faculty of Medicine, University of New South Wales, Sydney Australia.

Purpose of Review: The percentage of induced live birth has more than doubled from the 1990s to 2008. Induction of labour can either be based on medical indications, or performed as an elective procedure. A large range of pharmacological and non-pharmacological modalities are available for the induction of labour and the optimal method for labour induction is unknown. This article is aimed to examine literature on non-hormonal methods for labour induction, published from January 2012 to May 2013. Recent Findings: Eleven studies were identified in our search and included into the review. Foley balloon catheter appears to be more cost-effective and commonly used non-hormonal technique for induction of labour, although further meta-analysis is required in this area. Currently, there is not enough evidence to support routine use in all women for labour induction among other methods including amniotomy, acupuncture, sexual intercourse, isosorbide mononitrate, hypnosis, castor oil and breast stimulation. The latest three studies suggest that amniotomy may increase need for oxytocin augmentation during labour induction. Summary: Many non-hormonal methods for labour induction still require further evidence to support their use within the clinical setting. Balloon catheter seems to be a more widely accepted non-hormonal method that has been supported by various literatures.

[2081]
Systematic review of the efficacy of pre-surgical mind-body based therapies on post-operative outcome measures.
Author information: (1)The University of Melbourne, Department of Surgery, St Vincent's Hospital, Melbourne, VIC, Australia.

Objectives: A large body of research has demonstrated that patient factors are strong predictors of recovery from surgery. Mind-body therapies are increasingly targeted at pre-operative psychological factors. The objective of this paper was to evaluate the efficacy of pre-operative mind-body based interventions on post-operative outcome measures amongst elective surgical patients. Methods: A systematic review of the published literature was conducted using the electronic databases MEDLINE, CINAHL and PsychINFO. Randomised controlled trials (RCTs) with a prospective before-after surgery design were included. Results: Twenty studies involving 1297 patients were included. Mind-body therapies were categorised into relaxation, guided imagery and hypnotic interventions. The majority of studies did not adequately account for the risk of bias thus undermining the quality of the evidence. Relaxation was assessed in eight studies, with partial support for improvements in psychological well-being measures, and a lack of evidence for beneficial effects for analgesic intake and length of hospital stay. Guided imagery was examined in eight studies, with strong
evidence for improvements in psychological well-being measures and moderate support for the efficacy of reducing analgesic intake. Hypnosis was investigated in four studies, with partial support for improvements in psychological well-being measures. Evidence for the effect of mind-body therapies on physiological indices was limited, with minimal effects on vital signs, and inconsistent changes in endocrine measures reported. CONCLUSIONS: This review demonstrated that the quality of evidence for the efficacy of mind-body therapies for improving post-surgical outcomes is limited. Recommendations have been made for future RCTs.

Antenatal hypnosis training and childbirth experience: a randomized controlled trial.
Werner A(1), Uldbjerg N, Zachariae R, Wu CS, Nohr EA.
Author information: (1)Department of Gynecology and Obstetrics, Aarhus University Hospital Skejby, Aarhus N, Denmark.

BACKGROUND: Childbirth is a demanding event in a woman's life. The aim of this study was to explore whether a brief intervention in the form of an antenatal course in self-hypnosis to ease childbirth could improve the childbirth experience. METHOD: In a randomized, controlled, single-blinded trial, 1,222 healthy nulliparous women were allocated to one of three groups during pregnancy: A hypnosis group participating in three 1-hour sessions teaching self-hypnosis to ease childbirth, a relaxation group receiving three 1-hour lessons in various relaxation methods and Mindfulness, and a usual care group receiving ordinary antenatal care only. Wijmas Delivery Expectancy/Experience Questionnaire (W-DEQ) was used to measure the childbirth experience 6 weeks postpartum. RESULTS: The intention-to-treat analysis indicated that women in the hypnosis group experienced their childbirth as better compared with the other two groups (mean W-DEQ score of 42.9 in the Hypnosis group, 47.2 in the Relaxation group, and 47.5 in the Care as usual group (p = 0.01)). The tendency toward a better childbirth experience in the hypnosis group was also seen in subgroup analyses for mode of delivery and for levels of fear. CONCLUSION: In this large randomized controlled trial, a brief course in self-hypnosis improved the women's childbirth experience.

Management of fear and anxiety in the dental clinic: a review.
Armfield JM(1), Heaton LJ.
Author information: (1)Australian Research Centre for Population Oral Health, School of Dentistry, The University of Adelaide, South Australia, Australia.

People who are highly anxious about undergoing dental treatment comprise approximately one in seven of the population and require careful and considerate management by dental practitioners. This paper presents a review of a number of non-pharmacological (behavioural and cognitive) techniques that can be used in the dental clinic or surgery in order to assist anxious individuals obtain needed dental care. Practical advice for managing anxious patients is provided and the evidence base for the various approaches is examined and summarized. The importance of firstly identifying dental fear and then understanding its aetiology, nature and associated components is stressed. Anxiety management techniques range from good communication and establishing rapport to the use of systematic desensitization and hypnosis. Some techniques require specialist training but many others could usefully be adopted for all dental patients, regardless of their known level of dental anxiety. It is concluded that successfully managing dentally fearful individuals is achievable for clinicians but requires a greater level of understanding, good communication and a phased treatment approach. There is an acceptable evidence base for several non-pharmacological anxiety management practices to help augment dental practitioners providing care to anxious or fearful children and adults.

Group hypnosis vs. relaxation for smoking cessation in adults: a cluster-randomised controlled trial.
Dickson-Spillmann M(1), Haug S, Schaub MP.
Author information: (1)Swiss Research Institute for Public Health and Addiction ISGF, University of Zurich, Konradstrasse 32, Postfach, 8031 Zürich, Switzerland. maria.dickson@isgf.uzh.ch.

BACKGROUND: Despite the popularity of hypnotherapy for smoking cessation, the efficacy of this method is unclear. We aimed to investigate the efficacy of a single-session of group hypnotherapy for smoking cessation compared to relaxation in Swiss adult smokers. METHODS: This was a cluster-randomised, parallel-group, controlled trial. A single session of hypnosis or relaxation for smoking cessation was delivered to groups of smokers (median size = 11). Participants were 223 smokers consuming ≥ 5 cigarettes per day, willing to quit and not using cessation aids (47.1% females, M = 37.5 years [SD = 11.8], 86.1% Swiss). Nicotine withdrawal, smoking abstinence self-efficacy, and adverse reactions were assessed at a 2-week follow-up. The main outcome, self-reported 30-day point prevalence of smoking abstinence, was assessed at a 6-month follow up. Abstinence was validated through salivary analysis. Secondary outcomes included number of cigarettes smoked per day, smoking abstinence self-efficacy, and nicotine withdrawal. RESULTS: At the 6-month follow up, 14.7% in the hypnosis group and 17.8% in the relaxation group were abstinent. The intervention had no effect on smoking status (p = .73) or on the number of cigarettes smoked per day (p = .56). Smoking abstinence self-efficacy did not differ between the interventions (p = .14) at the 2-week follow-up, but non-smokers in the hypnosis group

Professional Hypnosis Databank - page 536 of 889 - by Alberto Torelli, hypnologist
experienced reduced withdrawal (p = .02). Both interventions produced few adverse reactions (p = .81). CONCLUSIONS: A single session of group hypnotherapy does not appear to be more effective for smoking cessation than a group relaxation session. TRIAL REGISTRATION: Current Controlled Trials ISRCTN72839675.

[2085] SAAD Dig. 2014 Jan;30:3-6.
The role of hypnotherapy in dentistry.
Facco E, Zanette G, Casiglia E.

Dental fear is a universal phenomenon justifying the increasing relevance of psychology and the behavioural sciences to dental training and clinical practice. Pharmacological sedation has been used more and more over the past two decades, in order to relieve dental anxiety and phobia and let the patient face oral surgery safely. Hypnosis is a still underused but powerful non-pharmacological tool in dentistry. It provides an effective sedation whilst maintaining patient collaboration, but it also may help patients recovering from dental anxiety and phobia as well as those with a severe gag reflex. While pharmacological sedation affords a temporary respite and helps the patient to cope with a single procedure, hypnosis can effectively allow for both an excellent sedation in a physiological way and the treatment of patients' anxiety, or substantially decrease the doses used for sedative and analgesic drugs when these are needed.

How to ... support hypnobirthing.
Baker K.
PMID: 25326976 [PubMed - indexed for MEDLINE]

[ABSTRACT NOT FOUND]

Experimental, controversial, and futuristic treatments for chronic tinnitus.
Folmer RL(1), Theodoroff SM(1), Martin WH(2), Shi Y(3).
Author information: (1)National Center for Rehabilitative Auditory Research, Portland VA Medical Center, Portland, OR; Department of Otolaryngology, Oregon Health and Science University, Portland, OR. (2)Department of Otolaryngology, Oregon Health and Science University, Portland, OR. (3)Department of Otolaryngology, Oregon Health and Science University, Portland, OR; Currently Metokos LLC, Portland, OR.

BACKGROUND: Because chronic tinnitus is a condition that negatively impacts the quality of life of millions of people worldwide, a safe and effective treatment for tinnitus has been sought for millennia. However, effective treatments for tinnitus are greatly outnumbered by ineffective strategies, medications, devices, and surgeries that continue to be developed and promoted for the condition. PURPOSE: This article describes and critiques experimental, controversial, and potential treatments for chronic tinnitus. The purpose of this review is to provide information that should help patients and clinicians to select tinnitus treatment and management strategies most likely to be effective for each set of symptoms and circumstances. RESEARCH DESIGN: PubMed and MEDLINE databases (National Center for Biotechnology Information, U.S. National Library of Medicine) were searched for the term tinnitus in articles published from 1940 to 2012. Other historical documents and publications were also reviewed as needed for particular topics. STUDY SAMPLE: Studies included in this review were selected to represent a sampling of treatment methodologies that have been used for tinnitus. DATA COLLECTION AND ANALYSIS: Due to the heterogeneity of the studies reviewed, it was not appropriate to perform a meta-analysis. A selective review of the literature was conducted to summarize and critique published research results. RESULTS: Most invasive treatments for tinnitus should be avoided because (1) at best, there is scant evidence that any of these treatments is effective, and (2) the risk to patients for most invasive procedures is much greater than the risk posed by the tinnitus perception. Effective and noninvasive treatments for tinnitus include acoustic therapy (which includes hearing aids and other types of environmental sound enrichment); cognitive-behavioral therapy; psychological counseling; hypnosis; biofeedback; and relaxation training. Over-the-counter or prescription medications may be used as needed to facilitate sleep and to reduce anxiety, depression, or obsessive-compulsiveness. CONCLUSIONS: Patients and clinicians should be especially cautious when considering invasive (and potentially harmful) treatments for tinnitus, which is a non-life-threatening symptom. Unless well-designed clinical trials verify that a tinnitus therapy demonstrates effectiveness above and beyond the placebo effect, consumers should be wary of medications, devices, or procedures promoted as a "cure." Although a true cure for tinnitus has not yet been found, effective and noninvasive tinnitus management strategies are available now. If progress is made to medically (or genetically) treat sensorineural hearing loss in humans, this breakthrough should also help to simultaneously reduce the perception of tinnitus for many patients.

Hypnosis, attachment, and oxytocin: an integrative perspective (1.).
Zelinka V(1), Cojan Y, Desseilles M.
This article considers links between clinical hypnosis, attachment theory, and oxytocin. First, it proposes that commonalities between clinical hypnosis and attachment theory may improve our understanding of the hypnotherapeutic process. Then, it suggests that an integrative model unifying clinical hypnosis and attachment theory may constitute a link between clinical hypnosis and a neurobiological factor such as oxytocin. Finally, it discusses the implications of these hypotheses for clinical practice and future researches.

Oxytocin and cortisol in the hypnotic interaction.
Varga K(1), Kekecs Z.
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Changes in oxytocin and cortisol levels were tested in healthy volunteers during hypnotic interactions in standardized laboratory sessions. Pre- to posthypnosis changes of oxytocin and cortisol were related to the hypnotic susceptibility of subjects and the relational experiences reposted by subjects and hypnotists on several paper-and-pencil tests. Results show that the changes in oxytocin are not related to hypnotic susceptibility but to relational experiences. After the hypnotic interaction, the subject's oxytocin level increased if perceived harmony with the hypnotist was high, whereas it increased in the hypnotist if the subject had memories of less warm emotional relationships with his or her parents. The results are interpreted within the social-psychobiological model of hypnosis.

Dynamic hypnosis, IBS, and the value of individualizing treatment: a clinical perspective.
Carolusson S(1).
Author information: (1)a Carolusson & Carolusson AB, Göteborg, Sweden.
Hypnosis has already been proven efficient in treatment of irritable bowel syndrome (IBS). The author was responsible for the hypnotherapy in a Swedish study and adds her clinical experience with IBS patients within and beyond that study. The hypnosis was labeled dynamic, and the treatment utilized the therapists' clinical competence and individually tailored techniques, including gut-oriented symptom relief and hypnoanalysis, separately or in combination. The author presents 2 cases, 1 with a focus on symptom relief and 1 on exploring traumatic causes. She illustrates her clinical rationale for technical flexibility from trauma resolving hypnoanalysis to symptom-alleviating suggestive hypnosis, including dynamics beyond the symptom when such are part of the case history.

The effect of hypnosis on dysmenorrhea.
Shah M(1), Monga A, Patel S, Shah M, Bakshi H.
Author information: (1) a Medical College, Baroda, Sir Sayaji General Hospital, Gujarat, India.
This randomized control trial studied the effect of hypnosis on dysmenorrhea. Fifty eligible nursing students were randomly divided into 2 groups according to baseline pain scores. One group was given hypnosis and the other given medications for pain relief for 3 menstrual cycles, followed by 3 cycles without any treatment. They were evaluated for functional restriction of activity on a 3-point scale. There was significant improvement in quality of life after the third cycle in both groups compared to baseline. The effect of hypnosis and medications on quality of life was similar in both groups at the third and sixth cycles.

Posthypnotic use of olfactory stimulus for pain management.
Bubenzer T(1), Huang H.
Author information: (1) a Private Practice, Indianapolis, Indiana, USA.
Chronic pain due to disease or injury persists even after interventions to alleviate these conditions. Opiates are not always effective for the patient and have undesirable side effects. Hypnosis has been shown to be an effective treatment and may be enhanced by the use of olfactory stimulation as a posthypnotic cue. The article details 2 case reports that demonstrate the possible benefits of olfactory stimulus as an adjunct to hypnosis for pain relief.

Hypnotherapy for persistent genital arousal disorder: a case study.
Persistent genital arousal disorder (PGAD) is characterized by intrusive sexual arousal that is unresolvable via sexual activity and persists for an extended period of time. PGAD's etiology is unknown, and it has no established treatments. This case study reports on a 71-year-old female patient diagnosed with PGAD who received 9 sessions of hypnotherapy. The following measures were administered at baseline and follow-up: Hospital Anxiety and Depression Scale, Center for Epidemiologic Studies Depression Scale, Pittsburgh Sleep Quality Index, and visual analogue measurements of quality of life, intensity of symptoms, and marital interference. At follow-up, there were significant improvements in all measures. Given the currently limited alternatives for treatment, this case study suggests that hypnotherapy may be beneficial for some patients with PGAD.


Myths or misconceptions concerning hypnosis are regarded among the major barriers to effective implementation of hypnosis. Contemporary hypnotherapists are expected to elicit patients' misconceptions and to provide explanations that distinguish between mystical and scientific perceptions of hypnosis and that offer a picture of the state of the art of hypnosis. Dealing with misconceptions on a rational and cognitive level seems to have the ability to change a patient's conscious knowledge and understanding of hypnosis. Nevertheless, deeply rooted and emotionally saturated misbeliefs with historical-cultural origins still prevail. This article focuses on the prehypnotic phase of therapy and proposes remythification to deal with the myth of hypnosis. This approach aims to promote the hypnotherapeutic process by utilizing myth-related misconceptions.


The aim of this systematic review was to estimate the efficiency of hypnosis prior to medical procedures. Different databases were analyzed to identify randomized controlled trials (RCTs) comparing hypnosis to control interventions. All RCTs had to report pain or anxiety. Eighteen RCTs with a total of 968 patients were included; study size was from 20 to 200 patients (14 RCTs ≤ 60 patients). Fourteen RCTs included 830 adults and 4 RCTs included 138 children. Twelve of 18 RCTs had major quality limitations related to unclear allocation concealments, provider's experience in hypnosis, patient's adherence to hypnotic procedures, and intention-to-treat design. This systematic review observed major methodological limitations in RCTs on hypnosis prior to medical procedures.


This study takes a context-specific approach to examine people's willingness to try hypnosis under various conditions and the factors that contribute to their willingness. It examined 378 participants, who completed a web-based hypnotis survey. The results showed that people's willingness to try hypnosis varies by context. Specifically, people are more willing to try hypnosis when it is framed as "peak focus" rather than "hypnosis" and when they perceive the environment as being safer. Moreover, factors including participants' demographics, hypnotists' demographics (relative to the subjects'), participants' control bias, and knowledge of hypnosis affect people's degrees of willingness to try hypnosis, depending on the specific context. The results suggest further analysis of hypnosis occurring in public contexts and the effects it may have on attitudes and therapeutic outcomes.


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Santiago Ramón y Cajal (1852-1934) did not only contribute to neurobiology and neurohistology. At the end of the 19th century, he published one of the first clinical reports on the employment of hypnotic suggestion to induce analgesia (hypnoanalgesia) in order to relieve pain in childbirth. Today, the clinical application of hypnoanalgesia is considered an effective technique for the treatment of pain in medicine, dentistry, and psychology. However, the knowledge we have today on the neural and cognitive underpinnings of hypnotic suggestion has increased dramatically since Cajal's times. Here we review the main contributions of Cajal to hypnoanalgesia and the current knowledge we have about hypnoanalgesia from neural and cognitive perspectives.

[2008]

This historical review presents the advances made mostly during the last 200 years on the description, concepts, theories, and (more specifically) cure of patients suffering from hysteria, a still obscure entity. The denomination of the syndrome has changed over time, from hysteria (reinvestigated by Paul Briquet and Jean-Martin Charcot) to pithiatism (Joseph Babinski), then to conversion neurosis (Sigmund Freud), and today functional neurological disorders according to the 2013 American Neurological Association DSM-5 classification. The treatment was renewed in the second half of the 19th century in Paris by Paul Briquet and then by Jean-Martin Charcot. Hysterical women, who represented the great majority of cases, were cured by physical therapy (notably physio-, hydro-, and electrotherapy, and in some cases ovary compression) and 'moral' therapies (general, causal therapy, rest, isolation, hypnosis, and suggestion). At the turn of the 19th and 20th centuries, psychotherapy, psychoanalysis, and persuasion were established respectively by Pierre Janet, Sigmund Freud, and Joseph Babinski. During World War I, military forces faced a large number of posttrauma neurosis cases among soldiers (named the 'Babinski-Froment war neurosis' and Myers 'shell shock', in the French and English literature, respectively). This led to the use of more brutal therapies in military hospitals, combining electrical shock and persuasion, particularly in France with Clovis Vincent and Gustave Roussy, but also in Great Britain and Germany. After World War I, this method was abandoned and there was a marked decrease in interest in hysteria for a long period of time. Today, the current treatment comprises (if possible intensive) physiotherapy, together with psychotherapy, and in some cases psychoanalysis. Antidepressants and anxiolytics may be required, and more recently cognitive and behavioral therapy. Repetitive transcranial magnetic stimulation is a new technique under investigation which may be promising in patients presenting with motor conversion syndrome (motor deficit or movement disorder). Functional neurological disorders remain a difficult problem to manage with frequent failures and chronic handicapping evolution. This emphasizes the need for therapeutic innovations in the future.

[2009]

Hypnotic induction is followed by state-like changes in the organization of EEG functional connectivity in the theta and beta frequency bands in high-hypnotically susceptible individuals.

Jamieon GA(1), Burgess AP(2).

This review presents the advances made mostly during the last 200 years on the description, concepts, theories, and (more specifically) cure of patients suffering from hysteria, a still obscure entity. The denomination of the syndrome has changed over time, from hysteria (reinvestigated by Paul Briquet and Jean-Martin Charcot) to pithiatism (Joseph Babinski), then to conversion neurosis (Sigmund Freud), and today functional neurological disorders according to the 2013 American Neurological Association DSM-5 classification. The treatment was renewed in the second half of the 19th century in Paris by Paul Briquet and then by Jean-Martin Charcot. Hysterical women, who represented the great majority of cases, were cured by physical therapy (notably physio-, hydro-, and electrotherapy, and in some cases ovary compression) and 'moral' therapies (general, causal therapy, rest, isolation, hypnosis, and suggestion). At the turn of the 19th and 20th centuries, psychotherapy, psychoanalysis, and persuasion were established respectively by Pierre Janet, Sigmund Freud, and Joseph Babinski. During World War I, military forces faced a large number of posttrauma neurosis cases among soldiers (named the 'Babinski-Froment war neurosis' and Myers 'shell shock', in the French and English literature, respectively). This led to the use of more brutal therapies in military hospitals, combining electrical shock and persuasion, particularly in France with Clovis Vincent and Gustave Roussy, but also in Great Britain and Germany. After World War I, this method was abandoned and there was a marked decrease in interest in hysteria for a long period of time. Today, the current treatment comprises (if possible intensive) physiotherapy, together with psychotherapy, and in some cases psychoanalysis. Antidepressants and anxiolytics may be required, and more recently cognitive and behavioral therapy. Repetitive transcranial magnetic stimulation is a new technique under investigation which may be promising in patients presenting with motor conversion syndrome (motor deficit or movement disorder). Functional neurological disorders remain a difficult problem to manage with frequent failures and chronic handicapping evolution. This emphasizes the need for therapeutic innovations in the future.

[2009]

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Jamieon GA(1), Burgess AP(2).

Altered state theories of hypnosis posit that a qualitatively distinct state of mental processing, which emerges in those with high hypnotic susceptibility following a hypnotic induction, enables the generation of anomalous experiences in response to specific hypnotic suggestions. If so then such a state should be observable as a discrete pattern of changes to functional connectivity (shared information) between brain regions following a hypnotic induction in high but not low hypnotically susceptible participants. Twenty-eight channel EEG was recorded from 12 high susceptible (highs) and 11 low susceptible (lows) participants with their eyes closed prior to and following a standard hypnotic induction. The EEG was used to provide a measure of functional connectivity using both coherence (COH) and the imaginary component of coherence (iCOH), which is insensitive to the effects of volume conduction. COH and iCOH were calculated between all electrode pairs for the frequency bands: delta (0.1-3.9 Hz), theta (4-7.9 Hz) alpha (8-12.9 Hz), beta1 (13-19.9 Hz), beta2 (20-29.9 Hz) and gamma (30-45 Hz). The results showed that there was an increase in theta iCOH from the pre-hypnosis to hypnosis condition with a focus on a fronto-central and an occipital hub that was greater in high compared to low susceptibles. There were no significant differences for COH or for spectral band amplitude in any frequency band. The results are interpreted as indicating that the hypnotic induction elicited a qualitative change in the organization of specific control systems within the brain for high as compared to low susceptible participants. This change in the functional organization of neural networks is a plausible indicator of the much theorized "hypnotic-state."
In this article, we focus on the social image of the phenomenon known as mesmerism, or animal magnetism, through analysis of the works: The Facts in the Case of M. Valdemar (1845) by Edgar Allan Poe, The Great Keinplatz Experiment (1885) by Conan Doyle and Trilby (1894) by George Du Maurier. We describe the stereotype of the mesmerist and the uses of mesmerism observed. We pay attention to the spaces and actors of the mesmeric transcript presented in the stories. We consider the reception of these stories by the public and the relationship of the authors with mesmeric and hypnotic knowledge. Nowadays, academic researchers in the discipline of psychology publish articles and books on popular myths about hypnosis in attempts to depict the distorted images related to this phenomenon. This distorted image of the hypnotic process and the hypnotist derives from "circus" hypnotism shows (stage hypnosis), the cinema, television and fictional literature. Works of fiction represent a unique and invaluable source of information, ideas, speculations, concerns and opportunities around animal magnetism and hypnosis, and the exploration and analysis of this literature is an essential chapter in any historical study of this topic. We see how the literary use of mesmerism by Poe, Doyle and Du Maurier is not chance or peripheral, with all three being intellectually interested in and stimulated by these ideas.

Dental anxiety can be a hindrance to treatment. It is prevalent, so helping patients to overcome it should not be regarded as the province of a specialist. Hypnosis can be effective but is underused. A comparison of the conscious, alert state and hypnosis/nitrous oxide sedation is shown by electroencephalogram examples. The benefits and drawbacks of the use of hypnosis are discussed and suggestions of ways of learning and using hypnosis outlined.CLINICAL RELEVANCE: This paper is an overview of the common problem of dental anxiety and a pragmatic approach to overcoming it using hypnotherapy.

Within the hypnosis field, there is a disparity between clinical and research worldviews. Clinical practitioners work with patients who are dealing with serious, often unique, real-world problems-lived experience. Researchers adhere to objective measurements, standardization, data, and statistics. Although there is overlap, an ongoing divergence can be counterproductive to the hypnosis field and to the larger professional and social contexts. The purpose of this article is: (1) to examine some of the major assumptions, the history, and the philosophy that undergird the definition of science, which was constructed in the mid-17th century; (2) to discover how science is a product of prevailing social forces and is undergoing a paradigm shift; and (3) to understand the more encompassing, holistic paradigm with implications for the hypnosis field.

The spirit of hypnosis is reflected in the belief that people are more resourceful than they realize and through hypnosis can create meaningful possibilities. Thus, it is puzzling why hypnosis isn't better regarded. Do we present as too internally conflicted to inspire others' confidence? Do we overstate the dangers of hypnosis and scare people away? Do we define hypnosis as such a unique approach that others don't see its relevance for their work? Self-exploration is important if we want to ensure we are not unwittingly adding to our image problems as a field. Beyond these considerations, the novel and spirited application of hypnosis in the context of captive elephant breeding is discussed, as is a personal acknowledgment of some of the pioneers who manifested the spirit of hypnosis.


Author information: (1)Oliver Grundmann, Department of Medicinal Chemistry, College of Pharmacy, University of Florida, FL 32610, United States.
Irritable bowel syndrome (IBS) is a common gastrointestinal disorder with a high incidence in the general population. The diagnosis of IBS is mainly based on exclusion of other intestinal conditions through the absence of inflammatory markers and specific antigens. The current pharmacological treatment approaches available focus on reducing symptom severity while often limiting quality of life because of significant side effects. This has led to an effectiveness gap for IBS patients that seek further relief to increase their quality of life. Complementary and alternative medicines (CAM) have been associated with a higher degree of symptom management and quality of life in IBS patients. Over the past decade, a number of important clinical trials have shown that specific herbal therapies (peppermint oil and Iberogast®), hypnotherapy, cognitive behavior therapy, acupuncture, and yoga present with improved treatment outcomes in IBS patients. We propose an integrative approach to treating the diverse symptoms of IBS by combining the benefits of and need for pharmacotherapy with known CAM therapies to provide IBS patients with the best treatment outcome achievable. Initial steps in this direction are already being considered with an increasing number of practitioners recommending CAM therapies to their patients if pharmacotherapy alone does not alleviate symptoms sufficiently.


Hypnotherapy is an integrative mind-body technique with therapeutic potential in various health care applications, including labor and birth. Evaluating the efficacy of this modality in controlled studies can be difficult, because of methodologic challenges, such as obtaining adequate sample sizes and standardizing experimental conditions. Women using hypnosis techniques for childbirth in hospital settings may face barriers related to caregiver resistance or institutional policies. The potential anxiolytic and analgesic effects of clinical hypnosis for childbirth merit further study. Nurses caring for women during labor and birth can increase their knowledge and skills with strategies for supporting hypnotherapeutic techniques.


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BACKGROUND: The efficacy of pharmacotherapy for smoking cessation is well documented. However, due to relapse rates and side effects, hypnotherapy is gaining attention as an alternative treatment option. The aim of this one-center randomized study was to compare the efficacy of hypnotherapy alone, as well as hypnotherapy with nicotine replacement therapy (NRT), to conventional NRT in patients hospitalized with a cardiac or pulmonary illness. METHODS: We evaluated self-reported and biochemically verified 7-day prevalence smoking abstinence rates at 12 and 26 weeks post-hospitalization. Patients (n=164) were randomized into one of three counseling-based treatment groups: NRT for 30 days (NRT; n=41), a 90-min hypnotherapy session (H; n=39), and NRT with hypnotherapy (HNRT; n=37). Treatment groups were compared to a "self-quit" group of 35 patients who refused intervention. RESULTS: Hypnotherapy patients were more likely than NRT patients to be nonsmokers at 12 weeks (43.9% vs. 28.2%; p=0.14) and 26 weeks after hospitalization (36.6% vs. 18.0%; p=0.06). Smoking abstinence rates in the HNRT group were similar to the H group. There was no difference in smoking abstinence rates at 26 weeks between "self quit" and participants in any of the treatment groups. In multivariable regression analysis adjusting for diagnosis and demographic characteristics, H and HNRT were over three times more likely than NRT participants to abstain at 26-weeks post-discharge (RR=3.6; p=0.03 and RR=3.2; p=0.04, respectively). CONCLUSION: Hypnotherapy is more effective than NRT in improving smoking abstinence in patients hospitalized for a smoking-related illness, and could be an asset to post-discharge smoking cessation programs.

[2107] Suggestion overrides automatic audiovisual integration. Déry C(1), Campbell NK(1), Lifshitz M(1), Raz A(2).

Author information: (1)McGill University, Montreal, Québec, Canada. (2)McGill University, Montreal, Québec, Canada; Lady Davis Institute for Medical Research, Jewish General Hospital, Montreal, Québec, Canada. Electronic address: amir.raz@mcgill.ca.
Cognitive scientists routinely distinguish between controlled and automatic mental processes. Through learning, practice, and exposure, controlled processes can become automatic; however, whether automatic processes can become deautomatized - recuperated under the purview of control - remains unclear. Here we show that a suggestion derails a deeply ingrained process involving involuntary audiovisual integration. We compared the performance of highly versus less hypnotically suggestible individuals (HSIs versus LSIs) in a classic McGurk paradigm - a perceptual illusion task demonstrating the influence of visual facial movements on auditory speech percepts. Following a posthypnotic suggestion to prioritize auditory input, HSIs but not LSIs manifested fewer illusory auditory perceptions and correctly identified more auditory percepts. Our findings demonstrate that a suggestion deautomatized a ballistic audiovisual process in HSIs. In addition to guiding our knowledge regarding theories and mechanisms of automaticity, the present findings pave the road to a more scientific understanding of top-down effects and multisensory integration.

[2018]
Hypnotic approaches for chronic pain management: clinical implications of recent research findings.
Jensen MP(1), Patterson DR(1).
Author information: (1)Department of Rehabilitation Medicine, University of Washington.
The empirical support for hypnosis for chronic pain management has flourished over the past two decades. Clinical trials show that hypnosis is effective for reducing chronic pain, although outcomes vary between individuals. The findings from these clinical trials also show that hypnotic treatments have a number of positive effects beyond pain control. Neurophysiological studies reveal that hypnotic analgesia has clear effects on brain and spinal-cord functioning that differ as a function of the specific hypnotic suggestions made, providing further evidence for the specific effects of hypnosis. The research results have important implications for how clinicians can help their clients experience maximum benefits from hypnosis and treatments that include hypnotic components.

[2019]
[Hypnosis for chronic pain of children].
[Article in French]
Célestin-Lhopiteau I.
A child or adolescent can suffer from chronic pain. Whatever the causes, it can trap the child in a specific process whereby they focus on the pain, fearing that it will appear and experiencing anxiety. Hypno-analgesia and hypnotherapy enable them to escape this process and find within themselves the capacity to face up to the pain. Moreover, these techniques offer them an autonomy which they can use in all areas of their life.

[2010]
Hypnosis in paediatric respiratory medicine.
McBride JJ(1), Vlieger AM(2), Anbar RD(3).
Author information: (1)Department of Pediatrics, SUNY Upstate Medical University, Syracuse, NY, USA. (2)Department of Pediatrics, St. Antonius Hospital, Nieuwegein, The Netherlands. (3)Department of Pediatrics, SUNY Upstate Medical University, Syracuse, NY, USA. Electronic address: anbarr@upstate.edu.
Hypnotherapy is an often misunderstood yet effective therapy. It has been reported to be useful within the field of paediatric respiratory medicine as both a primary and an adjunctive therapy. This article gives a brief overview of how hypnotherapy is performed followed by a review of its applications in paediatric patients with asthma, cystic fibrosis, dyspnea, habit cough, vocal cord dysfunction, and those requiring non-invasive positive pressure ventilation. As the available literature is comprised mostly of case series, retrospective studies, and only a single small randomized study, the field would be strengthened by additional randomized, controlled trials in order to better establish the effectiveness of hypnosis as a treatment, and to identify the processes leading to hypnosis-induced physiologic changes. As examples of the utility of hypnosis and how it can be taught to children with respiratory disease, the article includes videos that demonstrate its use for patients with cystic fibrosis.

[2111]
Effect of autogenic relaxation on depression among menopausal women in rural areas of Thiruvalur District (Tamil Nadu).
Sujithra S.
An experimental study was conducted among 60 menopausal women, 30 each in experimental and control group who met inclusion criteria. The menopausal women were identified in both the groups and level of depression was assessed using Cornell Dysthymia rating scale. Simple random sampling technique by lottery method was used for selecting the sample. Autogenic relaxation was practiced by the menopausal women for four weeks. The findings revealed that in
experimental group, after intervention of autogenic relaxation on depression among menopausal women, 23 (76.7%) had mild depression. There was a statistically significant effectiveness in experimental group at the level of p < 0.05. There was a statistically significant association between the effectiveness of autogenic relaxation on depression among menopausal women in the post-experimental group with the type of family at the level of p < 0.05.

[2112]
Neuromodulatory treatments for chronic pain: efficacy and mechanisms.
Jensen MP(1), Day MA(1), Miro J(2).
Author information: (1)Department of Rehabilitation Medicine, University of Washington, Harborview Medical Center, 325 9th Avenue, Seattle, WA 98104-2499, USA. (2)Department of Psychology, Universitat Rovira i Virgili, Carretera de Valls, s/n, 43007 Tarragona, Spain.

Chronic pain is common, and the available treatments do not provide adequate relief for most patients. Neuromodulatory interventions that modify brain processes underlying the experience of pain have the potential to provide substantial relief for some of these patients. The purpose of this Review is to summarize the state of knowledge regarding the efficacy and mechanisms of noninvasive neuromodulatory treatments for chronic pain. The findings provide support for the efficacy and positive side-effect profile of hypnosis, and limited evidence for the potential efficacy of meditation training, noninvasive electrical stimulation procedures, and neurofeedback procedures. Mechanisms research indicates that hypnosis influences multiple neurophysiological processes involved in the experience of pain. Evidence also indicates that mindfulness meditation has both immediate and long-term effects on cortical structures and activity involved in attention, emotional responding and pain. Less is known about the mechanisms of other neuromodulatory treatments. On the basis of the data discussed in this Review, training in the use of self-hypnosis might be considered a viable 'first-line' approach to treat chronic pain. More-definitive research regarding the benefits and costs of meditation training, noninvasive brain stimulation and neurofeedback is needed before these treatments can be recommended for the treatment of chronic pain.

[2113]
Complementary and Alternative Medicine for Posttraumatic Stress Disorder Symptoms: A Systematic Review.
Wahbeh H(1), Senders A(2), Neuendorf R(3), Cayton J(4).
Author information: (1)Oregon Health and Science University, Portland, OR, USA National College of Natural Medicine, Portland, OR, USA wahbehh@ohsu.edu. (2)Oregon Health and Science University, Portland, OR, USA National College of Natural Medicine, Portland, OR, USA. (3)National College of Natural Medicine, Portland, OR, USA. (4)Oregon Health and Science University, Portland, OR, USA.

OBJECTIVES: To (1) characterize complementary and alternative medicine studies for posttraumatic stress disorder symptoms, (2) evaluate the quality of these studies, and (3) systematically grade the scientific evidence for individual CAM modalities for posttraumatic stress disorder. DESIGN: Systematic review. Eight data sources were searched. Selection criteria included any study design assessing posttraumatic stress disorder outcomes and any complementary and alternative medicine intervention. The body of evidence for each modality was assessed with the Natural Standard evidence-based, validated grading rationale. RESULTS AND CONCLUSIONS: Thirty-three studies (n = 1329) were reviewed. Scientific evidence of benefit for posttraumatic stress disorder was strong for repetitive transcranial magnetic stimulation and good for acupuncture, hypnotherapy, meditation, and visualization. Evidence was unclear or conflicting for biofeedback, relaxation, Emotional Freedom and Thought Field therapies, yoga, and natural products. Considerations for clinical applications and future research recommendations are discussed.

[2114]
Author information: (1)Department of Anesthesiology, Intensive Care, Robert Debre Hospital, 48 Bd Suerier, 75019, Paris, France.

Many factors contribute to suboptimal pain management in children. Current evidence suggests that severe pain in children has significant long-lasting effects, even more so than in adults. In particular, recent evidence suggests a lack of optimal postoperative pain management in children, especially following ambulatory surgery. This review provides simple guidelines for the management of postoperative pain in children. It discusses the long-term effects of severe pain and how to evaluate pain in both healthy and neurologically impaired children, including neonates. Currently available treatment options are discussed with reference to the efficacy and side effects of opioid and non-opioid and regional analgesic techniques. The impact of preoperative anxiety on postoperative pain, and the efficacy of some nonpharmacological techniques such as hypnosis or distraction, are also discussed. Finally, basic organizational strategies are described, aiming to promote safer and more efficient postoperative pain management in children.
An hypnotic suggestion: review of hypnosis for clinical emergency care.
Iserson KV(1).

BACKGROUND: Hypnosis has been used in medicine for nearly 250 years. Yet, emergency clinicians rarely use it in emergency departments or prehospital settings. OBJECTIVE: This review describes hypnosis, its historical use in medicine, several neurophysiologic studies of the procedure, its uses and potential uses in emergency care, and a simple technique for inducing hypnosis. It also discusses reasons why the technique has not been widely adopted, and suggests methods of increasing its use in emergency care, including some potential research areas. DISCUSSION: A limited number of clinical studies and case reports suggest that hypnosis may be effective in a wide variety of conditions applicable to emergency medical care. These include providing analgesia for existing pain (e.g., fractures, burns, and lacerations), providing analgesia and sedation for painful procedures (e.g., needle sticks, laceration repair, and fracture and joint reductions), reducing acute anxiety, increasing children's cooperation for procedures, facilitating the diagnosis and treatment of acute psychiatric conditions, and providing analgesia and anxiolysis for obstetric/gynecologic problems. CONCLUSIONS: Although it is safe, fast, and cost-effective, emergency clinicians rarely use hypnosis. This is due, in part, to the myths surrounding hypnosis and its association with alternative-complementary medicine. Genuine barriers to its increased clinical use include a lack of assured effectiveness and a lack of training and training requirements. Based on the results of further research, hypnosis could become a powerful and safe nonpharmacologic addition to the emergency clinician's armamentarium, with the potential to enhance patient care in emergency medicine, prehospital care, and remote medical settings.

The Efficacy of Hypnotherapy in the Treatment of Irritable Bowel Syndrome: A Systematic Review and Meta-analysis.
Lee HH(1), Choi YY(2), Choi MG(1).

BACKGROUND/AIMS: Hypnotherapy is considered as a promising intervention for irritable bowel syndrome (IBS), but the evidence is still limited. The aims of this study were to conduct a systematic review and meta-analysis to estimate the efficacy of hypnotherapy for the treatment of IBS. METHODS: A literature search was performed using MEDLINE (PubMed), Embase, PsycINFO and the Cochrane Central Register of Controlled Trials (CENTRAL database). Only randomized controlled trials that compared hypnotherapy with any other conventional treatment or no treatment in patients with IBS were included. Studies had to report outcomes as IBS symptom score or quality of life. The mean change in outcome score was used to pool these outcomes for the meta-analysis. Data were synthesized using the standardized mean difference for continuous data. RESULTS: Seven randomized controlled trials (6 papers) involving 374 patients with IBS were identified. Performance bias was high in all trials because it was impossible to blind participants and therapists in this type of intervention. The outcomes in this meta-analysis were evaluated at 3 months for short-term effects and at 1 year for long-term effects. The change in abdominal pain score at 3 months was significant in the hypnotherapy group (standardized mean difference, -0.83; 95% CI, -1.65 to -0.01). Three of the 4 trials showed greater improvement in overall gastrointestinal symptoms in the hypnotherapy group. CONCLUSIONS: This study provides clearer evidence that hypnotherapy has beneficial short-term effects in improving gastrointestinal symptoms of patients with IBS.

A Case of Successful Use of Hypnosis in the Treatment of Parasomnia Overlap Disorder.
Kohler WC(1), Kurz PJ, Kohler EA.

A young male patient was successfully treated for parasomnia overlap disorder (POD) using hypnosis. In 2006, this 16-year-old patient underwent a clinical evaluation for episodes of sleep talking, sleepwalking, and dream enactment. This initial assessment was followed by polysomnographic evaluation, a brain MRI, and three sessions of treatment using hypnosis. From the beginning, until the last contact in December 2011, benefits from the hypnotic suggestions were noted and documented.

Hypnotherapy for birth.
Howell M.

There are many misunderstandings about hypnotherapy for birth and how best to support a woman who has chosen to use it. This article brings together experiences of midwives who have attended women in labour using hypnotherapy, and

Professional Hypnosis Databank - page 545 of 889 - by Alberto Torelli, hypnotologist
aims to help birth professionals understand a bit more about hypnotherapy and how they can best support women who are using it. It is a personal account from a hypnotherapy trainer reflecting on her encounters with midwives as they share experiences of observing hypnotherapy in action.

[2119]
J Health Psychol. 2014 May 1. [Epub ahead of print]
Hypnotherapy for disability-related pain: A meta-analysis.
Bowker E(1), Dorstyn D.
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Hypnotherapy can address the biopsychosocial aspects of disability-related pain, although the available evidence is limited in quality and quantity. Meta-analytic techniques were utilised to evaluate 10 controlled studies. Hypnotherapy produced significant short-term improvements in fatigue, pain experience and affect. However, a lack of significance was noted at 3- to 6-month follow-up. A beneficial effect size (dw = 0.53; confidence interval = 0.28-0.84) in comparison to control conditions was reported, although comparability with other cognitive-behavioural treatments could not be confirmed across the few studies reporting this data (dw = 0.06; confidence interval = -0.33 to 0.45). The findings highlight the need for further controlled and longitudinal research in this area.

[2120]
Depening sleep by hypnotic suggestion.
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STUDY OBJECTIVES: Slow wave sleep (SWS) plays a critical role in body restoration and promotes brain plasticity; however, it markedly declines across the lifespan. Despite its importance, effective tools to increase SWS are rare. Here we tested whether a hypnotic suggestion to "sleep deeper" extends the amount of SWS. DESIGN: Within-subject, placebo-controlled crossover design. SETTING: Sleep laboratory at the University of Zurich, Switzerland. PARTICIPANTS: Seventy healthy females 23.27 ± 3.17 y. INTERVENTION: Participants listened to an auditory text with hypnotic suggestions or a control tape before napping for 90 min while high-density electroencephalography was recorded. MEASUREMENTS AND RESULTS: After participants listened to the hypnotic suggestion to "sleep deeper" subsequent SWS was increased by 81% and time spent awake was reduced by 67% (with the amount of SWS or wake in the control condition set to 100%). Other sleep stages remained unaffected. Additionally, slow wave activity was significantly enhanced after hypnotic suggestions. During the hypnotic tape, parietal theta power increased predicted the hypnosis-induced extension of SWS. Additional experiments confirmed that the beneficial effect of hypnotic suggestions on SWS was specific to the hypnotic suggestion and did not occur in low suggestible participants. CONCLUSIONS: Our results demonstrate the effectiveness of hypnotic suggestions to specifically increase the amount and duration of slow wave sleep (SWS) in a midday nap using objective measures of sleep in young, healthy, suggestible females. Hypnotic suggestions might be a successful tool with a lower risk of adverse side effects than pharmacological treatments to extend SWS also in clinical and elderly populations.

[2121]
Efficacy, tolerability, and safety of hypnosis in adult irritable bowel syndrome: systematic review and meta-analysis.
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OBJECTIVE: To assess the efficacy, tolerability, and safety of hypnosis in adult irritable bowel syndrome by a meta-analysis of randomized controlled trials. METHODS: Studies were identified by a literature search of the databases Allied and Complementary Medicine Database, Central Register of Controlled Trials, Cumulative Index to Nursing and Allied Health Literature, PubMed, PsyCINFO, and Scopus (from inception to June 30, 2013). Primary outcomes were adequate symptom relief, global gastrointestinal score, and safety. Summary relative risks (RRs) with number needed to treat (NNT) and standardized mean differences (SMDs) with 95% confidence intervals (95% CIs) were calculated using random-effects models. RESULTS: Eight randomized controlled trials with a total of 464 patients and a median of 8.5 (7-12) hypnosis sessions over a median of 12 (5-12) weeks were included into the analysis. At the end of therapy, hypnosis was superior to control conditions in producing adequate symptom relief (RR, 1.69 [95% CI = 1.14-2.51]; NNT, 5 [3-10]).
and in reducing global gastrointestinal score (SMD, 0.32 [95% CI = -0.56 to -0.08]). At long-term follow-up, hypnosis was superior to controls in adequate symptom relief (RR, 2.17 [95% CI = 1.22-3.87]; NNT, 3 [2-10]), but not in reducing global gastrointestinal score (SMD, -0.57 [-1.40 to 0.26]). One (0.4%) of 238 patients in the hypnosis group dropped out due to an adverse event (panic attack). CONCLUSION: This meta-analysis demonstrated that hypnosis was safe and provided long-term adequate symptom relief in 54% of patients with irritable bowel syndrome refractory to conventional therapy.

[2122]
Medical hypnotherapy for pain management.
Colón Y, Avnet MS.

Questions from patients about pain conditions and analgesic pharmacotherapy and responses from authors are presented to help educate patients and make them more effective self-advocates. Hypnotherapy, its uses and process, and certification and training of hypnotherapy professionals are addressed.

[2123]
Brid Hendron: 'People talk about stress when what we need to be doing is eliminating it'.
Hendron B, Doherty R.

Brid Hendron is a GDP and has a special interest in relaxing nervous, anxious and phobic patients. She holds an NLP trainer qualification and is also qualified in hypnosis. Brid provides training for healthcare professionals in advanced communication skills.

[2124]
Gut-directed hypnotherapy in children with irritable bowel syndrome or functional abdominal pain (syndrome): a randomized controlled trial on self exercises at home using CD versus individual therapy by qualified therapists.
Rutten JM(1), Vlieger AM, Frankenhuys C, George EK, Groeneweg M, Norbruis OF, Tjon a Ten W, Van Wering H, Dijkgraaf MG, Merkus MP, Benninga MA.
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BACKGROUND: Irritable bowel syndrome (IBS) and functional abdominal pain (syndrome) (FAP(S)) are common pediatric disorders, characterized by chronic or recurrent abdominal pain. Treatment is challenging, especially in children with persisting symptoms. Gut-directed hypnotherapy (HT) performed by a therapist has been shown to be effective in these children, but is still unavailable to many children due to costs, a lack of qualified child-hypnotherapists and because it requires a significant investment of time by child and parent(s). Home-based hypnotherapy by means of exercises on CD has been shown effective as well, and has potential benefits, such as lower costs and less time investment. The aim of this randomized controlled trial (RCT) is to compare cost-effectiveness of individual HT performed by a qualified therapist with HT by means of CD recorded self-exercises at home in children with IBS or FAP(S).
METHODS/DESIGN: 260 children, aged 8-18 years with IBS or FAP(S) according to Rome III criteria are included in this currently conducted RCT with a follow-up period of one year. Children are randomized to either 6 sessions of individual HT given by a qualified therapist over a 3-month period or HT through self-exercises at home with CD for 3 months. The primary outcome is the proportion of patients in which treatment is successful at the end of treatment and after one year follow-up. Treatment success is defined as at least 50% reduction in both abdominal pain frequency and intensity scores. Secondary outcomes include adequate relief, cost-effectiveness and effects of both therapies on depression and anxiety scores, somatization scores, QoL, pain beliefs and coping strategies. DISCUSSION: If the effectiveness of home-based HT with CD is comparable to, or only slightly lower, than HT by a therapist, this treatment may become an attractive form of therapy in children with IBS or FAP(S), because of its low costs and direct availability. TRIAL REGISTRATION: Dutch Trial Register number NTR2725 (date of registration: 1 February 2011).

[2125]
Complementary medicine and general practice in an urban setting: a decade on.
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AIM: To conduct a follow-up survey ascertaining changes in usage, referral rate, beliefs and attitudes towards complementary and alternative medicine (CAM) during the last decade. BACKGROUND: In many countries, CAM use is reported to be substantial and increasing. METHODS: A questionnaire was posted to all GPs registered with the Liverpool Primary Care Trust. Respondents were asked whether they treat, refer, endorse or discuss eight common CAM therapies.
and about their views on National Health Service (NHS) funding, effectiveness, CAM training needs and theoretical validity of each therapy. Comparisons were made between these results and those collected in 1999. FINDINGS: The response rate was low (32%) compared with the 1999 survey (52%). The main findings were similar to the most popular therapies still being acupuncture, hypnotherapy and chiropractic and the least being aromatherapy, reflexology and medical herbalism. GPs felt most comfortable with acupuncture, with greater belief in its theoretical validity, a greater desire for training and a greater support for acupuncture to receive NHS funding than for the other CAM therapies under question. Opinions about homeopathy had become less supportive. Overall, GPs were less likely to endorse CAMs than previously shown (38% versus 19%).

[2126]
The effect of relaxation interventions on cortisol levels in HIV-seropositive women.
Jones D, Owens M, Kumar M, Cook R, Weiss SM.
PURPOSE: Activation of the hypothalamic-pituitary-adrenal axis, assessed in terms of cortisol levels, may enhance the ability of HIV to infect lymphocytes and downregulate the immune system, accelerating disease progression. This study sought to determine the effects of relaxation techniques on cortisol levels in HIV-seropositive women. METHODS: Women (n = 150) were randomized to a group cognitive-behavioral stress management (CBSM) condition or an individual information condition and underwent 3 types of relaxation training (progressive muscle relaxation, imagery, and autogenic training). Cortisol levels were obtained pre- and postrelaxation. RESULTS: Guided imagery was effective in reducing cortisol in the group condition (t = 3.90, P < .001), and muscle relaxation reduced cortisol in the individual condition (t = 3.11, P = .012). Among participants in the group condition attending all sessions, the magnitude of pre- to postsession reduction became greater over time. CONCLUSIONS: Results suggest that specific relaxation techniques may be partially responsible for cortisol decreases associated with relaxation and CBSM.

[2127]
Acupuncture for acute stroke, peppermint oil for irritable bowel syndrome, yoga for depression and anxiety, hypnotherapy for smoking cessation, and lime juice for sickle cell anemia.
Glickman-Simon R, Savasta S.

[ABSTRACT NOT FOUND]

[2128]
[Hypnotic communication and hypnosis in clinical practice].
[Article in German; Abstract available in German from the publisher]
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In addition to usual medical care it is often critical to consider the patient's inner world in order to sensitively differentiate between harmful and helpful suggestive elements. The respective abilities in terms of hypnotic communication can be easily learned. Confident, empathic attention and a calm, understanding and figurative language narrowing the focus on positive emotions and positive change, which have been shown to improve the patient's chances of healing, are of particular importance. Proper clinical hypnosis goes one step further: it makes explicit use of suggestions, trance, and trance phenomena. The major clinical indications for hypnosis include psychosomatic disorders, anxiety disorders, obsessive-compulsive disorders, depression, and pain syndromes. Hypnosis can also be employed as an adjunct for surgical therapy.

[2129]
Treatment of abdominal pain in irritable bowel syndrome.
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Functional abdominal pain in the context of irritable bowel syndrome (IBS) is a challenging problem for primary care physicians, gastroenterologists and pain specialists. We review the evidence for the current and future non-pharmacological and pharmacological treatment options targeting the central nervous system and the gastrointestinal tract. Cognitive interventions such as cognitive behavioral therapy and hypnotherapy have demonstrated excellent results in IBS patients, but the limited availability and labor-intensive nature limit their routine use in daily practice. In patients who are refractory to first-line therapy, tricyclic antidepressants (TCA) and selective serotonin reuptake inhibitors are both effective to obtain symptomatic relief, but only TCAs have been shown to improve abdominal pain in meta-analyses. A diet low in fermentable carbohydrates and polyols (FODMAP) seems effective in subgroups of patients to reduce
abdominal pain, bloating, and to improve the stool pattern. The evidence for fiber is limited and only isphagula may be somewhat beneficial. The efficacy of probiotics is difficult to interpret since several strains in different quantities have been used across studies. Antispasmodics, including peppermint oil, are still considered the first-line treatment for abdominal pain in IBS. Second-line therapies for diarrhea-predominant IBS include the non-absorbable antibiotic rifaximin and the 5HT3 antagonists alosetron and ramosetron, although the use of the former is restricted because of the rare risk of ischemic colitis. In laxative-resistant, constipation-predominant IBS, the chloride-secretion stimulating drugs lubiprostone and linaclotide, a guanylate cyclase C agonist that also has direct analgesic effects, reduce abdominal pain and improve the stool pattern.

[2130]
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Inflammatory bowel diseases (IBD) are chronic disorders of unknown aetiology which are characterized by episodes of exacerbations and remissions. There is evidence that perceived distress contributes to IBD symptom flares; anxiety and depression are frequently found in patients with the active disease. Because there is no cure, treatment has to focus on prevention of complications, induction/maintenance of remission and improvement of quality of life. Gut-directed hypnotherapy (GHT) has been used successfully in functional gastrointestinal disorders. Few experimental studies and case reports have been published for IBD; GHT increases the health-related quality of life and reduces symptoms. Additionally, GHT seems to have an immune-modulating effect and is able to augment clinical remission in patients with quiescent ulcerative colitis.

[2131]
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BACKGROUND & AIMS: Chest pain is a common and frightening symptom. Once cardiac disease has been excluded, an esophageal source is most likely. Pathophysiologically, gastroesophageal reflux disease, esophageal dysmotility, esophageal hypersensitivity, and anxiety disorders have been implicated. However, treatment remains a challenge. Here we examined the efficacy and safety of various commonly used modalities for treatment of esophageal (noncardiac) chest pain (ECP) and provided evidence-based recommendations. METHODS: We reviewed the English language literature for drug trials evaluating treatment of ECP in PubMed, Cochrane, and MEDLINE databases from 1968-2012. Standard forms were used to abstract data regarding study design, duration, outcome measures and adverse events, and study quality. RESULTS: Thirty-five studies comprising various treatments were included and grouped under 5 broad categories. Patient inclusion criteria were extremely variable, and studies were generally small with methodological concerns. There was good evidence to support the use of omeprazole and fair evidence for lansoprazole, rabeprazole, theophylline, sertraline, trazodone, venlafaxine, imipramine, and cognitive behavioral therapy. There was poor evidence for nifedipine, diltiazem, paroxetine, biofeedback therapy, ranitidine, nitrates, botulinum toxin, esophageal myotomy, and hypnotherapy. CONCLUSIONS: Ideally, treatment of ECP should be aimed at correcting the underlying mechanism(s) and relieving symptoms. Proton pump inhibitors, antidepressants, theophylline, and cognitive behavioral therapy appear to be useful for the treatment of ECP. However, there is urgent and unmet need for effective treatments and for rigorous, randomized controlled trials.

[2132]
Management and diagnosis of psychogenic cough, habit cough, and tic cough: a systematic review.

BACKGROUND: Several pharmacologic and nonpharmacologic therapeutic options have been used to treat cough that is not associated with a pulmonary or extrapulmonary etiology. METHODS: We conducted a systematic review to summarize the evidence supporting different cough management options in adults and children with psychogenic, tic, and habit cough. Medline, EMBASE, the Cochrane Central Register of Controlled Trials, Cochrane Database of Systematic Reviews, and Scopus were searched from the earliest inception of each database to September 2013. Content experts were contacted, and we searched bibliographies of included studies to identify additional references. RESULTS: A total of 18 uncontrolled studies were identified, enrolling 223 patients (46% male subjects, 96% children and adolescents). Psychogenic cough was the most common descriptive term used (90% of the studies). Most of the patients (95%) had no cough during sleep; barking or honking quality of cough was described in only eight studies. Hypnosis (three studies),
suggestion therapy (four studies), and counseling and reassurance (seven studies) were the most commonly used interventions. Hypnosis was effective in resolving cough in 78% of the patients and improving it in another 5%. Suggestion therapy resolved cough successfully in 96% of the patients. The greatest majority of improvements noted with these forms of therapy occurred in the pediatric age group. The quality of evidence is low due to the lack of control groups, the retrospective nature of all the studies, heterogeneity of definitions and diagnostic criteria, and the high likelihood of reporting bias. CONCLUSIONS: Only low-quality evidence exists to support a particular strategy to define and treat psychogenic, habit, and tic cough. Patient values, preferences, and availability of potential therapies should guide treatment choice.

[2133]
Hypnosis for induction of labour.
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BACKGROUND: Induction of labour using pharmacological and mechanical methods can increase complications. Complementary and alternative medicine methods including hypnosis may have the potential to provide a safe alternative option for the induction of labour. However, the effectiveness of hypnosis for inducing labour has not yet been fully evaluated. OBJECTIVES: To assess the effect of hypnosis for induction of labour compared with no intervention or any other interventions. SEARCH METHODS: We searched the Cochrane Pregnancy and Childbirth Group's Trials Register (31 January 2014), handsearched relevant conference proceedings, contacted key personnel and organisations in the field for published and unpublished references. SELECTION CRITERIA: All published and unpublished randomised controlled trials (RCTs) and cluster-RCTs of acceptable quality comparing hypnosis with no intervention or any other interventions, in which the primary outcome is to assess whether labour was induced. DATA COLLECTION AND ANALYSIS: Two review authors assessed the one trial report that was identified (but was subsequently excluded). MAIN RESULTS: No RCTs or cluster-RCTs were identified from the search strategy. AUTHORS' CONCLUSIONS: There was no evidence available from RCTs to assess the effect of hypnosis for induction of labour. Evidence from RCTs is required to evaluate the effectiveness and safety of this intervention for labour induction. As hypnosis may delay standard care (in case standard care is withheld during hypnosis), its use in induction of labour should be considered on a case-by-case basis. Future RCTs are required to examine the effectiveness and safety of hypnotic relaxation for induction of labour among pregnant women who have anxiety above a certain level. The length and timing of the intervention, as well as the staff training required, should be taken into consideration. Moreover, the views and experiences of women and staff should also be included in future RCTs.

[2134]
Prevalence and Characteristics of Pain in Patients Awaiting Lung Transplantation.
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CONTEXT: Pain in patients awaiting lung transplantation is not well known. OBJECTIVES: This study prospectively investigated prevalence and characteristics of pain in these patients. METHODS: Assessment, undertaken at the time of registration, comprised an interview, a physical examination by a pain-qualified anesthesiologist, and a questionnaire completed by the patient and investigator. This questionnaire included evaluation of pain (intensity, location, sensory and affective qualifications, and treatment), detection of neuropathic pain, and assessment of anxiety and depression. A patient was considered "with pain" when at least one of the following criteria was met: 1) positive answer to the question "Do you suffer regularly from pain?" and 2) score greater than 3 on at least one of three numeric pain scales (current, maximal, and average during the last eight days) ranging from 0 (no pain) to 10 (most severe pain imaginable). RESULTS: One hundred forty-three patients were enrolled. Prevalence of pain was 59%. Three independent variables were correlated to the magnitude of the average pain score for the preceding eight days: female gender (P = 0.003), cystic fibrosis (P = 0.02), and depression score (P = 0.02). Among the pain patients, 39% took analgesic drugs daily and 36% regularly but less than daily; 2% used opioids. Nineteen percent used nonpharmacological strategies (e.g., hypnosis, relaxation). CONCLUSION: This study highlights the prevalence of pain in this population and specific problems associated with pain such as anxiety and depression. Appropriate assessment and treatment of pain should be considered a component of pretransplantation management.

[2135]
[Contributions of medical hypnosis to orthodontic treatment].
Hypnosis is making a comeback in all of the medical disciplines. But in a world where everyone wants to control everything and manage everything, it's helpful to know that hypnosis is a dynamic process that cannot be forced on anyone, a psychic reality, clearly demonstrated today by brain imaging. Hypnosis does not take any power over the individual. It is just one more tool to help ease patient's discomfort. It is also useful to avoid professional burnout to provide care without depleting our energy and without wasting our valuable time. Medical hypnosis is a real asset for providing comfortable orthodontic treatment and creating a serene atmosphere. It can be done simply and rapidly to take high quality impressions, to place braces comfortably on a patient who is sitting quietly. Orthodontic treatment requires cooperation and motivation, so let's give our patients a new sense of confidence and a willingness to cooperate.

[2136]
Systematic review and meta-analysis of distraction and hypnosis for needle-related pain and distress in children and adolescents.
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OBJECTIVE: To systematically review the evidence (and quality) for distraction and hypnosis for needle-related pain and distress in children and adolescents. To explore the effects of distraction characteristics (e.g., adult involvement, type of distractor), child age, and study risk of bias on treatment efficacy. METHODS: 26 distraction and 7 hypnosis trials were included and self-report, observer-report, and behavioral pain intensity and distress examined. Distraction studies were coded for 4 intervention characteristics, and all studies coded for child age and study risk of bias. RESULTS: Findings showed strong support for distraction and hypnosis for reducing pain and distress from needle procedures. The quality of available evidence was low, however. Characteristics of distraction interventions, child age, and study risk of bias showed some influence on treatment efficacy, CONCLUSIONS: Distraction and hypnosis are efficacious in reducing needle-related pain and distress in children. The quality of trials in this area needs to be improved.

[2137]
A systematic review: non-pharmacological interventions in treating pain in patients with advanced cancer.
Hökkä M(1), Kaakinen P, Pöllki T.
Author information: (1)Institution of Health Sciences, University of Oulu, Finland. AIMS: To assess and synthesize the evidence of the effects and safety of non-pharmacological interventions in treating pain in patients with advanced cancer. BACKGROUND: Pain is a common symptom experienced by patients with advanced cancer; the treatment of such pain is often suboptimal. To manage it, non-pharmacological interventions are recommended after pharmacological treatments have been re-evaluated and modified. However, there remains a lack of knowledge about the effects and safety of such interventions. DESIGN: A systematic review was conducted based on the procedure of the Centre of Reviews and Dissemination. DATA SOURCES: Research papers published between 2000-2013 were identified from the following
databases: CINAHL, MEDIC, MEDLINE (Ovid) and PsycINFO. The references in the selected studies were searched manually. REVIEW METHODS: The studies selected were reviewed for quality, using Cochrane Effective Practice and Organisation of Care Review Group risk of bias assessment criteria. RESULTS: There was limited evidence that some of the non-pharmacological interventions were promising with respect to reducing cancer pain. Relatively, few adverse events were reported as a result of using such interventions. CONCLUSION: It was not possible to draw conclusions about the effects and safety of the non-pharmacological interventions in reducing cancer pain. Some interventions showed promising short-term effects, but there is a need for more rigorous trials. Qualitative studies are required to collect information about patients' perceptions. There are several research gaps: we found no studies about music, spiritual care, hypnosis, active coping training, cold or ultrasonic stimulation.

[2138]
Nonpharmacologic approach to fatigue in patients with cancer.
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Cancer-related fatigue is a common yet underappreciated problem with a significant impact on functional ability and quality of life. Practice guidelines mandate that all cancer patients and survivors be screened for cancer-related fatigue (CRF) at regular intervals. Comorbidities that could contribute to fatigue should be treated, and patients with moderate to severe fatigue should undergo a comprehensive evaluation. Nonpharmacologic interventions are important tools to combat CRF and should be incorporated into routine practice. Physical activity, educational interventions, and cognitive-behavioral therapy have the most supportive data and can be recommended to patients with confidence. From a practical standpoint, general education on CRF is something that most care providers can readily offer patients as part of routine care. Other interventions that appear promising but are as yet lacking convincing evidence include mindfulness-based stress reduction, yoga, and acupuncture. Reiki, Qigong, hypnosis, and music therapy may be worthy of further investigation.

[2139]
Correlates of complementary and alternative medicine use in a pediatric tertiary pain center.
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OBJECTIVE: To examine correlates of complementary and alternative medicine (CAM) use in a pediatric population with chronic pain, and to determine whether CAM use is positively correlated with adaptive coping skills. METHODS: We examined patient data from 1175 children aged 7 to 18 years with chronic pain who completed the intake assessment at the time of initial evaluation at Boston Children's multidisciplinary Pain Treatment Service between 2003 and 2011. The intake assessment included validated measures of anxiety, depression, pain coping skills, and functional disability. Parents were also asked whether their child had tried CAM modalities in the past. We used a multivariable logistic regression model to determine correlates of CAM use and a multivariable linear regression model to determine the relationship between biobehavioral CAM (relaxation training, hypnosis, and biofeedback) and accommodative coping. RESULTS: In our multivariable model, we found that female gender (odds ratio [OR] 1.48, 95% confidence interval [95% CI] 1.07-2.02), level of parental education (OR 1.11 per year, 95% CI 1.06-1.16), greater pain intensity (OR 1.06 per point on an 11-point numerical analog scale, 95% CI 1.01-1.11), and more functional disability (OR 1.19 per 10-point increment on the Functional Disability Inventory, 95% CI 1.06-1.34) were independently associated with CAM use. Biobehavioral CAM was found to have a statistically significant correlation with accommodative coping skills (β = 0.2, P = .004). CONCLUSIONS: In a pediatric chronic pain center, CAM users tended to have higher pain intensity and greater functional disability. Exposure to biobehavioral CAM techniques was associated with adaptive coping skills.

[2140]
Soins. 2014 Oct;(789):54-5.[Health maintenance, relaxation and hypnosis for chronic pain patients]. [Article in French]
Boiron C.
The treatment of chronic pain patients integrates more and more complementary therapies such as relaxation and hypnosis, implemented by specially trained nurses. These techniques are offered on the basis of nurses' diagnoses carried out in the framework of a clinical approach.

[2141]
Perceptually-oriented hypnosis: removing a socially learned pathology and developing adequacy: the case of invisible girl.
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This is the first case review to explicate perceptual hypnotic principles such as differentiation, characteristics of an adequate personality, and the need for adequacy, as utilized in clinical hypnosis in a complex case that altered the distorted perceptions and personal meanings of an eleven-year-old girl who believed that she had Bipolar Disorder and her body and mind were damaged. This qualitative case study examines aspects of hypnosis during therapy from a perceptual point of view to illustrate frustrations in difficult cases and identify some of the causes and origins of alleged clinical pathology in adverse environments. Some moments of effective self-healing through supporting internally controlled changes in perception during hypnotic experiencing are highlighted rather than externally focusing on observed thoughts and behavior. Factors relevant to social psychological research, such as family dynamics, poverty, and interactions with social service agencies and institutions, creating learned pathology, are pointed out for future research.

I wept for four years and when I stopped I was blind.
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The conversion phenomena of hysteria were the subject of intense study in the late nineteenth and early twentieth centuries, after which work on the subject went into decline. The patients are still with us, however, and I cite an epidemic of hysterical blindness among Cambodian refugees living in the U.S. as a poignant example. Since the advent of brain imaging technology, conversion hysteria has been receiving renewed attention. In this paper, I suggest that examining the ideas about hysteria from the past, especially those of Charcot and Janet are fertile areas of study, including the illness and its relation to hypnosis, shock, suggestion, and dissociation theory. I also address the role of the imaginary and the imagination in the illness and critique the implicit dualist model used in most brain imaging studies that distorts the integration of psyche and soma. I summon Merleau-Ponty's body-subject, infant research on intersubjectivity, and Vittorio Gallese's "embodied simulation" as possible windows onto the problem of hysterical conversion, and finally I suggest that along with imaging studies, more dynamic narrative strategies should be used if we hope to understand the metamorphoses, mimesis, and powerful emotions that all play a part in this mysterious disease.

Brain circuits implicated in psychogenic paralysis in conversion disorders and hypnosis.
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Conversion disorders are defined as neurological symptoms arising without organic damage to the nervous system, presumably in relation to various emotional stress factors, but the exact neural substrates of these symptoms and the mechanisms responsible for their production remain poorly understood. In the past 15 years, novel insights have been gained with the advent of functional neuroimaging studies in patients suffering from conversion disorders in both motor and non-motor (e.g. somatosensory, visual) domains. Several studies have also compared brain activation patterns in conversion to those observed during hypnosis, where similar functional losses can be evoked by suggestion. The current review summarizes these recent results and the main neurobiological hypotheses proposed to account for conversion symptoms, in particular motor deficits. An emerging model points to an important role of ventromedial prefrontal cortex (VMPFC), precuneus, and perhaps other limbic structures (including amygdala), all frequently found to be hyperactivated in conversion disorders in parallel to impaired recruitment of primary motor and/or sensory pathways at the cortical or subcortical (basal ganglia) level. These findings are only partly shared with hypnosis, where increases in precuneus predominate, together with activation of attentional control systems, but without any activation of VMPFC. Both VMPFC and precuneus are key regions for access to internal representations about the self, integrating information from memory and imagery with affective relevance (in VMPFC) and sensory or agency representations (in precuneus). It is therefore postulated that conversion deficits might result from an alteration of conscious sensorimotor functions and self-awareness under the influence of affective and sensory representations generated in these regions, which might promote certain patterns of behaviors in response to self-relevant emotional states.

Neurophysiology of hypnosis.
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We here review behavioral, neuroimaging and electrophysiological studies of hypnosis as a state, as well as hypnosis as a tool to modulate brain responses to painful stimulations. Studies have shown that hypnotic processes modify internal (self awareness) as well as external (environmental awareness) brain networks. Brain mechanisms underlying the modulation of pain perception under hypnotic conditions involve cortical as well as subcortical areas including anterior cingulate and prefrontal cortices, basal ganglia and thalami. Combined with local anesthesia and conscious sedation in patients undergoing surgery, hypnosis is associated with improved peri- and postoperative comfort of patients and surgeons. Finally, hypnosis can be considered as a useful analogue for simulating conversion and dissociation symptoms in healthy subjects, permitting better characterization of these challenging disorders by producing clinically similar experiences.

[2145]
Noninvasive and alternative management of chronic low back pain (efficacy and outcomes).
Wellington J(1).

OBJECTIVES: The goal of this article is to provide a thorough literature review of available noninvasive and alternative treatment options for chronic low back pain. In particular, the efficacy of each therapy is evaluated and pertinent outcomes are described. MATERIALS AND METHODS: A comprehensive search for available literature was done through PubMed and Cochrane data base for topics discussed in this paper. RESULTS: Relevant current and past references were reviewed and presented to reflect the efficacy of each therapy and related outcomes. CONCLUSIONS: There are a wide variety of noninvasive and alternative therapies for the treatment of chronic low back pain. Those with the strongest evidence in the literature for good efficacy and outcomes include exercise therapy with supervised physical therapy, multidisciplinary biopsychosocial rehabilitation, and acupuncture. Therapies with fair evidence or moderately supported by literature include yoga, back schools, thermal modalities, acupressure, and cognitive-behavioral therapy. Those therapies with poor evidence or little to no literature support include manipulation, transcutaneous electrical nerve stimulation, low-level laser therapy, reflexology, biofeedback, progressive relaxation, hypnosis, and aromatherapy. Providers delivering care for patients with chronic low back pain must carefully evaluate these available treatment options related to their efficacy or lack thereof as well as relevant outcomes.

[2146]
Spatial Analytic Phase Difference of EEG activity during anesthetic-induced unconsciousness.
Nicolaou N(1), Georgiou J(2).

OBJECTIVE: A number of studies provide supporting evidence for changes in synchronization during anesthetic-induced unconsciousness. This study investigates how anesthetic administration affects the widespread patterns of phase synchrony. METHODS: The recently introduced method of Spatial Analytic Phase Difference (SAPD) was used to measure changes in synchrony in the electroencephalogram (EEG) activity of 29 patients undergoing routine surgery. Analysis was performed over 9 frequency bands: (i) δ (1.5-3.5Hz); (ii) θ (3.5-7.5Hz); (iii) α1 (8-10Hz); (iv) α2 (10.5-12Hz); (v) β1 (12.5-18Hz); (vi) β2 (18.5-21Hz); (vii) β3 (21.5-30Hz); (viii) γ1 (30.5-40Hz); and (ix) γ2 (60-80Hz). RESULTS: Anesthesia was characterized by (a) large and localized synchrony increases in mid-frequency bands (8-12Hz), (b) smaller and widespread synchrony increases in higher frequency bands (30.5-40Hz, 60-80Hz), and (c) both increase and decrease of synchrony in low frequency bands (1.5-7.5Hz). CONCLUSIONS: This study supports anesthetic-induced changes in synchrony, with the induction of persistent and reversible widespread synchrony being most prominent. SIGNIFICANCE: Our findings have implications in the study of consciousness, support existing literature in the field and contribute towards the theoretical understanding of the mechanisms behind loss of consciousness. Future investigations could result in a synchrony-based measure for monitoring the level of hypnosis of patients during surgery.

[2147]
Hypnosis-induced mental training improves performance on the Fundamentals of Laparoscopic Surgery (FLS) simulator.
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BACKGROUND: Mental training (MT) is used extensively by musicians and athletes to improve their performance. Recently, it has been assessed as a training method for surgical trainees. We assessed the influence of MT, induced by hypnosis, on the performance of simulated tasks on a laparoscopic simulator, as compared to a non-specific relaxing intervention. METHODS: 11 surgeons completed a proficiency-based training program on the Fundamentals of Laparoscopic Surgery (FLS) simulator, until they reached performance plateau of the peg transfer task. Thereafter, they were offered a single music session, as a relaxing intervention, followed by repeating of the peg transfer task. Then they went through a hypnosis session guided by an experienced psychologist, with suggestions of smooth flow of pegs from one position on the board to another, and re-performed the task. RESULTS: Plateau performance was 51.1 ± 6.9 s. After the music session performance improved by 6.3 % to 47.9 ± 5.4 s (p = 0.86). After the MT session performance further improved by 15.3 % to 40.1 ± 5.8 s (p = 0.009), which was a 21.6 % improvement from baseline (p < 0.001). Subject's satisfaction from their performance, without knowledge of the task scores, was 6.0 ± 2.9 on 0-10 VAS after the music and reached as high as 8.5 ± 1.7 after the hypnotic session (p = 0.01). CONCLUSIONS: Hypnosis-induced MT significantly improves performance on the FLS simulator, which cannot be attributed to its relaxing qualities alone. This study contributes evidence to the effectiveness of MT in surgical skills acquisition and suggests that hypnotic techniques should be used in mental preparation processes. There is a need to further study these effects on operating room performance.


BACKGROUND: Infertility patients are increasingly using complementary and alternative medicine (CAM) to supplement or replace conventional fertility treatments. The objective of this study was to determine the roles of CAM practitioners in the support and treatment of infertility. METHODS: Ten semi-structured interviews were conducted in Ottawa, Canada in 2011 with CAM practitioners who specialized in naturopathy, acupuncture, traditional Chinese medicine, hypnotherapy and integrated medicine. RESULTS: CAM practitioners played an active role in both treatment and support of infertility, using a holistic, interdisciplinary and individualized approach. CAM practitioners recognized biological but also environmental and psychosomatic determinants of infertility. Participants were receptive to working with physicians, however little collaboration was described. CONCLUSIONS: Integrated infertility patient care through both collaboration with CAM practitioners and incorporation of CAM's holistic, individualized and interdisciplinary approaches would greatly benefit infertility patients.


INTRODUCTION: Up to 18% of people in industrialised societies are mildly affected by chronic tinnitus, and 0.5% report tinnitus having a severe effect on their daily life. Tinnitus can be associated with hearing loss, acoustic neuromas, drug toxicity, ear diseases, and depression. Tinnitus can last for many years, and can interfere with sleep and concentration. METHODS AND OUTCOMES: We conducted a systematic review and aimed to answer the following clinical question: What are the effects of treatments for chronic tinnitus? We searched: Medline, Embase, The Cochrane Library, and other important databases up to November 2013 (Clinical Evidence reviews are updated periodically; please check our website for the most up-to-date version of this review). We included harms alerts from relevant organisations such as the US Food and Drug Administration (FDA) and the UK Medicines and Healthcare products Regulatory Agency (MHRA). RESULTS: We found 33 studies that met our inclusion criteria. We performed a GRADE evaluation of the quality of evidence for interventions. CONCLUSIONS: In this systematic review, we present information relating to the effectiveness and safety of the following interventions: a camphorate, acupuncture, antidepressant drugs, benzodiazepines, carbamazepine, electromagnetic stimulation, ginkgo biloba, hearing aids, hypnosis, psychotherapy, tinnitus-masking devices, and cognitive behavioural therapy plus tinnitus-masking device (tinnitus retraining therapy).

[2150] Menopause. 2014 Oct 27. [Epub ahead of print] Treatment of chronic insomnia disorder in menopause: evaluation of literature. Attarian H(1), Hachul H, Gutusso T, Phillips B. Author information: (1)From the 1Department of Neurology, Northwestern University Feinberg School of Medicine, Chicago, IL; 2Departments of Psychobiology and Gynecology, Universidade Federal de São Paulo, São Paulo, Brazil; 3Department of Neurology, University at Buffalo School of Medicine, State University of New York, Buffalo, NY; and 4Department of Medicine, University of Kentucky College of Medicine, Lexington, KY.

OBJECTIVE: Insomnia both as a symptom and as part of chronic insomnia disorder is quite common in menopause. Comorbid conditions, such as restless legs syndrome and obstructive sleep apnea, occur with high prevalence among
perimenopausal women with insomnia. Insomnia in this population group is associated with adverse health outcomes, and there are no clear standards on how to treat it. METHODS: Based on extensive literature search, 76 articles were identified. Two authors independently graded evidence according to the Oxford Centre for Evidence-Based Medicine Levels of Evidence. RESULTS: Evaluation and treatment of other comorbid sleep disorders are recommended, as is cognitive-behavioral therapy for insomnia. Hormone therapy, eszopiclone, escitalopram, gabapentin, isoflavones, valerian, exercise, and hypnosis are suggested. Zolpidem, quetiapine XL, citalopram, mirtazapine followed by long-acting melatonin, ramelteon, Pycnogenol, Phyto-Female Complex, yoga, and massage may be considered. Kampo formulas are not recommended. Acupuncture may not be suggested, and cognitive-behavioral therapy that is not tailored for insomnia probably should not be considered. CONCLUSIONS: Although a variety of interventions are shown to be helpful in improving sleep in menopause, there is a need for well-designed head-to-head trials with uniform outcome measures.

Brain areas that influence general anesthesia. Leung LS(1), Luo T(2), Ma J(3), Herrick I(4).

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This document reviews the literature on local brain manipulation of general anesthesia in animals, focusing on behavioral and electrophysiological effects related to hypnosis or loss of consciousness. Local inactivation or lesion of wake-active areas, such as locus coeruleus, dorsal raphe, pedunculopontine tegmental nucleus, perifornical area, tuberomammillary nucleus, ventral tegmental area and basal forebrain, enhanced general anesthesia. Anesthesia enhancement was shown as a delayed emergence (recovery of righting reflex) from anesthesia or a decrease in the minimal alveolar concentration that induced loss of righting. Local activation of various wake-active areas, including pontis oralis and centromedial thalamus, promoted behavioral or electrographic arousal during maintained anesthesia and facilitated emergence. Lesion of the sleep-active ventrolateral preoptic area resulted in increased wakefulness and decreased isoflurane sensitivity, but only for 6 days after lesion. Inactivation of any structure within limbic circuits involving the medial septum, hippocampus, nucleus accumbens, ventral pallidum, and ventral tegmental area, amygdala, entorhinal and piriform cortex delayed emergence from anesthesia, and often reduced anesthetic-induced behavioral excitation. In summary, the concept that anesthesia works on the sleep-wake system has received strong support from studies that inactivated/lesioned or activated wake-active areas, and weak support from studies that lesioned sleep-active areas. In addition to the conventional wake-sleep areas, limbic structures such as the medial septum, hippocampus and prefrontal cortex are also involved in the behavioral response to general anesthesia. We suggest that hypnosis during general anesthesia may result from disrupting the wake-active neuronal activities in multiple areas and suppressing an atropine-resistant cortical activation associated with movements.


PURPOSE: To provide a snapshot of provider-based complementary and alternative medicine (pBCAM) use among adult smokers and assess the opportunity for these providers to deliver tobacco cessation interventions. DESIGN: Cross-sectional analysis of data from the 2002 and 2007 National Health Interview Surveys. SETTING: Nationally representative sample. SUBJECTS: A total of 54,437 (31,044 from 2002; 23,393 from 2007) adults 18 years and older. MEASURES: The analysis focuses on 10 types of pBCAM, including acupuncture, Ayurveda, biofeedback, chelation therapy, chiropractic care, energy therapy, folk medicine, hypnosis, massage, and naturopathy. ANALYSIS: The proportions of current smokers using any pBCAM as well as specific types of pBCAM in 2002 and 2007 are compared using SAS SURVEYLOGISTIC. RESULTS: Between 2002 and 2007, the percentage of recent users of any pBCAM therapy increased from 12.5% to 15.4% (p = .001). The largest increases occurred in massage, chiropractic, and acupuncture. Despite a decrease in the national average of current smokers (22.0% to 19.4%; p = .001), proportions of smokers within specific pBCAM disciplines remained consistent. CONCLUSION: Complementary and alternative medicine (CAM) practitioners, particularly those in chiropractic, acupuncture, and massage, represent new cohorts in the health care community to promote tobacco cessation. There is an opportunity to provide brief tobacco intervention training to CAM practitioners and engage them in public health efforts to reduce the burden of tobacco use in the United States.

Self, memory, and imagining the future in a case of psychogenic amnesia. Rathbone CJ(1), Ellis JA, Baker I, Butler CR.
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We report a case of psychogenic amnesia and examine the relationships between autobiographical memory impairment, the self, and ability to imagine the future. Case study JH, a 60-year-old male, experienced a 6-year period of pervasive psychogenic amnesia covering all life events from childhood to the age of 53. JH was tested during his amnesic period and again following hypnotherapy and the recovery of his memories. JH's amnesia corresponded with deficits in self-knowledge and imagining the future. Results are discussed with reference to models of self and memory and processes involving remembering and imagining.

Non-pharmacological interventions for chronic pain in people with spinal cord injury.
Boldt I(1), Eriks-Hoogland I, Brinkhof MW, de Bie R, Joggi D, von Elm E.
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BACKGROUND: Chronic pain is frequent in persons living with spinal cord injury (SCI). Conventionally, the pain is treated pharmacologically, yet long-term pain medication is often refractory and associated with side effects. Non-pharmacological interventions are frequently advocated, although the benefit and harm profiles of these treatments are not well established, in part because of methodological weaknesses of available studies. OBJECTIVES: To critically appraise and synthesise available research evidence on the effects of non-pharmacological interventions for the treatment of chronic neuropathic and nociceptive pain in people living with SCI. SEARCH METHODS: The search was run on the 1st March 2011. We searched the Cochrane Injuries Group's Specialised Register, the Cochrane Central Register of Controlled Trials (CENTRAL), MEDLINE (OvidSP), Embase (OvidSP), PsycINFO (OvidSP), four other databases and clinical trials registers. In addition, we manually searched the proceedings of three major scientific conferences on SCI. We updated this search in November 2014 but these results have not yet been incorporated. SELECTION CRITERIA: Randomised controlled trials of any intervention not involving intake of medication or other active substances to treat chronic pain in people with SCI. DATA COLLECTION AND ANALYSIS: Two review authors independently extracted data and assessed risk of bias in the included studies. The primary outcome was any measure of pain intensity or pain relief. Secondary outcomes included adverse events, anxiety, depression and quality of life. When possible, meta-analyses were performed to calculate standardised mean differences for each type of intervention. MAIN RESULTS: We identified 16 trials involving a total of 616 participants. Eight different types of interventions were studied. Eight trials investigated the effects of electrical brain stimulation (transcranial direct current stimulation (tDCS) and cranial electrotherapy stimulation (CES); five trials) or repetitive transcranial magnetic stimulation (rTMS; three trials). Interventions in the remaining studies included exercise programmes (three trials); acupuncture (two trials); self-hypnosis (one trial); transcutaneous electrical nerve stimulation (TENS) (one trial); and a cognitive behavioural programme (one trial). None of the included trials were considered to have low overall risk of bias. Twelve studies had high overall risk of bias, and in four studies risk of bias was unclear. The overall quality of the included studies was weak. Their validity was impaired by methodological weaknesses such as inappropriate choice of control groups. An additional search in November 2014 identified more recent studies that will be included in an update of this review. For tDCS the pooled mean difference between intervention and control groups in pain scores on an 11-point visual analogue scale (VAS) (0-10) was a reduction of -1.90 units (95% confidence interval (CI) -3.48 to -0.33; P value 0.02) in the short term and of -1.87 (95% CI -3.30 to -0.45; P value 0.01) in the mid term. Exercise programmes led to mean reductions in chronic shoulder pain of -1.9 score points for the Short Form (SF)-36 item for pain experience (95% CI -3.4 to -0.4; P value 0.01) and -2.8 pain VAS units (95% CI -3.77 to -1.83; P value < 0.00001); this represented the largest observed treatment effects in the included studies. Trials using rTMS, CES, acupuncture, self-hypnosis, TENS or a cognitive behavioural programme provided no evidence that these interventions reduce chronic pain. Ten trials examined study endpoints other than pain, including anxiety, depression and quality of life, but available data were too scarce for firm conclusions to be drawn. In four trials no side effects were reported with study interventions. Five trials reported transient mild side effects. Overall, a paucity of evidence was found on any serious or long-lasting side effects of the interventions. AUTHORS' CONCLUSIONS: Evidence is insufficient to suggest that non-pharmacological treatments are effective in reducing chronic pain in people living with SCI. The benefits and harms of commonly used non-pharmacological pain treatments should be investigated in randomised controlled trials with adequate sample size and study methodology.

[Practice of hypnosis in the nurse care].
[Article in French]
Vadrot GL.

Hypnosis is practicing in hospital, especially in palliative care and in pain consultation. This technique is used in a well-defined field by doctors, psychologists and caregivers, all specifically trained.

Jensen MP(1), Sherlin LH, Fregni F, Gianas A, Howe JD, Hakimian S.
OBJECTIVES: The objective of this study was to examine the associations between baseline electroencephalogram (EEG)-assessed brain oscillations and subsequent response to four neuromodulatory treatments. Based on available research, we hypothesized that baseline theta oscillations would prospectively predict response to hypnotic analgesia. Analyses involving other oscillations and the other treatments (meditation, neurofeedback, and both active and sham transcranial direct current stimulation) were viewed as exploratory, given the lack of previous research examining brain oscillations as predictors of response to these other treatments. DESIGN: Randomized controlled study of single sessions of four neuromodulatory pain treatments and a control procedure. METHODS: Thirty individuals with spinal cord injury and chronic pain had their EEG recorded before each session of four active treatments (hypnosis, meditation, EEG biofeedback, transcranial direct current stimulation) and a control procedure (sham transcranial direct stimulation). RESULTS: As hypothesized, more presession theta power was associated with greater response to hypnotic analgesia. In exploratory analyses, we found that less baseline alpha power predicted pain reduction with meditation. CONCLUSIONS: The findings support the idea that different patients respond to different pain treatments and that between-person treatment response differences are related to brain states as measured by EEG. The results have implications for the possibility of enhancing pain treatment response by either 1) better patient/treatment matching or 2) influencing brain activity before treatment is initiated in order to prepare patients to respond. Research is needed to replicate and confirm the findings in additional samples of individuals with chronic pain.


Although part of the medical fold since the 1870s, hypnosis was long relegated to the margins, recognised and used by only a relatively small group of medical professionals. In the decades around 1900 hypnotic techniques were monopolised as a form of medical treatment through a long and in no way linear process. Hypnosis of laymen was vehemently opposed, however, denounced as being far too dangerous. And yet, medical participation in the aura of spectacular intervention into the human psyche garnered support. The medium of both documentary and instructional film served an important function in this regard, conveying popular interest in acknowledging hypnosis as a scientific method. On the basis of four medically accredited films on hypnosis from 1920 to 1936, this paper attempts to investigate how medical experts and these genres, as part of their effort to claim hypnosis from the realm of public spectacle and parapsychological experimentation, worked to stabilise hypnosis as a purified form of medical and psychiatric practice.


BACKGROUND: Suggestive interventions such as hypnosis and therapeutic suggestions are frequently used to alleviate surgical side effects; however, the effectiveness of therapeutic suggestion intervention has not yet been systematically evaluated. In the present study, we tested the hypotheses that (1) suggestive interventions are useful for reducing postoperative side effects; (2) therapeutic suggestions are comparable in effectiveness to hypnosis; (3) live presentation is more effective than recordings; and (4) suggestive interventions would be equally effective used in minor and major surgeries. METHODS: We performed random effect meta-analysis with meta-regression and sensitivity analysis by moderating factors on a pool of 26 studies meeting the inclusion criteria (N = 1890). Outcome variables were postoperative anxiety, pain intensity, pain medication requirement, and nausea. RESULTS: Suggestive interventions reduced postoperative anxiety (g = 0.40; 99% confidence interval [CI] = 0.13-0.66; P < 0.001) and pain intensity (g = 0.25; 99% CI = 0.00-0.50; P = 0.010), but did not significantly affect postoperative analgesic drug consumption (g = 0.16; 99% CI = -0.16 to 0.47; P = 0.202) and nausea (g = 0.38; 99% CI = -0.6 to 0.81; P = 0.026). No significant differences were found for intervention type, presentation method, and severity of surgery; however, sensitivity analysis only supported the effectiveness of hypnosis (g = 0.62; 99% CI = 0.31-0.92; P < 0.001) and live presentation (g = 0.55; 99% CI = 0.23-0.88; P < 0.001) for decreasing postoperative anxiety, and that of live presentation for alleviating postoperative pain (g = 0.44; 99% CI = 0.07-0.82; P = 0.002). Sensitivity analyses also suggested that suggestive interventions are only effective for decreasing pain intensity during minor surgical procedures (g = 0.39; 99% CI = 0.00-0.78; P = 0.009). CONCLUSIONS: Suggestive techniques might be useful tools to alleviate postoperative anxiety and pain; however, strength of the evidence is weak because of possible bias in the reviewed articles. The lack of access to within-subjects data and the overlap between moderator conditions also limit the scope of the analysis. More methodologically correct studies are required with sensitivity to moderating factors and to within-subjects changes. For clinical purposes, we advise the use of hypnosis with live presentation to reduce postoperative anxiety and pain, until convincing evidence is uncovered for the effectiveness of therapeutic suggestions and recorded presentation. Pain management with adjunct suggestive
interventions is mostly encouraged in minor rather than major surgeries.

[2159]
Hypnotic relaxation results in elevated thresholds of sensory detection but not of pain detection.
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BACKGROUND: Many studies show an effectiveness of hypnotic analgesia. It has been discussed whether the analgesic effect is mainly caused by the relaxation that is concomitant to hypnosis. This study was designed to evaluate the effects of hypnotic relaxation suggestion on different somatosensory detection and pain thresholds. METHODS: Quantitative sensory testing (QST) measurements were performed before and during hypnosis in twenty-three healthy subjects on the dorsum of the right hand. Paired t-test was used to compare threshold changes. The influence of hypnotic susceptibility was evaluated by calculating correlation coefficients for threshold changes and hypnotic susceptibility (Harvard group scale). RESULTS: During hypnosis significantly changed somatosensory thresholds (reduced function) were observed for the following sensory detection thresholds: Cold Detection Threshold (CDT), Warm Detection Threshold (WDT), Thermal Sensory Limen (TSL) and Mechanical Detection Threshold (MDT). The only unchanged sensory detection threshold was Vibration Detection Threshold (VDT). No significant changes were observed for the determined pain detection thresholds (Cold Pain Thresholds, Heat Pain Thresholds, Mechanical Pain Sensitivity, Dynamic Mechanical Allodynia, Wind-up Ratio and Pressure Pain Threshold). No correlation of hypnotic susceptibility and threshold changes were detected.
CONCLUSION: Hypnotic relaxation without a specific analgesic suggestion results in thermal and mechanical detection, but not pain threshold changes. We thus conclude that a relaxation suggestion has no genuine effect on sensory pain thresholds. TRIAL REGISTRATION: ClinicalTrials.gov, Identifier: NCT02261155 (9th October 2014).

[2160]
Alteration of consciousness via diverse photo-acoustic stimulatory patterns. Phenomenology and effect on salivary flow rate, alpha-amylase and total protein levels.

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Long-term photo-acoustic stimulation is used for the induction of altered states of consciousness for both therapeutic and experimental purposes. Long-term photo-acoustic stimulation also leads to changes in the composition of saliva which have a key contribution to the efficiency of this technique in easing mucosal symptoms of oral psychosomatic patients. The aim of this study is to find out whether there is any cumulative effect of repeated stimulation and whether
there are any detectable differences between diverse stimulatory patterns of long lasting photo-acoustic stimulation on the phenomenology of the appearing trance state and on salivary secretion. There was significant cumulative effect in relation with the appearance of day dreaming as phenomenological parameter, and in relation with protein output and amylase/protein ratio as salivary parameter. Pattern specific effect was detectable in relation with salivary flow rate only. Although our results clearly indicate the existence of certain cumulative and stimulation-pattern specific effects of repeated photo-acoustic stimulation, the absolute values of all these effects were relatively small in this study. Therefore, in spite of their theoretical importance there are no direct clinical consequences of these findings. However, our data do not exclude at all the possibility that repeated stimulation with other stimulatory parameters may lead to more pronounced effects. Further studies are needed to make clear conclusion in this respect.

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[2161]
Patterns of hypnotic response, revisited.
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It has long been speculated that there are discrete patterns of responsiveness to hypnotic suggestions, perhaps paralleling the factor structure of hypnotizability. An earlier study by Brenneman and Kihlstrom (1986), employing cluster analysis, found evidence for 12 such profiles. A new study by Terhune (2015), employing latent profile analysis, found evidence for three such patterns among highly hypnotizable subjects, and a fourth comprising subjects of medium hypnotizability. Some differences between the two studies are described. Convincing identification of discrete “types” of high hypnotizability, such as dissociative and nondissociative, may require a larger dataset than is currently available, but also data pertaining directly to divisions in conscious awareness and experienced involuntariness.

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[2162]
The use of hypnosis in severe brain injury rehabilitation: a case report.
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[2163]
The effect of sedation during transesophageal echocardiography on heart rate variability: a comparison of hypnotic sedation with medical sedation.
BACKGROUND: There is no ideal sedation technique that can be used during TEE, and the data concerning the effects of available sedation techniques on HRV are limited. In our study we aimed at comparing the effects of sedation through hypnotherapy with medical sedation achieved by midazolam on HRV. MET: ODS: We recruited 76 patients with an indication of TEE, the age range was 18-83 years. In Group T there were 26 patients who had the procedure under topical pharyngeal anesthesia, in Group D there were 23 patients who received midazolam and in Group H there were 27 patients receiving hypnosis. All patients had an IV access, throughout the procedure heart rate, rhythm ECG, peripheric O2 saturation were monitored with a non-invasive monitor, blood pressure measurements were taken every 3 minutes. Rhythm holter recordings were obtained from all patients and TEE was performed. RESULTS: When time domain parameters for HRV were compared in all three groups, hypnosis group had significant increases in pNN50 and RMSSD compared to Groups D and T (p<0.05). As concerns of frequency domain parameters, there were no significant differences between groups where LF was decreased in hypnosis group and HF was increased (p>0.05). However, LF/HF was decreased statistically significant (p<0.05) when compared with midazolam group. CONCLUSION: Contrary to standard sedation in TEE patients, when hypnosis is used autonomic cardiac tone is modified to a significant extent. Hypnotic sedation achieves this by increasing the parasympathetic activity, decreasing the sympathetic activity and changing the sympathovagal interaction balance.
In altered subjective states, the behavioural quantification of external and internal awareness remains challenging due to the need for reports on the subjects' behalf. With the aim to characterize the behavioural counterpart of external and internal awareness in a modified subjective condition, we used hypnosis during which subjects remain fully responsive. Eleven right-handed subjects reached a satisfactory level of hypnotisability as evidenced by subjective reports on arousal, absorption and dissociation. Compared to normal wakefulness, in hypnosis (a) participants' self-ratings for internal awareness increased and self-ratings for external awareness decreased, (b) the two awareness components tended to anticorrelate less and the switches between external and internal awareness self-ratings were less frequent, and (c) participants' reaction times were higher and lapses in key presses were more frequent. The identified imbalance between the two components of awareness is considered as of functional relevance to subjective (meta)cognition, possibly mediated by allocated attentional properties brought about by hypnosis. Our results highlight the presence of a cognitive counterpart in resting state, indicate that the modified contents of awareness are measurable behaviourally, and provide leverage for investigations of more challenging altered conscious states, such as anaesthesia, sleep and disorders of consciousness.

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Hypnosis and belief: A review of hypnotic delusions.

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Hypnosis can create temporary, but highly compelling alterations in belief. As such, it can be used to model many aspects of clinical delusions in the laboratory. This approach allows researchers to recreate features of delusions on demand and examine underlying processes with a high level of experimental control. This paper reviews studies that have used hypnosis to model delusions in this way. First, the paper reviews studies that have focused on reproducing the surface features of delusions, such as their high levels of subjective conviction and strong resistance to counter-evidence. Second, the paper reviews studies that have focused on modelling underlying processes of delusions, including anomalous experiences or cognitive deficits that underpin specific delusional beliefs. Finally, the paper evaluates this body of research as a whole. The paper discusses advantages and limitations of using hypnotic models to study delusions and suggests some directions for future research.

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Efficacy and cost-effectiveness: A study of different treatment approaches in a tertiary pain centre.

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Professional Hypnosis Databank - page 562 of 889 - by Alberto Torelli, hypnotologist
BACKGROUND: Chronic pain is considered to be a complex phenomenon, involving an interrelation of biological, psychosocial and sociocultural factors. Currently, no single treatment or therapy can address all aspects of this pathology. In our expert tertiary pain centre, we decided to assess the effectiveness of four treatments for chronic pain classically proposed in our daily clinical work: physiotherapy; psycho-education; physiotherapy combined with psycho-education; and self-hypnosis/self-care learning.

METHODS: This study included 527 chronic pain patients, with a mean duration of pain of 10 years. Patients were allocated either to one of the four pre-cited treatment groups or to the control group. Pain intensity, quality of life, pain interference, anxiety and depression were assessed before and after treatment.

RESULTS: This study revealed a significant positive effect on pain interference and anxiety in patients included in the physiotherapy combined with psycho-education group, after 20 sessions spread over 9 months of treatment. The most prominent results were obtained for patients allocated to the self-hypnosis/self-care group, although they received only six sessions over a 9-month period. These patients showed significant benefits in the areas of pain intensity, pain interference, anxiety, depression and quality of life.

CONCLUSIONS: This clinical report demonstrates the relevance of biopsychosocial approaches in the improvement of pain and psychological factors in chronic pain patients. The study further reveals the larger impact of self-hypnosis/self-care learning treatment, in addition to a cost-effectiveness benefit of this treatment comparative to other interventions.

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The effects of hypnotherapy during transrectal ultrasound-guided prostate needle biopsy for pain and anxiety.

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INTRODUCTION: Several studies evaluating the tolerance of transrectal ultrasound (TRUS)-guided needle biopsies showed that moderate-to-severe pain was associated with the procedure. Additionally, prebiopsy anxiety or rebiopsy as a result of a prior biopsy procedure is mentioned as factors predisposing to higher pain intensity. Thus, in this study, we investigated the effects of hypnotherapy during transrectal ultrasound-guided prostate needle biopsy for pain and anxiety.

MATERIALS AND METHODS: Sixty-four patients presenting for TRUS-guided prostate needle biopsy were randomly assigned to receive either 10-min presurgery hypnosis session (n = 32, mean age 63.5 ± 6.1, p = 0.289) or a presurgery control session (n = 32, mean age 61.8 ± 6.8, p = 0.289). The hypnosis session involved suggestions for increased relaxation and decreased anxiety. Presurgery pain and anxiety were measured using visual analog scales (VAS), Beck Anxiety Inventory (BAI), and Hamilton Anxiety Scale (HAS), respectively. In our statistics, p < 0.05 was considered statistically significant.

RESULTS: Postintervention, and before surgery, patients in the hypnosis group had significantly lower mean values for presurgery VAS [mean 1 (0-8); p = 0.011], BAI (6.0 vs 2.0; p < 0.001), and HAS (11.0 vs 6.0; p < 0.001).

CONCLUSION: The study results indicate that a brief presurgery hypnosis intervention can be an effective means of controlling presurgical anxiety, and therefore pain, in patients awaiting diagnostic prostate cancer surgery.

Dietary Supplements and Alternative Therapies for Pain Management.

Gregory PJ.

The use of complementary and alternative medicines (CAM) continues to grow in North America. The most recent National Health Interview Survey found that in 2012, 33.2 percent of respondents reported usage of some form of CAM in the previous 12 months. A survey of adult patients in a U.S. dental school clinic found that 24 percent reported the use of herbal supplements. Dietary supplements and alternative therapies are often used for pain management.

Effect of hypnosis on masseter EMG recorded during the 'resting' and a slightly open jaw posture.

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The aim of this experimental study was to determine whether minimal levels of electromyographic activity in the masseter muscle are altered when individuals are in a verified hypnotic state. Experiments were performed on 17 volunteer subjects (8 male, 9 female) all of whom gave informed consent. The subjects were dentate and had no symptoms of pain or masticatory dysfunction. Surface electromyograms (EMGs) were made from the masseter muscles and quantified by integration following full-wave rectification and averaging. The EMGs were obtained (i) with the mandible in 'resting' posture; (ii) with the mandible voluntarily lowered (but with the lips closed); (iii) during maximum voluntary clenching (MVC). The first two recordings were made before, during and after the subjects were in a hypnotic state. Susceptibility to hypnosis was assessed with Spiegel's eye-roll test, and the existence of the hypnotic state was verified by changes in ventilatory pattern. On average, EMG levels expressed as percentages of MVC were less: (i) when the jaw was deliberately lowered as opposed to being in the postural position; (ii) during hypnosis compared with during the pre- and post-hypnotic periods. However, analysis of variance followed by post hoc tests with multiple comparison corrections (Bonferroni) revealed that only the differences between the level during hypnosis and those before and after hypnosis were statistically significant (P < 0·05). As the level of masseter EMG when the mandible was in 'resting' posture was reduced by hypnosis, it appears that part of that EMG is of biological origin.

Hypnosis and music interventions (HMI) inactivate HIF-1: A potential curative efficacy for cancers and hypertension.

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Hypnosis and music interventions (HMI) have shown positive influence on cancers for nearly 200 years, but the underlying mechanisms were rarely explored systematically. The hypothesis suggests a potential curative efficacy of HMI on cancers by inhibiting hypoxia inducible factor-1 (HIF-1), which is a key mediator of cancer development, especially under hypoxic conditions. HMI are sufficient to attenuate the pain and anxiety degree of individuals, improve multiple psychological and physiological parameters, and consequently, lead to increased oxygen saturation in vivo. Furthermore, abundant oxygen in vivo inhibits the activation of HIF-1 and potentially blockades kinds of HIF-1-induced oncogenic signaling pathways. The hypothesized efficacy of HMI is very similar to anti-cancer medicines targeting HIF-1. The implication of the hypothesis in preventing hypertension is also discussed. In summary, the hypothesis clearly suggests the potential involvement of the convenient, safe, non-pharmaceutical, and low-cost HMI in preventing HIF-1-mediated diseases, including cancers and hypertension.

Cost-Effectiveness and Cost-Utility of Home-Based Hypnotherapy Using Compact Disc Versus Individual Hypnotherapy By A Therapist for Pediatric Irritable Bowel Syndrome and Functional Abdominal Pain (Syndrome).

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Aspects of the non-pharmacological treatment of irritable bowel syndrome.

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Irritable bowel syndrome (IBS) is one of the most commonly diagnosed gastrointestinal conditions. It represents a significant healthcare burden and remains a clinical challenge. Over the years IBS has been described from a variety of different perspectives; from a strict illness of the gastrointestinal tract (medical model) to a more complex multi-symptomatic disorder of the brain-gut axis (biopsychosocial/psychosomatic model). In this article we present aspects of the pathophysiology and the non-pharmacological treatment of IBS based on current knowledge. Effects of conditioned stress and/or traumatic influences on the emotional system (top-down) as well as effects on the intestine through stressors, infection, inflammation, food and dysbiosis (bottom-up) can affect brain-gut communication and result in dysregulation of the autonomic nervous system (ANS), playing an important role in the pathophysiology of IBS. Conditioned stress together with dysregulation of the autonomic nervous system and the emotional system may involve reactions in which the distress inside the body is not recognized due to low body awareness. This may explain why patients have difficulty identifying their symptoms despite dysfunction in muscle tension, movement patterns, and posture and biochemical functions in addition to gastrointestinal symptoms. IBS shares many features with other idiopathic conditions, such as fibromyalgia, chronic fatigue syndrome and somatoform disorders. The key to effective treatment is a thorough examination, including a gastroenterological examination to exclude other diseases along with an assessment of body awareness by a body-mind therapist. The literature suggests that early interdisciplinary diagnostic co-operation between gastroenterologists and body-mind therapists is necessary. Re-establishing balance in the ANS is an important component of IBS treatment. This article discusses the current knowledge of body-mind treatment, addressing the topic from a practical point of view.

Chinese medicines with sedative-hypnotic effects and their active components.

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The main pharmacological effects of sedative agents are sedation, hypnosis, antianxiety, and antidepressant. Traditional Chinese medicine (TCM) has a long history of clinical experience in treating insomnia. This review focuses mainly on the role of active ingredients from TCM in the treatment of insomnia. Single herbs and their active ingredients from TCM with hypnotic effects are summarized through reviewing the relevant literature published in the past 20 y. The active ingredients are divided into alkaloids, terpenoids, and volatile oils, flavonoids, lignanoids and coumarins, saponins, and others. Current studies on TCM in treating insomnia are described from the aspects of active ingredients, sources, experimental models and methods, results, and mechanisms. In addition, Chinese compound prescriptions developed from a variety of single herbs with sedative-hypnotic effects are introduced. The acting pathways of TCM are covered from the perspectives of regulating central neurotransmitters, influencing sleep-related cytokines, and improving the structure of the central nervous system.

Successful Treatment of Ptyalism Gravidarum With Concomitant Hyperemesis Using Hypnosis.

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Ptyalism gravidarum, or sialorrhea, is the excessive secretion of saliva during pregnancy. Treatment of ptyalism gravidarum is often challenging due to its unknown etiologies. This article discusses a case of ptyalism gravidarum with concomitant hyperemesis in which the condition was successfully treated with hypnosis. A 28-year-old woman presented with ptyalism 2 months into her pregnancy and hyperemesis 3 months into pregnancy with associated vomiting that occurred following every meal. Hypnosis was administered at week 16 of pregnancy to eliminate ptyalism and hyperemesis, to prepare for childbirth, and to increase overall psychological well-being. Ptyalism resolved by week 36, concurrent with the final hypnosis session.

Effects of Dry Flotation Restricted Environmental Stimulation on Hypnotizability and Pain Control.

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The effects of dry flotation restricted environmental stimulation (REST) on hypnotizability and pain control were tested in lighted and unlighted conditions. Participants (N = 30, ages 18-30) were exposed to hypnosis maximizing (plateauing) experiences prior to the experiment. Participants were exposed to 6 hours of lighted REST (N = 10), 6 hours of unlighted REST (N = 10), or 6 hours of normal stimulation (N = 10). The Stanford Hypnotic Susceptibility Scale: Form C (SHSS: C) (Weitzenhoffer & Hilgard, 1962) and standardized ischemic pain tests were administered before and after the conditions and at a 2-week follow-up. Both REST groups shared significantly higher SHSS: C scores and significantly lower
pain scores from pre-test to post-test and follow-up. The lighted REST group showed significantly higher SHSS: C scores and significantly lower pain scores than the unlighted REST group at post-test and follow-up. The findings supported Barabasz’s (1982) theory of REST responding.

[2178]
Hypnosis for Asthma and Vocal Cord Dysfunction in a Patient With Autism.
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Wheezing in children often is the result of asthma, but vocal cord dysfunction (VCD) may cause stridor or sounds that sometimes are misattributed to the wheezing of asthma. The frequent comorbidity of asthma and VCD also adds to the difficulty in making a clear diagnosis. The challenges of evaluating and treating wheezing are complicated further in children with developmental disorders, such as autism, because of the difficulties of obtaining an adequate history and assessing the clinical response to treatment. This article presents a patient with multiple psychiatric problems, including autism, with severe recurrent wheezing as a result of vocal cord dysfunction and asthma. Hypnosis has previously proven efficacious for treating vocal cord dysfunction, and in this case, hypnotic techniques were major factors in successful symptom control.

[2179]
Transcultural Factors in Hypnotizability Scales: Limits and Prospects.
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Hypnotic suggestibility—loosely termed hypnotizability—is difficult to assess across cultures. Investigators often use translated research instruments to guide their inquiry in disparate geographic locations. Present-day hypnosis researchers rely heavily on two primary scales that are more than half a century old: the Stanford Hypnotic Susceptibility Scale: Form C (SHSS:C) (Weitzenhoffer & Hilgard, 1959) and the Harvard Group Scale of Hypnotic Susceptibility: Form A (HGSHS:A) (Shor & Orne, 1962). Scholars typically translate these scales to measure hypnotizability transculturally. This approach, however, operates under the spurious assumption that the concept of hypnotizability is largely monolithic or universal across cultures. Whereas translations likely conserve the linguistic content, they may arguably imply different cultural meanings and historical subtexts. Whereas social scientists acknowledge the importance of qualitative and phenomenological accounts in the study of altered consciousness, including suggestibility, researchers interested in hypnotizability consider the impact of findings from anthropology and ethnography too little. Clinicians and scholars of hypnosis would stand to benefit from incorporating the insights afforded by transcultural research in the overarching investigation of a concept as nuanced as hypnotizability.

[2180]
Alert Hypnotic Inductions: Use in Treating Combat Post-Traumatic Stress Disorder.
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Alert hypnosis can be a valuable part of the treatment protocol for the resolution of post-traumatic stress disorder (PTSD). Research indicates that combat veterans with PTSD are more hypnotically susceptible than the general population. For that reason, it is hypothesized that they should be better able to use hypnosis in treatment. As opposed to the traditional modality, eyes-open alert hypnosis allows the patient to take advantage of hypnotic phenomena while participating responsibly in work, social life, and recreation. Three case studies are reported on combat veterans with PTSD who learned to overcome their symptoms using alert hypnosis.

[2181]


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Hypnotherapy has been investigated for 30 years as a treatment for gastrointestinal (GI) disorders. There are presently 35 studies in the published empirical literature, including 17 randomized controlled trials (RCTs) that have assessed clinical outcomes of such treatment. This body of research is reviewed comprehensively in this article. Twenty-four of the studies have tested hypnotherapy for adult irritable bowel syndrome (IBS) and 5 have focused on IBS or abdominal pain in children. All IBS hypnotherapy studies have reported significant improvement in gastrointestinal symptoms, and 7 out of 10 RCTs in adults and all 3 RCTs in pediatric patient samples found superior outcomes for hypnosis compared to control groups. Collectively this body of research shows unequivocally that for both adults and children with IBS, hypnosis treatment is highly efficacious in reducing bowel symptoms and can offer lasting and substantial symptom relief for a large proportion of patients who do not respond adequately to usual medical treatment approaches. For other GI disorders the evidence is more limited, but preliminary indications of therapeutic potential can be seen in the single randomized controlled trials published to date on hypnotherapy for functional dyspepsia, functional chest pain, and ulcerative colitis. Further controlled hypnotherapy trials in those three disorders should be a high priority. The mechanisms underlying the impact of hypnosis on GI problems are still unclear, but findings from a number of studies suggest that they involve both modulation of gut functioning and changes in the brain's handling of sensory signals from the GI tract.

[2182]

Efficacy of Conversational Hypnosis and Propofol in Reducing Adverse Effects of Endoscopy.

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BACKGROUND: As pain and nausea is usually associated with endoscopy procedure,
its management is important to alleviate patients' anxious in this regard.

OBJECTIVES: The present study aimed to examine the effectiveness of conversational hypnosis in reducing anxiety and endoscopy-related complications as well as its role in increasing the satisfaction of patients exposed to endoscopic procedures.

PATIENTS AND METHODS: The participants of upper GI endoscopy procedure were randomly assigned to an experiment group (with conversational hypnosis intervention, n = 93) and a control group (n = 47). The participants' hemodynamic indexes (HR, blood pressure, pulse oximetry), anxiety, satisfaction level, and complications resulted from the procedure were monitored and included in the self-administered questionnaire.

RESULTS: The results indicated that the participants in experiment group had a significant reduction of anxiety in the posttest. The adverse side effects such as vomiting, nausea, and hiccups in the experimental group was less than the control group, though this difference was not significant (P = 0.54).

CONCLUSIONS: The results suggested that conversational hypnosis technique could reduce anxiety as well as the sedation process in invasive procedures such as endoscopy.


Methods of reducing pain during bone marrow biopsy: a narrative review.

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Bone marrow examination plays a crucial role in the diagnosis and management of various hematological and systemic diseases. Even though the procedure has been carried out for decades, it remains an extremely painful and uncomfortable experience for a majority of patients. This paper reviews the different strategies used to provide analgesia and summarizes the advantages and drawbacks of one strategy over the other. A literature review was carried out addressing the different approaches to providing pain relief during bone marrow aspiration and biopsy. Several different methods, procedure modifications and protocols are employed at various centers but pain control and analgesia remain incomplete. Local infiltration with lidocaine or similar local analgesics is the standard at most centers. Although there is limited data, there are several studies in literature demonstrating the pain relieving effects of different methods and drugs when used with local anesthetics. Sedation, usually using benzodiazepines, reduces anticipatory anxiety, provides analgesia and also short term amnesia. Combinations of different agents not only yield potent effects but also reduce the required dose of each individual drug, minimizing adverse effects. Non-pharmacological factors also play key roles. Providing patients with complete and comprehensible information is vital to ensure the least amount of discomfort during the biopsy. Distraction techniques, such as cognitive behavioral therapy, hypnosis and music therapy, may also play a role in minimizing pain.


Hypnotherapy for insomnia: a systematic review and meta-analysis of randomized controlled trials.

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OBJECTIVE: To examine the efficacy and safety of hypnotherapy for insomnia as
compared to placebo, pharmacological or non-pharmacological intervention, or no treatment.

METHODS: A systematic search on major electronic databases was conducted up until March 2014. Inclusion criteria are: (1) randomized controlled trials (RCTs) or quasi-RCTs; (2) intervention targeted at improving sleep; (3) hypnosis as an intervention; and (4) English language articles. Sleep diary variable is the primary outcome measure.

RESULTS: Six RCTs of hypnotherapy and seven on autogenic training or guided imagery, comprising 502 subjects, were included. Eleven of the 13 studies had low methodological quality, as indicated by a modified Jadad score below 3, and high risks of bias in blinding and design of the control interventions. No adverse events related to hypnosis were reported, though seldom investigated.

Meta-analyses found hypnotherapy significantly shortened sleep latency compared to waitlist (standardized mean difference, SMD=-0.88, 95% confidence interval (CI): -1.56, -0.19, P=0.01, I(2)=15%), but no difference compared to sham intervention (SMD: -1.08, 95% CI: -3.15, 0.09, P=0.31, I(2)=90%). Similar results were found for autogenic training or guided imagery (SMD with waitlist=-1.16, 95% CI: -1.92, -0.40, P=0.003, I(2)=0%; SMD with sham intervention=-0.50, 95% CI: -1.19, 0.19, P=0.15, I(2)=0%).

CONCLUSIONS: Generalizability of the positive results is doubtful due to the relatively small sample size and methodological limitations. Future studies with larger sample size and better study design and methodology are called for.

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[2185]

Suggestibility as a predictor of response to antidepressants: A preliminary prospective trial.


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BACKGROUND: The growing awareness that so many do not respond adequately to antidepressant (AD) pharmacotherapy has sparked research seeking to characterize those who do. While the pharmacological mechanisms of AD treatment have been extensively evaluated, much remains unknown about the placebo component of the response to medication. This study examined the association between suggestibility levels and response to ADs amongst depressed patients.

METHODS: Twenty unipolar depression outpatients, recruited before starting AD monotherapy, received clear, standardized instructions that the therapeutic effects of AD, though not side effects, would require 2-4 weeks. At baseline (T1), 1 week (T2), and 1 month (T3), participants were evaluated for depressive symptoms, using the Hamilton Rating Scale for Depression-17 items (HAM-D); for anxiety by the Hamilton Rating Scale for Anxiety (HAM-A); for side effects by the Antidepressant Side Effect Checklist (ASEC); and for suggestibility, using the Multidimensional Iowa Suggestibility Scale (MISS).

RESULTS: High levels of baseline suggestibility were associated with less improvement in depression level and more side-effects during the first week. In accordance with our hypothesis the more suggestible patients improved more between T2 and T3. No significant correlations were found between baseline suggestibility levels and change in anxiety.

LIMITATIONS: Small sample size and a self-report questionnaire assessing suggestibility were limitations.

CONCLUSION: This study offers a potentially new and clinically useful approach to
understanding and predicting who will respond to AD treatment. Suggestibility seems to play a role, presumably by shaping expectation, in response to AD treatment. We hope that this avenue will be further explored.

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[2186]

Acute Effects of Online Mind-Body Skills Training on Resilience, Mindfulness, and Empathy.

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BACKGROUND: Some studies have begun to show benefits of brief in-person mind-body skills training. We evaluated the effects of 1-hour online elective mind-body skills training for health professionals on mindfulness, resilience, and empathy.

METHODS: Between May and November, 2014, we described enrollees for the most popular 1-hour modules in a new online mind-body skills training program; compared enrollees' baseline stress and burnout to normative samples; and assessed acute changes in mindfulness, resilience, and empathy.

RESULTS: The 513 enrollees included dietitians, nurses, physicians, social workers, clinical trainees, and health researchers; about 1/4 were trainees. The most popular modules were the following: Introduction to Stress, Resilience, and the Relaxation Response (n = 261); Autogenic Training (n = 250); Guided Imagery and Hypnosis for Pain, Insomnia, and Changing Habits (n = 112); Introduction to Mindfulness (n = 112); and Mindfulness in Daily Life (n = 102). Initially, most enrollees met threshold criteria for burnout and reported moderate to high stress levels. Completing 1-hour modules was associated with significant acute improvements in stress (P < .001), mindfulness (P < .001), empathy (P = .01), and resilience (P < .01).

CONCLUSION: Online mind-body skills training reaches diverse, stressed health professionals and is associated with acute improvements in stress, mindfulness, empathy, and resilience. Additional research is warranted to compare the long-term cost-effectiveness of different doses of online and in-person mind-body skills training for health professionals.

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[2187]
Midwives. 2015 Autumn;18:30.

Randomised controlled trial of self-hypnosis for intrapartum pain.

[No authors listed]

[2188]

Complementary and alternative therapies in pregnancy.

Close C.

[2189]

[Use of hypnosis in treating a patient with dental anxiety: A case study].

[Article in Hebrew]
Meyerson J, Ratson T.

Dental anxiety is quite common and may lead to dental neglect due to lack of regular visits to the dental clinic. The difficulties in managing anxious patients are characterized by prolonged visits, a tendency to cancel appointments and a tense atmosphere during treatment. The use of hypnosis while treating an anxious patient can help create a positive environment and shorten the duration of dental appointments as well. The article describes a case in which hypnosis was used while treating a patient who had suffered from dental anxiety for over 20 years.


Unexpected consequences: women's experiences of a self-hypnosis intervention to help with pain relief during labour.


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BACKGROUND: Self-hypnosis is becoming increasingly popular as a means of labour pain management. Previous studies have produced mixed results. There are very few data on women's views and experiences of using hypnosis in this context. As part of a randomized controlled trial of self-hypnosis for intra-partum pain relief (the SHIP Trial) we conducted qualitative interviews with women randomized to the intervention arm to explore their views and experiences of using self-hypnosis during labour and birth.

METHODS: Participants were randomly selected from the intervention arm of the study, which consisted of two antenatal self-hypnosis training sessions and a supporting CD that women were encouraged to listen to daily from 32 weeks gestation until the birth of their baby. Those who consented were interviewed in their own homes 8-12 weeks after birth. Following transcription, the interviews were analysed iteratively and emerging concepts were discussed amongst the authors to generate organizing themes. These were then used to develop a principal organizing metaphor or global theme, in a process known as thematic networks analysis.

RESULTS: Of the 343 women in the intervention group, 48 were invited to interview, and 16 were interviewed over a 12 month period from February 2012 to January 2013. Coding of the data and subsequent analysis revealed a global theme of 'unexpected consequences', supported by 5 organising themes, 'calmness in a climate of fear', 'from sceptic to believer', 'finding my space', 'delays and disappointments' and 'personal preferences'. Most respondents reported positive experiences of self-hypnosis and highlighted feelings of calmness, confidence and empowerment. They found the intervention to be beneficial and used a range of novel strategies to personalize their self-hypnosis practice. Occasionally women reported feeling frustrated or disappointed when their relaxed state was misinterpreted by midwives on admission or when their labour and birth experiences did not match their expectations.

CONCLUSION: The women in this study generally appreciated antenatal self-hypnosis training and found it to be beneficial during labour and birth. The state of focused relaxation experienced by women using the technique needs to be recognized by providers if the intervention is to be implemented into the maternity service.
The neural correlates of movement intentions: A pilot study comparing hypnotic and simulated paralysis.

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The distinct feeling of wanting to act and thereby causing our own actions is crucial to our self-perception as free human agents. Disturbances of the link between intention and action occur in several disorders. Little is known, however, about the neural correlates of wanting or intending to act. To investigate these for simple voluntary movements, we used a paradigm involving hypnotic paralysis and functional magnetic resonance imaging. Eight healthy women were instructed to sequentially perform left and right hand movements during a normal condition, as well as during simulated weakness, simulated paralysis and hypnotic paralysis of the right hand. Right frontopolar cortex was selectively hypoactivated for attempted right hand movement during simulated paralysis while it was active in all other conditions. Since simulated paralysis was the only condition lacking an intention to move, the activation in frontopolar cortex might be related to the intention or volition to move.

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OBJECTIVE: Empirical evidence concerning the efficacy of hypnosis to reduce anxiety in dental patients is limited. Hence we conducted a controlled trial in patients undergoing tooth removal. The study aims at assessing patient's attitude toward hypnosis and comparing the course of dental anxiety before, during and subsequent to tooth removal in patients with treatment as usual (TAU) and patients with treatment as usual and hypnosis (TAU+HYP).

METHODS: 102 patients in a dental practice were assigned to TAU or TAU+HYP. Dental anxiety was assessed before, during and after treatment. All patients were asked about their experiences and attitudes toward hypnosis.

RESULTS: More than 90% of patients had positive attitudes toward hypnosis. Dental anxiety was highest before treatment, and was decreasing across the three assessment points in both groups. The TAU+HYP group reported significantly lower levels of anxiety during treatment, but not after treatment compared with TAU group.

CONCLUSION: Our findings confirm that hypnosis is beneficial as an adjunct intervention to reduce anxiety in patients undergoing tooth removal, particularly with regard to its no-invasive nature.

PRACTICAL IMPLICATION: The findings underline that hypnosis is not only beneficial, but also highly accepted by the patients. Implementation of hypnosis in routine dental care should be forwarded.

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What makes your brain suggestible? Hypnotizability is associated with differential brain activity during attention outside hypnosis.

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Theoretical models of hypnosis have emphasized the importance of attentional processes in accounting for hypnotic phenomena but their exact nature and brain substrates remain unresolved. Individuals vary in their susceptibility to hypnosis, a variability often attributed to differences in attentional functioning such as greater ability to filter irrelevant information and inhibit prepotent responses. However, behavioral studies of attentional performance outside the hypnotic state have provided conflicting results. We used fMRI to investigate the recruitment of attentional networks during a modified flanker task in High and Low hypnotizable participants. The task was performed in a normal (no hypnotized) state. While behavioral performance did not reliably differ between groups, components of the fronto-parietal executive network implicated in monitoring (anterior cingulate cortex; ACC), adjustment (lateral prefrontal cortex; latPFC), and implementation of attentional control (intraparietal sulcus; IPS) were differently activated depending on the hypnotizability of the subjects: the right inferior frontal gyrus (rIFG) was more recruited, whereas IPS and ACC were less recruited by High susceptible individuals compared to Low. Our results demonstrate that susceptibility to hypnosis is associated with particular executive control capabilities allowing efficient attentional focusing, and point to specific neural substrates in right prefrontal cortex.

SIGNIFICANCE STATEMENT: We demonstrated that outside hypnosis, low hypnotizable subjects recruited more parietal cortex and anterior cingulate regions during selective attention conditions suggesting a better detection and...
implementation of conflict. However, outside hypnosis the right inferior frontal gyrus (rIFG) was more recruited by highly hypnotizable subjects during selective attention conditions suggesting a better control of conflict. Furthermore, in highly hypnotizable subjects this region was more connected to the default mode network suggesting a tight dialogue between internally and externally driven processes that may permit higher flexibility in attention and underlie a greater ability to dissociate.

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[2194]

Physiological Signal Processing for Individualized Anti-nociception Management During General Anesthesia: a Review.

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OBJECTIVE: The aim of this paper is to review existing technologies for the nociception / anti-nociception balance evaluation during surgery under general anesthesia.

METHODS: General anesthesia combines the use of analgesic, hypnotic and muscle-relaxant drugs in order to obtain a correct level of patient non-responsiveness during surgery. During the last decade, great efforts have been deployed in order to find adequate ways to measure how anesthetic drugs affect a patient's response to surgical nociception. Nowadays, though some monitoring devices allow obtaining information about hypnosis and muscle relaxation, no gold standard exists for the nociception / anti-nociception balance evaluation. Articles from the PubMed literature search engine were reviewed. As this paper focused on surgery under general anesthesia, articles about nociception monitoring on conscious patients, in post-anesthesia care unit or in intensive care unit were not considered.

RESULTS: In this article, we present a review of existing technologies for the nociception / anti-nociception balance evaluation, which is based in all cases on the analysis of the autonomous nervous system activity. Presented systems, based on sensors and physiological signals processing algorithms, allow studying the patients' reaction regarding anesthesia and surgery.

CONCLUSION: Some technological solutions for nociception / antinociception balance monitoring were described. Though presented devices could constitute efficient solutions for individualized anti-nociception management during general anesthesia, this review of current literature emphasizes the fact that the choice to use one or the other mainly relies on the clinical context and the general purpose of the monitoring.

[2195]

Interventions for prevention of herpes simplex labialis (cold sores on the lips).

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BACKGROUND: Herpes simplex labialis (HSL), also known as cold sores, is a common disease of the lips caused by the herpes simplex virus, which is found throughout the world. It presents as a painful vesicular eruption, forming unsightly crusts,
which cause cosmetic disfigurement and psychosocial distress. There is no cure available, and it recurs periodically.

OBJECTIVES: To assess the effects of interventions for the prevention of HSL in people of all ages.

SEARCH METHODS: We searched the following databases up to 19 May 2015: the Cochrane Skin Group Specialised Register, the Oral Health Group Specialised Register, CENTRAL in the Cochrane Library (Issue 4, 2015), MEDLINE (from 1946), EMBASE (from 1974), LILACS (from 1982), the China National Knowledge Infrastructure (CNKI) database, Airiti Library, and 5 trial registers. To identify further references to relevant randomised controlled trials, we scanned the bibliographies of included studies and published reviews, and we also contacted the original researchers of our included studies.

SELECTION CRITERIA: Randomised controlled trials (RCTs) of interventions for preventing HSL in immunocompetent people.

DATA COLLECTION AND ANALYSIS: Two authors independently selected trials, extracted data, and assessed the risk of bias. A third author was available for resolving differences of opinion.

MAIN RESULTS: This review included 32 RCTs, with a total of 2640 immunocompetent participants, covering 19 treatments. The quality of the body of evidence was low to moderate for most outcomes, but was very low for a few outcomes. Our primary outcomes were 'Incidence of HSL' and 'Adverse effects during use of the preventative intervention'. The evidence for short-term (≤ 1 month) use of oral aciclovir in preventing recurrent HSL was inconsistent across the doses used in the studies: 2 RCTs showed low quality evidence for a reduced recurrence of HSL with aciclovir 400 mg twice daily (risk ratio (RR) 0.26, 95% confidence interval (CI) 0.13 to 0.51; n = 177), while 1 RCT testing aciclovir 800 mg twice daily and 2 RCTs testing 200 mg 5 times daily found no similar preventive effects (RR 1.08, 95% CI 0.62 to 1.87; n = 237; moderate quality evidence and RR 0.46, 95% CI 0.20 to 1.07; n = 66; low quality evidence, respectively). The direction of intervention effect was unrelated to the risk of bias. The evidence from 1 RCT for the effect of short-term use of valaciclovir in reducing recurrence of HSL by clinical evaluation was uncertain (RR 0.55, 95% CI 0.23 to 1.28; n = 125; moderate quality evidence), as was the evidence from 1 RCT testing short-term use of famciclovir. Long-term (> 1 month) use of oral antiviral agents reduced the recurrence of HSL. There was low quality evidence from 1 RCT that long-term use of oral aciclovir reduced clinical recurrences (1.80 versus 0.85 episodes per participant per a 4-month period, P = 0.009) and virological recurrence (1.40 versus 0.40 episodes per participant per a 4-month period, P = 0.003). One RCT found long-term use of valaciclovir effective in reducing the incidence of HSL (with a decrease of 0.09 episodes per participant per month; n = 95). One RCT found that a long-term suppressive regimen of valaciclovir had a lower incidence of HSL than an episodic regimen of valaciclovir (difference in means (MD) -0.10 episodes per participant per month, 95% CI -0.16 to -0.05; n = 120). These trials found no increase in adverse events associated with the use of oral antiviral agents (moderate quality evidence). There was no evidence to show that short-term use of topical antiviral agents prevented recurrent HSL. There was moderate quality evidence from 2 RCTs that topical aciclovir 5% cream probably has little effect on preventing recurrence of HSL (pooled RR 0.91, 95% CI 0.48 to 1.72; n = 271). There was moderate quality evidence from a single RCT that topical foscarnet 3% cream has little effect in preventing HSL (RR 1.08, 95% CI 0.82 to 1.40; n = 295). The efficacy of long-term use of topical aciclovir cream was uncertain. One RCT found significantly fewer research-diagnosed recurrences of HSL when on aciclovir cream treatment than on placebo (P < 0.05), but found no significant differences in the mean number of participant-reported recurrences between the 2 groups (P ≥ 0.05). One RCT found no preventive effect of topical application of 1,5-pentanediol gel for 26 weeks (P > 0.05). Another RCT found that the group who used 2-hydroxypropyl-β-cyclodextrin 20% gel for 6 months had significantly more recurrences than the placebo group (P = 0.003). These studies found no increase in adverse events related to the use of topical antiviral agents. Two RCTs found that the application of sunscreen significantly prevented recurrent HSL induced by experimental ultraviolet light (pooled RR 0.07, 95% CI 0.01 to 0.33; n = 111), but another RCT found that sunscreen did not prevent HSL induced by sunlight (RR 1.13, 95% CI 0.25 to 5.06; n = 51). These RCTs did not report adverse events. There were very few data suggesting that thymopentin, low-level laser therapy, and hypnotherapy are effective in preventing recurrent HSL, with one to two RCTs for each intervention. We failed to find any evidence of efficacy for lysine, LongoVital® supplementation, gamma globulin, herpes simplex virus (HSV) type I subunit vaccine, and yellow fever vaccine in
preventing HSL. There were no consistent data supporting the efficacy of levamisole and interferon, which were also associated with an increased risk of adverse effects such as fever.

AUTHORS' CONCLUSIONS: The current evidence demonstrates that long-term use of oral antiviral agents can prevent HSL, but the clinical benefit is small. We did not find evidence of an increased risk of adverse events. On the other hand, the evidence on topical antiviral agents and other interventions either showed no efficacy or could not confirm their efficacy in preventing HSL.


Self-hypnosis for intrapartum pain management in pregnant nulliparous women: a randomised controlled trial of clinical effectiveness.

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OBJECTIVE: (Primary) To establish the effect of antenatal group self-hypnosis for nulliparous women on intra-partum epidural use.

DESIGN: Multi-method randomised control trial (RCT).

SETTING: Three NHS Trusts.

POPULATION: Nulliparous women not planning elective caesarean, without medication for hypertension and without psychological illness.

METHODS: Randomisation at 28-32 weeks' gestation to usual care, or to usual care plus brief self-hypnosis training (two × 90-minute groups at around 32 and 35 weeks' gestation; daily audio self-hypnosis CD). Follow up at 2 and 6 weeks postnatal.


RESULTS: Six hundred and eighty women were randomised. There was no statistically significant difference in epidural use: 27.9% (intervention), 30.3% (control), odds ratio (OR) 0.89 [95% confidence interval (CI): 0.64-1.24], or in 27 of 29 pre-specified secondary clinical and psychological outcomes. Women in the intervention group had lower actual than anticipated levels of fear and anxiety between baseline and 2 weeks post natal (anxiety: mean difference -0.72, 95% CI -1.16 to -0.28, P = 0.001); fear (mean difference -0.62, 95% CI -1.08 to -0.16, P = 0.009) [Correction added on 7 July 2015, after first online publication: 'Mean difference replaced 'Odds ratio (OR)' in the preceding sentence.]. Postnatal response rates were 67% overall at 2 weeks. The additional cost in the intervention arm per woman was £4.83 (CI £257.93 to £267.59).

CONCLUSIONS: Allocation to two-third-trimester group self-hypnosis training sessions did not significantly reduce intra-partum epidural analgesia use or a range of other clinical and psychological variables. The impact of women's anxiety and fear about childbirth needs further investigation.

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Post-traumatic stress disorder managed successfully with hypnosis and the rewind technique: two cases in obstetric patients.

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Two obstetric patients presenting with post-traumatic stress disorder in the antenatal period are discussed. The first patient had previously had an unexpected stillborn delivered by emergency caesarean section under general anaesthesia. She developed post-traumatic stress disorder and presented for repeat caesarean section in her subsequent pregnancy, suffering flashbacks and severe anxiety. Following antenatal preparation with hypnosis and a psychological method called the rewind technique, she had a repeat caesarean section under spinal anaesthesia, successfully managing her anxiety. The second patient suffered post-traumatic stress disorder symptoms after developing puerperal psychosis during the birth of her first child. Before the birth of her second child, she was taught self-hypnosis, which she used during labour in which she had an uneventful water birth. These cases illustrate the potential value of hypnosis and alternative psychological approaches in managing women with severe antenatal anxiety.

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Impure placebo is a useless concept.

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Placebos are allegedly used widely in general practice. Surveys reporting high level usage, however, have combined two categories, 'pure' and 'impure' placebos. The wide use of placebos is explained by the high level usage of impure placebos. In contrast, the prevalence of the use of pure placebos has been low. Traditional pure placebos are clinically ineffective treatments, whereas impure placebos form an ambiguous group of diverse treatments that are not always ineffective. In this paper, we focus on the impure placebo concept and demonstrate problems related to it. We also show that the common examples of impure placebos are not meaningful from the point of view of clinical practice. We conclude that the impure placebo is a scientifically misleading concept and should not be used in scientific or medical literature. The issues behind the concept, however, deserve serious attention in future research.

A perspective on complementary/alternative medicine use among survivors of hematopoietic stem cell transplant: Benefits and uncertainties.

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The widespread use of complementary and alternative medicine (CAM) in cancer survivors is well known despite a paucity of scientific evidence to support its use. The number of survivors of hematopoietic stem cell transplant (HCT) is growing rapidly and HCT clinicians are aware that many of their patients use CAM therapies consistently. However, due to a paucity of data regarding the benefits and harms of CAM therapies in these survivors, clinicians are reluctant to provide specific recommendations for or against particular CAM therapies. A systematic literature review was conducted with a search using PubMed, the Cochrane Database of Systematic Reviews, and Ovid online for each CAM therapy as defined by the National Center of Complementary and Alternative Medicine. The search generated 462 references, of which 26 articles were deemed to be relevant for the review. Due to extensive heterogeneity in data and limited randomized trials, a meta-analysis could not be performed but a comprehensive systematic review was conducted with specified outcomes for each CAM therapy. In randomized controlled trials, certain mind and body interventions such as relaxation were observed to be effective in alleviating psychological symptoms in patients undergoing HCT, whereas the majority of the other CAM treatments were found to have mixed results. CAM use is an understudied area in HCT survivorship and clinicians should convey the benefits and uncertainties concerning the role of CAM therapies to their patients.

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[2200]

Non-pharmacological interventions for assisting the induction of anaesthesia in children.

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Update of

BACKGROUND: Induction of general anaesthesia can be distressing for children. Non-pharmacological methods for reducing anxiety and improving co-operation may avoid the adverse effects of preoperative sedation.

OBJECTIVES: To assess the effects of non-pharmacological interventions in assisting induction of anaesthesia in children by reducing their anxiety, distress or increasing their co-operation.

SEARCH METHODS: In this updated review we searched CENTRAL (the Cochrane Library 2012, issue 12) and searched the following databases from inception to 15 January 2013: MEDLINE, EMBASE, PsycINFO and Web of Science. We reran the search in August 2014. We will deal with the single study found to be of interest when we next update the review.

SELECTION CRITERIA: We included randomized controlled trials of a non-pharmacological intervention implemented on the day of surgery or anaesthesia.

DATA COLLECTION AND ANALYSIS: At least two review authors independently extracted data and assessed risk of bias in trials.

MAIN RESULTS: We included 28 trials (2681 children) investigating 17 interventions of interest; all trials were conducted in high-income countries. Overall we judged the trials to be at high risk of bias. Except for parental acupuncture (graded low), all other GRADE assessments of the primary outcomes of comparisons were very low, indicating a high degree of uncertainty about the overall findings. Parental presence: In five trials (557 children), parental presence at induction of anaesthesia did not reduce child anxiety compared with not having a parent present (standardized mean difference (SMD) 0.03, 95%
confidence interval (CI) -0.14 to 0.20). In a further three trials (267 children) where we were unable to pool results, we found no clear differences in child anxiety, whether a parent was present or not. In a single trial, child anxiety showed no significant difference whether one or two parents were present, although parental anxiety was significantly reduced when both parents were present at the induction. Parental presence was significantly less effective than sedative premedication in reducing children's anxiety at induction in three trials with 254 children (we could not pool results). Child interventions (passive): When a video of the child's choice was played during induction, children were significantly less anxious than controls (median difference modified Yale Preoperative Anxiety Scale (mYPAS) 31.2, 95% CI 27.1 to 33.3) in a trial of 91 children. In another trial of 120 children, co-operation at induction did not differ significantly when a video fairytale was played before induction. Children exposed to low sensory stimulation were significantly less anxious than control children on introduction of the anaesthesia mask and more likely to be co-operative during induction in one trial of 70 children. Music therapy did not show a significant effect on children's anxiety in another trial of 51 children.

Child interventions (mask introduction): We found no significant differences between a mask exposure intervention and control in a single trial of 103 children for child anxiety (risk ratio (RR) 0.59, 95% CI 0.31 to 1.11) although children did demonstrate significantly better co-operation in the mask exposure group (RR 1.27, 95% CI 1.06 to 1.51). Child interventions (interactive): In a three-arm trial of 168 children, preparation with interactive computer packages (in addition to parental presence) was more effective than verbal preparation, although differences between computer and cartoon preparation were not significant, and neither was cartoon preparation when compared with verbal preparation. Children given video games before induction were significantly less anxious at induction than those in the control group (mYPAS mean difference (MD) -9.80, 95% CI -19.42 to -0.18) and also when compared with children who were sedated with midazolam (mYPAS MD -12.20, 95% CI -21.82 to -2.58) in a trial of 112 children. When compared with parental presence only, clowns or clown doctors significantly lessened children's anxiety in the operating/induction room (mYPAS MD -24.41, 95% CI -38.43 to -10.48; random-effects, I² 75%) in three trials with a total of 133 children. However, we saw no significant differences in child anxiety in the operating room between clowns/clown doctors and sedative premedication (mYPAS MD -9.67, 95% CI -21.14 to 1.80, random-effects, I² 66%; 2 trials of 93 children). In a trial of hypnotherapy versus sedative premedication in 50 children, there were no significant differences in children's anxiety at induction (RR 0.59, 95% CI 0.33 to 1.04). Parental interventions: Children of parents having acupuncture compared with parental sham acupuncture were less anxious during induction (mYPAS MD -17, 95% CI -30.51 to -3.49) and were more co-operative (RR 1.59, 95% CI 1.01 to 2.53) in a single trial of 67 children. Two trials with 191 parents assessed the effects of parental video viewing but did not report any of the review's prespecified primary outcomes.

AUTHORS' CONCLUSIONS: This review shows that the presence of parents during induction of general anaesthesia does not diminish their child's anxiety. Potentially promising non-pharmacological interventions such as parental acupuncture; clowns/clown doctors; playing videos of the child's choice during induction; low sensory stimulation; and hand-held video games need further investigation in larger studies.

[2201]

Experiencing Effects of Cocaine and Speed with Self-Regulation Therapy.

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This study demonstrates the efficacy of Self-Regulation Therapy (SRT) to induce effects of cocaine and speed in a single session. SRT is a suggestion procedure of sensorial recall exercises (salivation, feeling of weight, tension, etc.) that increases the capacity to reproduce all sensation types and those that drugs produce. The Self-Regulation Scale (SRS) measures this capacity. Four groups participated, formed according to drug use: Group 1 (uses no illegal drugs);
Group 2 (experimentally uses cannabis only); Group 3 (moderate drug users); Group 4 (regular drug users, especially stimulants). All four groups participated in an SRT session to induce relaxation. No differences in the SRS were found. Group 4 also participated in a session that reproduced effects of drugs with SRT, when Euphoria and the Effects of drugs score (high and rush) substantially increased in relation to the base-line (MD = -5.83; p < .001; and MD = -3; p < .001, respectively) and in relation to the relaxation session (MD = -4.06; p < .001; and MD = -1.96; p < .05, respectively). A profile predicting SRT efficacy was also obtained to induce the effects of cocaine and speed: low Conscientiousness and high Openness and SRS scores. Finally, the potential use of this procedure to treat addictions, and strategy development towards more controlled, responsible drug use, are discussed.

[2202]

Education and Hypnosis for Treatment of Functional Gastrointestinal Disorders (FGIDs) in Pediatrics.
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FGIDs in children and adolescents (ROME III classification) have a significant impact on the daily functioning and quality of life. Often it is the pain that is one of the main contributors to the burden of functional dyspepsia, functional abdominal pain (syndrome), and irritable bowel syndrome. Current knowledge confirms that a number of integrated networks at cortical and subcortical sites are responsible for the experience of pain. From the work of Mayer and Tillisch (2011), mainly based on structural and functional magnetic resonance imaging and positron emission tomography, it has become clear that abdominal pain syndromes are disorders of the bi-directional mind-brain-gut interactions. In this multi-factorial bio-psycho-social model we recognize the importance of neurobiological processes in the mind-brain-gut interactions, leading to alterations in motility, sensation, and immune functions. Medical treatment often offers little or no relief. Until now pharmaceutical research has not succeeded in developing safe new drugs with an effect on the brain-gut axis. More recent published research shows the rationale for the use of medical hypnosis in FGID. In this article the author will illustrate her specific approach in a pediatric gastroenterology clinic with children and adolescents with FGIDs. Being a pediatric gastroenterologist, the author emphasizes the importance of a clear diagnosis, explains the rationale for educating the patient and his or her parents on the multi-factorial bio-psycho-social model and the concepts of chronic pain, discusses the specific settings and pitfalls for hypnosis treatment in children, and last but not least, provides some examples of hypnotic sessions used with FGIDs.

[2203]

Nurse-Administered, Gut-Directed Hypnotherapy in IBS: Efficacy and Factors Predicting a Positive Response.
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Hypnotherapy is an effective treatment in irritable bowel syndrome (IBS). It is often delivered by a psychotherapist and is costly and time consuming. Nurse-administered hypnotherapy could increase availability and reduce costs. In this study the authors evaluate the effectiveness of nurse-administered, gut-directed hypnotherapy and identify factors predicting treatment outcome. Eighty-five patients were included in the study. Participants received hypnotherapy by a nurse once/week for 12 weeks. Patients reported marked
improvement in gastrointestinal (GI) and extra-colonic symptoms after treatment, as well as a reduction in GI-specific anxiety, general anxiety, and depression. Fifty-eight percent were responders after the 12 weeks treatment period, and of these 82% had a favorable clinical response already at week 6. Women were more likely than men to respond favorably to the treatment. Nurse-administered hypnotherapy is an effective treatment for IBS. Being female and reporting a favorable response to treatment by week 6 predicted a positive treatment response at the end of the 12 weeks treatment period.


Hypnotherapy for Inflammatory Bowel Disease Across the Lifespan.

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Inflammatory bowel disease (IBD) is an autoimmune disorder characterized by lifelong relapsing gastrointestinal symptoms and associated with high rates of chronic pain, depression, and anxiety. In this review the author covers the existing literature including randomized controlled studies, open trials, and case reports as well as expert opinion in evaluating how hypnotherapy can be most beneficial in adolescents and adults with IBD. Hypnotherapy evidence for functional gastrointestinal disorders (FGIDs) is also reviewed as many of the gut-focused hypnotherapy (GHT) approaches used in IBD trials were developed for this latter population. Collectively, the strongest evidence of use of hypnotherapy is its association with reduced IBD-related inflammation and improved health-related quality of life with mixed results in terms of its effects on psychological and pain outcomes in adults with IBD. Studies of hypnotherapy for FGID symptoms show consistently more positive results. Post-operative hypnotherapy may also be helpful based on findings in other surgical samples. Adolescents with IBD have not been as systematically studied but small case series support the use of hypnotherapy to improve inflammation and pain. Future studies are needed to better delineate the specific brain-gut pathways which are most influenced by hypnotherapy in the IBD population and to investigate the longer-term course of the positive short-term findings.


Hypnosis and Therapy for a Case of Vomiting, Nausea, and Pain.

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In this case study the author illustrates the treatment of idiopathic gastrointestinal (GI) symptoms that practitioners sometimes encounter and for which none of the usual medical explanations apply. In this case, the symptoms have deeply personal and intricate causes that are explicated for the reader. A 20-year old female was vomiting six to eight times a day, accompanied with pain and nausea, for 2 years. She had medical intervention for almost that same duration. She had numerous uneventful medical tests, her gall bladder removed, and had exhausted hope for a medical cure. Working with a resource-building approach in therapy her vomiting was stopped within 6 weeks and her nausea in the following 7th week (or 13th session). Hypnosis was used during each session along with a protocol referred to as Self-Image Thinking (Lankton & Lankton, 1983/2008, 1986/2007; Lankton, 2008) to rehearse novel experiences and behaviors that she would implement in her social environment each week. She provided yearly follow-up phone contacts for 3 years and the latest contact was 1 month before this article was written. She remains symptom-free.
Functional abdominal pain is a mind-body, psychosocial, and self-reinforcing experience with significant consequences for the sufferer and the surrounding support network. The occurrence of unpredictable symptoms and their severity add an element of dread and feeling out-of-control to daily life and often reduce overall functioning in a downward spiral. Two clinical presentations of functional abdominal pain are offered in this article (composites to protect confidentiality) dealing with abdominal pain syndrome and abdominal migraines. The treatment demonstrates the use of hypnotic principles for self-regulation, exploration, and meaning-making. Hypnosis treatment is conducted in combination with mindfulness-based interventions and Traditional Chinese Medicine's (TCM) teachings regarding abdominal health and illness. The clinical examples illustrate medical findings that suggest children with early life stress and an early onset of gastrointestinal somatization may not simply outgrow their functional abdominal pain but may suffer into adulthood.

Hypnotherapy is an evidence based intervention for the treatment of functional bowel disorders, particularly irritable bowel syndrome. While similar in pathophysiology, less is known about the utility of hypnotherapy in the upper gastrointestinal tract. Esophageal disorders, most of which are functional in nature, cause painful and uncomfortable symptoms that impact patient quality of life and are difficult to treat from a medical perspective. After a thorough medical workup and a failed trial of proton pump inhibitor therapy, options for treatment are significantly limited. While the pathophysiology is likely multifactorial, two critical factors are believed to drive esophageal symptoms—visceral hypersensitivity and symptom hypervigilance. The goal of esophageal directed hypnotherapy is to promote a deep state of relaxation with focused attention allowing the patient to learn to modulate physiological sensations and symptoms that are not easily addressed with conventional medical intervention. Currently, the use of hypnosis is suitable for dysphagia, globus, functional chest pain/non-cardiac chest pain, dyspepsia, and functional heartburn. In this article the authors will provide a rationale for the use of hypnosis in these disorders, presenting the science whenever available, describing their approach with these patients, and sharing a case study representing a successful outcome.

Hypnosis and Guided Imagery Treatment for Gastrointestinal Disorders: Experience With Scripted Protocols Developed at the University of North Carolina.

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Completely scripted treatment courses for verbatim interventions are uncommon in the field of clinical hypnosis. This approach was adopted for by a North Carolina research team for treating gastrointestinal disorders 20 years ago and has been used in hypnosis treatment of irritable bowel syndrome and ulcerative colitis, as well as in guided imagery treatment for functional abdominal pain. Treatment with these scripted protocols is delivered in a fixed series of sessions over a 2- or 3-month period. They have been found efficacious for improving bowel symptoms in several clinical trials, even in patients who have been entirely unresponsive to medical treatment. Response rates in clinical trials have ranged from 53% to 94%, and the therapeutic benefits have been shown to be well maintained at 6-, 10-, or 12-month follow-ups in different studies. This article describes the development and research on these protocols and summarizes the advantages and limitations of this fully scripted treatment approach.

Changes in the electroencephalogram during anaesthesia and their physiological basis.

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Comment in

The use of EEG monitors to assess the level of hypnosis during anaesthesia has become widespread. Anaesthetists, however, do not usually observe the raw EEG data: they generally pay attention only to the Bispectral Index (BIS™) and other indices calculated by EEG monitors. This abstracted information only partially characterizes EEG features. To properly appreciate the availability and reliability of EEG-derived indices, it is necessary to understand how raw EEG changes during anaesthesia. With hemi-frontal lead EEGs obtained under volatile anaesthesia or propofol anaesthesia, the dominant EEG frequency decreases and the amplitude increases with increasing concentrations of anaesthetic. Looking more closely, the EEG changes are more complicated. At surgical concentrations of anaesthesia, spindle waves (alpha range) become dominant. At deeper levels, this activity decreases, and theta and delta waves predominate. At even deeper levels, EEG waveform changes into a burst and suppression pattern, and finally becomes flat. EEG waveforms vary in the presence of noxious stimuli (surgical skin incision), which is not always reflected in BIS™, or other processed EEG indices. Spindle waves are adequately sensitive, however, to noxious stimuli: under surgical anaesthesia they disappear when noxious stimuli are applied, and reappear when adequate analgesia is obtained. To prevent awareness during anaesthesia, I speculate that the most effective strategy is to administer anaesthetic agents in such a way as to maintain anaesthesia at a level where spindle waves predominate.

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As opposed to conscious, personally relevant (explicit) memories that we can recall at will, implicit (unconscious) memories are prototypical of 'hidden' memory; memories that exist, but that we do not know we possess. Nevertheless, our behaviour can be affected by these memories; in fact, these memories allow us to function in an ever-changing world. It is still unclear from behavioural studies whether similar memories can be formed during anaesthesia. Thus, a relevant question is whether implicit memory formation is a realistic possibility during anaesthesia, considering the underlying neurophysiology. A different conceptualization of memory taxonomy is presented, the serial parallel independent model of Tulving, which focuses on dynamic information processing with interactions among different memory systems rather than static classification of different types of memories. The neurophysiological basis for subliminal information processing is considered in the context of brain function as embodied in network interactions. Function of sensory cortices and thalamic activity during anaesthesia are reviewed. The role of sensory and perisensory cortices, in particular the auditory cortex, in support of memory function is discussed. Although improbable, with the current knowledge of neurophysiology one cannot rule out the possibility of memory formation during anaesthesia.

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Role of a health psychologist in the management of functional esophageal complaints.

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Upper gastrointestinal complaints are common among patients in a gastrointestinal clinic. Outside of typical gastroesophageal reflux disease symptoms that are treated with medication, the symptom presentations of esophageal patients, particularly those with functional conditions, are often difficult to treat and account for high health-care utilization. This manuscript describes the role of a health psychologist in the treatment of esophageal disorders using behavioral medicine interventions. Observations over the course of a 1-year period indicate that the sample presents with a relatively low level of psychological distress but reports negative effects of their symptoms on health-related quality of life. Five case examples of commonly treated disorders (globus, non-cardiac chest pain, functional dysphagia, rumination syndrome, supragastric belching) are described to highlight how behavioral treatment can improve patients’ symptoms, decrease health-care utilization, and improve overall quality of life in a timely and relatively simple manner. Successful treatment outcomes are associated with a collaborative working alliance between patient, health psychologist, and gastroenterologist. Results indicate the benefit of referring appropriate esophageal patients to a health psychologist with specialization in gastroenterology.


[2211]
[2212]

Utilization and patients' perceptions of the effectiveness of pain treatments in multiple sclerosis: A cross-sectional survey.

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BACKGROUND: Although chronic pain is common among persons with multiple sclerosis (MS), little is known about the utilization and patients' perception of the effectiveness of pain treatments in MS.

OBJECTIVES: The objectives were to: (1) identify specific treatments currently used for pain relief by adults with MS; (2) examine patients' perceptions of the effectiveness of each of these treatments; and (3) examine rates of health care utilization, specifically provider and emergency department visits, for pain.

DESIGN: Cross-sectional survey.

METHODS: One hundred twenty-five community-dwelling participants with MS and pain completed a postal survey that measured demographics, MS disease, pain, pain treatments, perceived effectiveness of treatments, and health care utilization.

RESULTS: The majority (89.6%) of the sample reported use of a variety of and multiple pain treatments (range = 1-19, median = 9.0, mean = 9.0, SD = 4.2); few were rated as providing pain relief. Non-prescription pain relievers were the most commonly reported treatment. Physical treatment modalities were also common. The treatments that were reported by patients to provide the greatest pain relief, such as hypnosis, nerve blocks, and marijuana, were not those that were the most frequently used. Overall, 75% reported at least one visit to a provider for pain in the past six months; participants made, on average, 9.7 visits for pain during this same time period. Emergency department visits explicitly for pain were reported by 11% of respondents.

CONCLUSIONS: These findings suggest that pain is inadequately treated from the perspective of persons with MS and results in a high level of health care utilization.

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[2213]

Editorial: a new shift in the paradigm of treatment for the irritable bowel syndrome?

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Comment on
Aliment Pharmacol Ther. 2015 May;41(9):844-55.

[2214]

Efficacy of hypnotherapy in one thousand patients with irritable bowel syndrome.

Dube S(1), Ford AC.
BACKGROUND: Gut-directed hypnotherapy is being increasingly applied to patients with irritable bowel syndrome (IBS) and to a lesser extent, inflammatory bowel disease (IBD).

AIM: To review the technique, mechanisms of action and evidence for efficacy, and to identify gaps in the understanding of gut-directed hypnotherapy as a treatment for IBS and IBD.

METHODS: A review of published literature and a systematic review of clinical trials in its application to patients with IBS and IBD were performed.

RESULTS: Gut-directed hypnotherapy is a clearly described technique. Its potential mechanisms of action on the brain-gut axis are multiple with evidence spanning psychological effects through to physiological gastrointestinal modifications. Six of seven randomised IBS studies reported a significant reduction (all P < 0.05) in overall gastrointestinal symptoms following treatment usually compared to supportive therapy only. Response rates amongst those who received gut-directed hypnotherapy ranged between 24% and 73%. Efficacy was maintained long-term in four of five studies. A therapeutic effect was also observed in the maintenance of clinical remission in patients with ulcerative colitis. Uncontrolled trials supported the efficacy and durability of gut-directed hypnotherapy in IBS. Gaps in understanding included to whom and when it should be applied, the paucity of adequately trained hypnotherapists, and the difficulties in designing well controlled-trials.

CONCLUSIONS: Gut-directed hypnotherapy has durable efficacy in patients with IBS and possibly ulcerative colitis. Whether it sits in the therapeutic arsenal as a primary and/or adjunctive therapy cannot be ascertained on the current evidence base. Further research into efficacy, mechanisms of action and predictors of response is required.

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is shifted toward the end of the day, interfering with sleep. According to the
biobehavioral model of NES, the disorder is the result of a genetic
predisposition that, coupled with stress, leads to enhanced reuptake of
serotonin, thereby dysregulating circadian rhythms and decreasing satiety. Using
the biobehavioral model as a guide, we developed a brief behavioral intervention
using education, relaxation strategies, and exercise to address the core symptoms
of NES. In this pilot randomized controlled clinical trial, 44 participants with
NES were randomly assigned to an educational group (E; n = 14), E plus
progressive muscle relaxation therapy (PMR; n = 15); or PMR plus exercise (PMR
Plus, n = 15). Participants received a baseline intervention with 1- and 3-week
follow-up sessions. Effectiveness analyses showed that participants in all three
groups evidenced significant reductions on measures of NES symptoms (p < .001),
depression (p < .05), anxiety (p < .01), and perceived stress (p < .05). However,
the only significant between group change was for the percent of food eaten after
the evening meal, with the PMR group showing the greatest reduction (-30.54%),
followed by the PMR Plus group (-20.42%) and the E group (-9.5%); only the
difference between the PMR and E groups was statistically significant (p = .012).
Reductions in NES scores were significantly associated with reductions on
measures of depression (r = .47; p < .01) and perceived stress (r = .37;
p < .05), but not anxiety (r = .26, p = ns). Results support the role of
education and relaxation in the behavioral treatment of NES.

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[2217]
10.

Contribution of verbal suggestion to the therapeutic efficacy of an analgesic
agent for acute primary headache.

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OBJECTIVE: The therapeutic response of a patient cannot purely be explained by
the method of therapy or the efficacy of a drug. Clinician-patient interaction,
psychosocial factors, patients' expectations, hopes, beliefs and fears are all
related to the healing outcome. Malleability and suggestibility are also
important in the placebo or nocebo effect. The purpose of this study was to
evaluate whether adding brief verbal suggestions for pain relief could change the
magnitude of an analgesic's efficacy.

METHODS: This prospective study was performed in the emergency department of a
university hospital. Patients who were ordered analgesia with diclofenac sodium
for primary headache were divided into three groups. All groups were informed
that they would be administered a pain killer by intramuscular injection. The
second and third groups were given positive and reduced treatment expectations
about the therapeutic efficacy, respectively. Patients were asked to rate their
pain on a VAS at 0 and 45 minutes and if they needed any additional analgesic 45
minutes after the injection.

RESULTS: A total of 153 patients were included in the study. The paired
univariate analyses showed significant differences for all groups between 0- and
45-minute VAS scores. However, there was no difference between the three groups
according to the differences in VAS scores between 45 and 0 minutes and according
to the administration of an additional drug.

CONCLUSION: Simple verbal suggestions did not alter the efficacy of an analgesic
agent for headache in an emergency setting. The contributions of suggestibility,
desire and expectation in acute primary headache patients should be further
investigated.

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Effects of a pain education program in Complementary and Alternative Medicine treatment utilization at a VA medical center.

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BACKGROUND: Past studies have shown that U.S. Veterans are consumers of CAM. However, more than 75% of Veteran non-users report they would utilize these treatment options if made available. Thus, Veterans may not be fully aware of the CAM options currently available to them in the current U.S. VA health care system.

OBJECTIVES: The current study tested the hypothesis that Veterans would report an increase in CAM utilization after completing a formal pain education program in a VA medical center.

DESIGN: The study used a quasi-experimental, one-group, pre/post-test design.

SETTING: Midwestern, U.S. VA Medical Center.

PARTICIPANTS: The responses from 103 Veterans who elected to participate in the program and the assessment measures were included in the outcome analyses.

INTERVENTION: "Pain Education School" is a 12-week, educational program that is open to all Veterans and their families. It is a comprehensive program that introduces patients to 23 different disciplines at the VA Medical Center that deal with chronic, non-cancer pain.

MAIN OUTCOME MEASURES: An adaptation of the Complementary and Alternative Medicine Questionnaire(©), SECTION A: Use of Alternative Health Care Providers.

RESULTS: There was a significant difference found in overall utilization of CAM after completing the pain education program. The most utilized CAM modality was the chiropractor; the least utilized were hypnosis and aromatherapy.

CONCLUSIONS: Not all health care systems or providers may have access to an education-focused, professionally driven program as an amenity. However, lessons can be learned from this study in terms of what pain providers may be able to accomplish in their practice.

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Treatment of chronic insomnia disorder in menopause: evaluation of literature.

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OBJECTIVE: Insomnia both as a symptom and as part of chronic insomnia disorder is quite common in menopause. Comorbid conditions, such as restless legs syndrome and obstructive sleep apnea, occur with high prevalence among perimenopausal women with insomnia. Insomnia in this population group is associated with adverse health outcomes, and there are no clear standards on how to treat it.

METHODS: Based on extensive literature search, 76 articles were identified. Two authors independently graded evidence according to the Oxford Centre for Evidence-Based Medicine Levels of Evidence.

RESULTS: Evaluation and treatment of other comorbid sleep disorders are...
recommended, as is cognitive-behavioral therapy for insomnia. Hormone therapy, eszopiclone, escitalopram, gabapentin, isoflavones, valerian, exercise, and hypnosis are suggested. Zolpidem, quetiapine XL, citalopram, mirtazapine followed by long-acting melatonin, ramelteon, Pycnogenol, Phyto-Female Complex, yoga, and massage may be considered. Kampo formulas are not recommended. Acupuncture may not be suggested, and cognitive-behavioral therapy that is not tailored for insomnia probably should not be considered.

CONCLUSIONS: Although a variety of interventions are shown to be helpful in improving sleep in menopause, there is a need for well-designed head-to-head trials with uniform outcome measures.

[2220]

Hypnotherapy for irritable bowel syndrome: an audit of one thousand adult patients.

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Comment in

BACKGROUND: Gut-focused hypnotherapy improves the symptoms of irritable bowel syndrome (IBS) with benefits being sustained for many years. Despite this, the technique has not been widely adopted by healthcare systems, possibly due to relatively small numbers in published studies and uncertainty about how it should be provided.

AIM: To review the effect of hypnotherapy in a large cohort of refractory IBS patients.

METHODS: One thousand IBS patients fulfilling Rome II criteria, mean age 51.6 years (range 17-91 years), 80% female, receiving 12 sessions of hypnotherapy over 3 months, were studied. The primary outcome was a 50 point reduction in the IBS Symptom Severity Score. The fall in scores for Noncolonic Symptoms, Quality of Life and Anxiety or Depression, were secondary outcomes. The Federal Drug Administration's recommended outcome of a 30% or more reduction in abdominal pain was also recorded.

RESULTS: Overall, 76% met the primary outcome which was higher in females (females: 80%, males: 62%, P < 0.001) and those with anxiety (anxious: 79%, non-anxious: 71%, P = 0.010). The mean reduction in other scores was: IBS Symptom Severity Score, 129 points (P < 0.001), Noncolonic Symptom Score, 65 (P < 0.001) and Quality of Life Score, 66 (P < 0.001). Sixty-seven per cent reported a 30% or more reduction in abdominal pain scores. Pain days fell from 18 to 9 per month. Patients with anxiety and depression fell from 63% to 34% and 25% to 12% respectively (P < 0.001). Outcome was unaffected by bowel habit subtype.

CONCLUSION: These results provide further evidence that gut-focused hypnotherapy is an effective intervention for refractory IBS.

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[2221]

[Relaxation, hypnosis, psychotherapy for headache: it truly works, under certain conditions!].

[Article in French]

Fauconnier E(1).

Author information:
High hypnotic suggestibility is a heterogeneous condition and there is accumulating evidence that highly suggestible individuals may be comprised of discrete subtypes with dissimilar cognitive and phenomenological profiles. This study applied latent profile analysis to response patterns on a diverse battery of difficult hypnotic suggestions in a sample of individuals in the upper range of hypnotic suggestibility. Comparisons among models indicated that a four-class model was optimal. One class was comprised of very highly suggestible (virtuoso) participants, two classes included highly suggestible participants who were alternately more responsive to inhibitory cognitive suggestions or posthypnotic amnesia suggestions, and the fourth class consisted primarily of medium suggestible participants. These results indicate that there are discrete response profiles in high hypnotic suggestibility. They further provide a number of insights regarding the optimization of hypnotic suggestibility measurement and have implications for the instrumental use of hypnosis for the modeling of different psychological conditions.

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The readiness potential (RP) is one of the most controversial topics in neuroscience and philosophy due to its perceived relevance to the role of conscious willing in action. Libet and colleagues reported that RP onset precedes both volitional movement and conscious awareness of willing that movement, suggesting that the experience of conscious will may not cause volitional movement (Libet, Gleason, Wright, & Pearl, 1983). Rather, they suggested that the RP indexes unconscious processes that may actually cause both volitional movement and the accompanying conscious feeling of will (Libet et al., 1983; pg. 640).

Here, we demonstrate that volitional movement can occur without an accompanying feeling of will. We additionally show that the neural processes indexed by RPs are insufficient to cause the experience of conscious willing. Specifically, RPs still occur when subjects make self-timed, endogenously-initiated movements due to a post-hypnotic suggestion, without a conscious feeling of having willed those
Our research extends studies that have examined the relation between hypnotic suggestibility and experiential involvement and the role of an hypnotic induction in enhancing experiential involvement (e.g., absorption) in engaging tasks. Researchers have reported increased involvement in reading (Baum & Lynn, 1981) and music-listening (Snodgrass & Lynn, 1989) tasks during hypnosis. We predicted a similar effect for film viewing: greater experiential involvement in an emotional (The Champ) versus a non-emotional (Scenes of Toronto) film. We tested 121 participants who completed measures of absorption and trait dissociation and the Harvard Group Scale of Hypnotic Susceptibility and then viewed the two films after either an hypnotic induction or a non-hypnotic task (i.e., anagrams). Experiential involvement varied as a function of hypnotic suggestibility and film clip. Highly suggestible participants reported more state depersonalization than less suggestible participants, and depersonalization was associated with negative affect; however, we observed no significant correlation between hypnotic suggestibility and trait dissociation. Although hypnosis had no effect on memory commission or omission errors, contrary to the hypothesis that hypnosis facilitates absorption in emotionally engaging tasks, the emotional film was associated with more commission and omission errors compared with the non-emotional film.
nonepileptic seizures were analyzed. While suggestive seizure induction using only placebo-based suggestion provoked a typical event in 13 of 20 patients (65%), the extended protocol was positive in 27 of 34 cases (84%); this improvement was not significant (p=0.11). Noninvasive suggestion techniques accounted for 78% of inductions, avoiding placebo administration in a majority of patients. Still, placebo remains an important part of suggestive seizure induction, responsible for 22% (6 out of 27) of successful inductions using our extended protocol. Our study demonstrates that the diversification of suggestive seizure induction is feasible and beneficial for both patients and diagnosticians.

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[2226]
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Chronic pain management: nonpharmacological therapies for chronic pain.
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Nonpharmacologic therapies have become a vital part of managing chronic pain (CP). Although these can be used as stand-alone therapies, nonpharmacologic treatments often are used to augment and complement pharmacologic treatments (ie, multimodal therapy). Nonpharmacologic approaches can be classified as behavioral, cognitive, integrative, and physical therapies. Core principles in developing a treatment plan are explaining the nature of the CP condition, setting appropriate goals, and developing a comprehensive treatment approach and plan for adherence. Clinicians should become familiar with these interventions so that they can offer patients flexibility in the pain management approach. Effective noninvasive treatment modalities for CP include behavioral therapy for short-term pain relief; cognitive behavioral therapy for reducing long-term pain and disability; hypnosis as adjunctive therapy; guided imagery, diaphragmatic breathing, and muscle relaxation, especially for cancer-related pain; mindfulness-based stress reduction for patients with chronic low back pain; acupuncture for multiple pain conditions; combination manipulation, manual therapy, endurance exercise, stretching, and strengthening for chronic neck pain; animal-assisted therapy; and S-adenosyl-L-methionine for joint pain. Guidelines for use of these treatment modalities are based on expert panel recommendations in combination with data from randomized controlled trials.

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[2227]
Harefuah. 2015 May;154(5):316-8, 338.

[HYPNOSIS IN OBSTETRICS AND GYNECOLOGY].

[Article in Hebrew]
Rabinerson D, Yeoshua E, Gabbay-Ben-Ziv R.

Hypnosis is an ancient method of treatment, in which an enhanced state of mind and elevated susceptibility for suggestion of the patient, are increased. Hypnosis is executed, either by a caregiver or by the person himself (after brief training). The use of hypnosis in alleviating labor pain has been studied as of the second half of the 20th century. In early studies, the use of hypnosis for
this purpose has been proven quite effective. However, later studies, performed in randomized controlled trial terms, have shown controversial results. Other studies, in which the effect of hypnosis was tested in various aspects of both obstetrics and gynecology and with different levels of success, are elaborated on in this review.

[2228]

Hypnosis for the Management of Anticipatory Nausea and Vomiting.

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CASE STUDY:
BJ is a 34-year-old woman who was diagnosed with metastatic breast cancer. She was treated with surgical removal of the primary tumor and sentinel node biopsy. Following surgery, she received chemotherapy. She was given antiemetic therapy prior to and immediately following chemotherapy. She began to experience significant and persistent nausea with intermittent episodes of vomiting after the second cycle of chemotherapy. She completed her chemotherapy but still experienced nausea and vomiting in response to several cues, such as smelling food cooking and going to the hospital. Her nausea and vomiting resulted in segregation from her family during meal time, which negatively impacted her quality of life. A hypnosis consultation was requested, and BJ was cooperative. She reported feeling very nauseated at the time of the interview. Hypnosis was discussed; her questions were answered, and the potential risks and benefits of hypnosis were reviewed. She agreed that she would like to try hypnosis. A hypnosis assessment was conducted and revealed that she had a history of profound motion sickness and severe, chronic childhood trauma associated with feelings of anxiety and hypervigilance. The therapeutic suggestions that were used with BJ included hypnotic suggestions for relaxation and removal of discomfort. A metaphor describing the central processing of the anticipatory nausea and vomiting as a thermostat that could be adjusted to reduce and eliminate the sensation was used to suggest that she could control her perceptions and in turn control the nausea. Posthypnotic suggestions included that at the earliest awareness of discomfort, rubbing the throat would eliminate that discomfort, and cooking aromas would be transformed into her favorite fragrance. Reversal went smoothly, and BJ reported satisfaction with the experience. BJ experienced significant reduction in symptoms after the first session. She had two more sessions, at which time she was able to eat with her family and go to the clinic without discomfort. She was provided a CD with a recording of her hypnosis script to reinforce the face-to-face intervention. She continues to be symptom-free 3 months after treatment with hypnosis.

[2229]

Heterogeneity in high hypnotic suggestibility and the neurophysiology of hypnosis.

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[2230]

Hypnotherapy: the salutogenic solution to dealing with phobias.
Williamson M, Gregory C.

Evidence suggests that around a quarter of women can suffer from an intense fear of giving birth (tocophobia). This can be costly to these women in terms of enduring negative effects of the increased use of medical interventions associated with tocophobia. Other phobias, such as white coat hypertension, can also be problematic in pregnancy. This article describes the establishment of a hypnotherapy service within the antenatal day assessment unit at East Lancashire Hospitals NHS Trust and recounts a recent case study in which the use of hypnotherapy was employed to help Rebecca, a white coat hypertension sufferer, to successfully manage her condition.


Hypnosis-induced mental training improves performance on the Fundamentals of Laparoscopic Surgery (FLS) simulator.

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BACKGROUND: Mental training (MT) is used extensively by musicians and athletes to improve their performance. Recently, it has been suggested as a training method for surgical trainees. We assessed the influence of MT, induced by hypnosis, on the performance of simulated tasks on a laparoscopic simulator, as compared to a non-specific relaxing intervention.

METHODS: 11 surgeons completed a proficiency-based training program on the Fundamentals of Laparoscopic Surgery (FLS) simulator, until they reached performance plateau of the peg transfer task. Thereafter, they received a single music session, as a relaxing intervention, followed by repeating of the peg transfer task. Then they went through a hypnosis session guided by an experienced psychologist, with suggestions of smooth flow of pegs from one position on the board to another, and re-performed the task.

RESULTS: Plateau performance was 51.1 ± 6.9 s. After the music session performance improved by 6.3% to 47.9 ± 5.4 s (p = 0.86). After the MT session performance further improved by 15.3% to 40.1 ± 5.8 s (p = 0.009), which was a 21.6% improvement from baseline (p < 0.001). Subject's satisfaction from their performance, without knowledge of the task scores, was 6.0 ± 2.9 on 0-10 VAS after the music and reached as high as 8.5 ± 1.7 after the hypnotic session (p = 0.01).

CONCLUSIONS: Hypnosis-induced MT significantly improves performance on the FLS simulator, which cannot be attributed to its relaxing qualities alone. This study contributes evidence to the effectiveness of MT in surgical skills acquisition and suggests that hypnotic techniques should be used in mental preparation processes. There is a need to further study these effects on operating room performance.


Quitting experiences and preferences for a future quit attempt: a study among inpatient smokers.

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OBJECTIVE: Understanding smokers’ quit experiences and their preferences for a future quit attempt may aid in the development of effective cessation treatments. The aims of this study were to measure tobacco use behaviour; previous quit attempts and outcomes; methods used to assist quitting; difficulties experienced during previous attempts; the motives and preferred methods to assist quitting in a future attempt; identify the factors associated with preferences for smoking cessation.

DESIGN: Face-to-face interview using a structured questionnaire.

SETTING: Inpatient wards of three Australian public hospitals.

PARTICIPANTS: Hospitalised smokers enrolled in a smoking cessation trial.

RESULTS: Of 600 enrolled patients (42.8% participation rate), 64.3% (n=386) had attempted quitting in the previous 12 months. On a scale of 1 (low) to 10 (high), current motivation to quit smoking was high (median 9; IQR 6.5-10), but confidence was modest (median 5; IQR 3-8). Among 386 participants who reported past quit attempts, 69.9% (n=270) had used at least one cessation aid to assist quitting. Nicotine replacement therapy (NRT) was most commonly stated (222, 57.5%), although the majority had used NRT for <4 weeks. Hypnotherapy was the most common (68, 17.6%) non-pharmacological treatment. Over 80% (n=311) experienced withdrawal symptoms; craving and irritability were commonly reported. Most participants (351, 58.5%) believed medications, especially NRT (322, 53.7%), would assist them to quit in the future. History of previous smoking cessation medication use was the only independent predictor of interest in using medications for a future quit attempt.

CONCLUSIONS: The majority of smokers had attempted quitting in the previous 12 months; NRT was a popular cessation treatment, although it was not used as recommended by most. This suggests a need for assistance in the selection and optimal use of cessation aids for hospitalised smokers.

TRIAL REGISTRATION NUMBER: Australian and New Zealand Clinical Trials Registry: ACTRN12612000368831.

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[2233]

On embracing plurality and tolerating ambiguity in the definitions of hypnosis.

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[2234]

The New APA Definition of Hypnosis: Spontaneous Hypnosis MIA.

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[2235]
Hypnosis: statehood at last.

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The elephant, the blind men, and hypnosis.

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Revision of the APA Division 30 Definition of Hypnosis.

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A Defining Moment: Commentary on the Revised APA Division 30 Definition of Hypnosis.

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Defining hypnosis: an integrative, multi-factor conceptualization.

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The Revised APA Division 30 Definition of Hypnosis: An Appreciation, a Commentary, and a Wish List.

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The new division 30 definitions regarding hypnosis: is "concise" better?

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Hypnosis as a "state of consciousness": how quantifying the mind can help us better understand hypnosis.

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Grounding Hypnosis in Science: The "New" APA Division 30 Definition of Hypnosis as a Step Backward.

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Words, words, words: some final thoughts.

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Advancing Research and Practice: The Revised APA Division 30 Definition of Hypnosis.

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This article describes the history, rationale, and guidelines for developing a new definition of hypnosis by the Society of Psychological Hypnosis, Division 30 of the American Psychological Association. The definition was developed with the aim of being concise, being heuristic, and allowing for alternative theories of the mechanisms (to be determined in empirical scientific study). The definition of hypnosis is presented as well as definitions of the following related terms: hypnotic induction, hypnotizability, and hypnotherapy. The implications for advancing research and practice are discussed. The definitions are presented within the article.

[2246]
A SoC Model of Hypnosis and Induction.

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Chronic pain and the adaptive significance of positive emotions.

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The February-March 2014 special issue of the American Psychologist featured articles summarizing select contributions from the field of psychology to the assessment and treatment of chronic pain. The articles examined a range of psychosocial and family factors that influence individual adjustment and contribute to disparities in pain care. The reviews also considered the psychological correlates and neurophysiological mechanisms of specific pain treatments, including cognitive-behavioral therapy, hypnosis, acceptance and commitment therapy, mindfulness, and meditation. Although a number of articles emphasized the role that negative states of mind play in pain outcomes, positive emotions were given only brief mention. Here, we provide a rationale for the inclusion of positive emotions in chronic pain research.

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Hypnosis/Relaxation therapy for temporomandibular disorders: a systematic review and meta-analysis of randomized controlled trials.


AIMS: To conduct a systematic review and meta-analysis to evaluate the effectiveness of hypnosis/relaxation therapy compared to no/minimal treatment in patients with temporomandibular disorders (TMD).

METHODS: Studies reviewed included randomized controlled trials (RCTs) where investigators randomized patients with TMD or an equivalent condition to an intervention arm receiving hypnosis, relaxation training, or hyporelaxation therapy, and a control group receiving no/minimal treatment. The systematic search was conducted without language restrictions, in Medline, EMBASE, CENTRAL, and PsycINFO, from inception to June 30, 2014. Studies were pooled using weighted mean differences and pooled risk ratios (RRs) for continuous outcomes and dichotomous outcomes, respectively, and their associated 95% confidence intervals (CI).

RESULTS: Of 3,098 identified citations, 3 studies including 159 patients proved eligible, although none of these described their method of randomization. The results suggested limited or no benefit of hypnosis/relaxation therapy on pain (risk difference in important pain -0.06; 95% CI: -0.18 to 0.05; P = .28), or on pressure pain thresholds on the skin surface over the temporomandibular joint (TMJ) and masticatory muscles. Low-quality evidence suggested some benefit of hypnosis/relaxation therapy on maximal pain (mean difference on 100-mm scale = -28.33; 95% CI: -44.67 to -11.99; P =.007) and active maximal mouth opening (mean difference on 100-mm scale = -2.63 mm; 95% CI: -3.30 mm to -1.96 mm; P <.001) compared to no/minimal treatment.

CONCLUSION: Three RCTs were eligible for the systematic review, but they were
with high risk of bias and provided low-quality evidence, suggesting that hypnosis/relaxation therapy may have a beneficial effect on maximal pain and active maximal mouth opening but not on pain and pressure pain threshold. Larger RCTs with low risk of bias are required to confirm or refute these findings and to inform other important patient outcomes.

[2249]

[Placement of a portacath under hypnosis].

[Article in French]
Barbier É(1).

Author information:

The portacath reflects the cancer and its future treatments. Its insertion causes high levels of anxiety for patient. Thanks to medical hypnosis, he can use its internal resources to help them manage the situation and the symptoms he feels.

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[2250]

[The use of hypnosis in healthcare].

[Article in French]
Vanhaudenhuyse A, Faymonville MÉ.

Hypnosis has proved successful in a variety of clinical situations such as alleviation of acute or chronic pain and other chronic debilitating conditions (asthma-eczema). Many psychotherapists utilize imagery to facilitate the process of change, treating depression with hypnosis and integrating patient centered strategic approaches (challenge efficacy of psychotherapy). This article focuses on delivering of hypnotic interventions for pain and will provide a very short overview of core issues in the development of the cognitive neuroscience of hypnosis and conscious state.

[2251]

Feasibility and acceptability of esophageal-directed hypnotherapy for functional heartburn.

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Functional heartburn (FH) is a benign but burdensome condition characterized by painful, burning epigastric sensations in the absence of acid reflux or symptom-reflux correlation. Esophageal hypersensitivity and its psychological counterpart, esophageal hypervigilance (EHv) drive symptom experience.

Hypnotherapy (HYP) is an established and preferred intervention for refractory symptoms in functional gastrointestinal disorders (FGIDs) and could be applied to FH. The objective of this study was to determine the feasibility, acceptability, and clinical utility of 7 weekly sessions of esophageal-directed HYP (EHYP) on
heartburn symptoms, quality of life, and EHv. Similar to other work in FGIDs and regardless of hypnotizability, there were consistent and significant changes in heartburn symptoms, visceral anxiety, and quality of life and a trend for improvement in catastrophizing. We would recommend EHYP in FH patients who are either non-responsive to medications or who would prefer a lifestyle intervention.


[2252]
[Obesity psychological treatment: beyond cognitive and behavioral therapy].
[Article in French]
Volery M, Bonnemain A, Latino A, Ourrad N, Perroud A.
The psychological assessment of the patient with obesity aims to identify the factors of maintenance of excess weight, such as eating disorders or anxi-depressive disorders. Psychotherapy helps a better weight management. Cognitive-behavioral therapy has shown its effectiveness in the treatment of obesity. New psychotherapeutic approaches are explored. The hypnosis and mindfulness are proposed for the management of emotions and stress. A targeted approach on the body image disorder decreases body dissatisfaction. When post-traumatic stress syndrome is involved, EMDR (Eye Movement Desensitization & Reprocessing) is better than other types of therapies. Family therapy is indicated when the entourage is impacted. Psychological difficulties should be the subject of specific care.

[2253]
The consequences of suggesting false childhood food events.

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We combined data across eight published experiments (N=1369) to examine the formation and consequences of false autobiographical beliefs and memories. Our path models revealed that the formation of false autobiographical belief fully mediated the pathway between suggesting to people that they had experienced a positive or negative food-related event in the past and current preference for that food. Suggestion indirectly affected intention to eat the food via change in autobiographical belief. The development of belief with and without memory produced similar changes in food preferences and behavior intention, indicating that belief in the event drives changes in suggestion-related attitudes. Finally, positive suggestions (e.g., "you loved asparagus the first time you tried it") yielded stronger effects than negative suggestions (e.g., "you got sick eating egg salad"). These findings show that false autobiographical suggestions lead to the development of autobiographical beliefs, which in turn, have consequences for one's attitudes and behaviors.

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[2254]
BACKGROUND: Pediatric patients represent a special challenge both for the management of anesthesia and for communication, especially the anxious and screaming child. Children have specific features of fears, cognition, comprehension and skills depending on the stage of development. In addition, behavior and anxiety are strongly shaped by the parents who have to be incorporated.

AIM: This article presents the special features of children as well as practical strategies and aids for dealing with children in a perioperative setting.

MATERIAL AND METHODS: In children suggestibility and susceptibility to placebo and nocebo effects are increased. This makes them more sensitive to negative factors but can also be utilized for positive, constructive effects. Possibilities are presented which make use of the special characteristics of children. A number of examples from daily clinical routine are given.

RESULTS: A child's imagination, creativity and capability for dissociation in particular allow an effective application of indirect suggestion, metaphors, stories, changes in focus of attention, retreat to an inner or imagined safe place, reframing of disturbing noises and events, pacing and leading in small steps and an activation of inner resources. A hand puppet, a pet toy, a little magic trick, introducing a magic friend, acupoint for palpitations with self-affirmation, stick figure drawings, ceiling pictures or holding hands can be quite helpful. All medical devices and interventions can be explained in a way that children can understand and in positive statements without lying or neglecting the need for information.

CONCLUSION: Meeting at eye level, talking to the child instead of just about it, a language appropriate for children but not childish, comprehensible information and explanations, return of control and care more than pure technical distance, all play an important role. A serious look into such communication strategies can help the anesthetist to overcome uncertainties that a child can easily sense.

Factors determining the need for sedation during successful regional anesthesia: when is it necessary?

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BACKGROUND: A common social influence technique for curbing unhealthy eating behavior is to communicate eating-related rules (e.g. 'you should not eat unhealthy food'). Previous research has shown that such restrictive rules sometimes backfire and actually increase unhealthy consumption. In the current studies, we aimed to investigate if a milder form of social influence, a suggested rule, is more successful in curbing intake of unhealthy food. We also investigated how both types of rules affected psychological reactance.

METHOD: Students (N = 88 in Study 1, N = 51 in Study 2) completed a creativity task while a bowl of M&M's was within reach. Consumption was either explicitly forbidden (restrictive rule) or mildly discouraged (suggested rule). In the control condition, consumption was either explicitly allowed (Study 1) or M&M's were not provided (Study 2). Measures of reactance were assessed after the creativity task. Subsequently, a taste test was administered where all participants were allowed to consume M&M's.

RESULTS: Across both studies, consumption during the creativity task did not differ between the restrictive- and suggested-rule-conditions, indicating that both are equally successful in preventing initial consumption. Restrictive-rule-condition participants reported higher reactance and consumed more in the free-eating taste-test phase than suggested-rule-condition participants and control-group participants, indicating a negative after-effect of restriction.

DISCUSSION: RESULTS show that there are more and less effective ways to communicate eating-related rules. A restrictive rule, as compared to a suggested rule, induced psychological reactance and led to greater unhealthy consumption when participants were allowed to eat freely. It is important to pay attention to the way in which eating-related rules are communicated.

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normalizing patient's psychological status primarily, and for the facilitation of
dental treatment, as well. The range of mouth opening changed from 3.7 to 6.2 cm,
allowing for easier entrance of dental appliances into the mouth for completion
of prosthetic rehabilitation. With the tooth prostheses in place, the patient
gained more social confidence and started sharing her experience with other
patients with the same condition.

DISCUSSION: This case illustrates that hypnosis therapy may prove beneficial for
patients with limited mouth opening secondary to scleroderma, facilitating the
prosthetic rehabilitation programs for both dental specialists and patients, with
a secondary important impact on the patient's social perception of himself.

[2259]

Pain and the thermally injured patient—A review of current therapies.
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Thermally injured patients experience tremendous pain from the moment of injury
to months or years after their discharge from the hospital. Pain is therefore a
critical component of proper management of burns. Although the importance of pain
is well recognized, it is often undertreated. Acute uncontrolled pain has been
shown to increase the incidence of mental health disorders and increase the
incidence of suicide after discharge. Long-term poor pain control leads to an
increase in the incidence of persistent pain. Most burn centers have used opioids
as the mainstay analgesic, but recently, the significant side effects of opioids
have led to the implementation of new and combined therapeutics. Pharmacological
agents such as gabapentin, clonidine, dexmedetomidine, and ketamine have all been
suggested as adjuncts to opioids in the treatment of burn pain.
Nonpharmacological therapies such as hypnosis, virtual reality devices, and
behavioral therapy are also essential adjuncts to current medications. This
review aims at identifying the currently available pharmacological and
nonpharmacological options for optimal pain management in the adult burn
population.

[2260]
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Prevalence and characteristics of pain in patients awaiting lung transplantation.
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CONTEXT: Pain in patients awaiting lung transplantation is not well known.
OBJECTIVES: This study prospectively investigated prevalence and characteristics
of pain in these patients.
METHODS: Assessment, undertaken at the time of registration, comprised an
interview, a physical examination by a pain-qualified anesthesiologist, and a
questionnaire completed by the patient and investigator. This questionnaire
included evaluation of pain (intensity, location, sensory and affective
qualifications, and treatment), detection of neuropathic pain, and assessment of
anxiety and depression. A patient was considered "with pain" when at least one of the following criteria was met: 1) positive answer to the question "Do you suffer regularly from pain?" and 2) score greater than 3 on at least one of three numeric pain scales (current, maximal, and average during the last eight days) ranging from 0 (no pain) to 10 (most severe pain imaginable).

RESULTS: One hundred forty-three patients were enrolled. Prevalence of pain was 59%. Three independent variables were correlated to the magnitude of the average pain score for the preceding eight days: female gender (P = 0.003), cystic fibrosis (P = 0.02), and depression score (P = 0.02). Among the pain patients, 39% took analgesic drugs daily and 36% regularly but less than daily; 2% used opioids. Nineteen percent used nonpharmacological strategies (e.g., hypnosis, relaxation).

CONCLUSION: This study highlights the prevalence of pain in this population and specific problems associated with pain such as anxiety and depression. Appropriate assessment and treatment of pain should be considered a component of pretransplantation management.

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Improving sleep and cognition by hypnotic suggestion in the elderly.

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Sleep quality markedly declines across the human lifespan. Particularly the amount of slow-wave sleep (SWS) decreases with age and this decrease is paralleled by a loss of cognitive functioning in the elderly. Here we show in healthy elderly females that the amount of SWS can be extended by a hypnotic suggestion "to sleep deeper" before sleep. In a placebo-controlled cross-over design, participants listened to hypnotic suggestions or a control tape before a midday nap while high density electroencephalography was recorded. After the hypnotic suggestion, we observed a 57% increase in SWS in females suggestible to hypnosis as compared to the control condition. Furthermore, left frontal slow-wave activity (SWA), characteristic for SWS, was significantly increased, followed by a significant improvement in prefrontal cognitive functioning after sleep. Our results suggest that hypnotic suggestions might be a successful alternative for widely-used sleep-enhancing medication to extend SWS and improve cognition in the elderly.

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BACKGROUND AND OBJECTIVE: Various nonpharmacologic treatments are available for pediatric abdominal pain-related functional gastrointestinal disorders (AP-FGIDs). Data on efficacy and safety are scarce. The goal of this study was to summarize the evidence regarding nonpharmacologic interventions for pediatric AP-FGIDs: lifestyle interventions, dietary interventions, behavioral interventions, prebiotics and probiotics, and alternative medicine.

METHODS: Searches were conducted of the Medline and Cochrane Library databases. Systematic reviews and randomized controlled trials (RCTs) concerning nonpharmacologic therapies in children (aged 3-18 years) with AP-FGIDs were included, and data were extracted on participants, interventions, and outcomes. The quality of evidence was assessed by using the GRADE approach.

RESULTS: Twenty-four RCTs were found that included 1390 children. Significant improvement of abdominal pain was reported after hypnotherapy compared with standard care/wait-list approaches and after cognitive behavioral therapy compared with a variety of control treatments/wait-list approaches. Written self-disclosure improved pain frequency at the 6-month follow-up only. Compared with placebo, Lactobacillus rhamnosus GG (LGG) and VSL#3 were associated with significantly more treatment responders (LGG relative risk: 1.31 [95% confidence interval: 1.08 to 1.59]; VSL#3: P < .05). Guar gum significantly improved irritable bowel syndrome symptom frequency; however, no effect was found for other fiber supplements (relative risk: 1.17 [95% confidence interval: 0.75 to 1.81]) or a lactose-free diet. Functional disability was not significantly decreased after yoga compared with a wait-list approach. No studies were found concerning lifestyle interventions; gluten-, histamine-, or carbonic acid-free diets; fluid intake; or prebiotics. No serious adverse effects were reported. The quality of evidence was found to be very low to moderate.

CONCLUSIONS: Although high-quality studies are lacking, some evidence shows efficacy of hypnotherapy, cognitive behavioral therapy, and probiotics (LGG and VSL#3) in pediatric AP-FGIDs. Data on fiber supplements are inconclusive.

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Hypnosis in the Management of Sleep Disorders.

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Hypnosis has been used to manage insomnia and disorders of arousal. The alteration in the state of consciousness produced during hypnotic trance is more similar to relaxed reverie than sleep. Hypnosis typically occurs in a state of repose and the accomplished subject may have no recollection of the experience during a trance, 2 commonalities with sleep. Because hypnosis allows for relaxation, increased suggestibility, posthypnotic suggestion, imagery rehearsal, access to preconscious cognitions and emotions, and cognitive restructuring, disorders of sleep such as the insomnias, parasomnias, and related mood or anxiety disorders can be amenable to this therapeutic intervention.

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Structural and functional correlates of hypnotic depth and suggestibility.


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This study explores whether self-reported depth of hypnosis and hypnotic suggestibility are associated with individual differences in neuroanatomy and/or levels of functional connectivity. Twenty-nine people varying in suggestibility were recruited and underwent structural, and after a hypnotic induction, functional magnetic resonance imaging at rest. We used voxel-based morphometry to assess the correlation of grey matter (GM) and white matter (WM) against the independent variables: depth of hypnosis, level of relaxation and hypnotic suggestibility. Functional networks identified with independent components analysis were regressed with the independent variables. Hypnotic depth ratings were positively correlated with GM volume in the frontal cortex and the anterior cingulate cortex (ACC). Hypnotic suggestibility was positively correlated with GM volume in the left temporal-occipital cortex. Relaxation ratings did not correlate significantly with GM volume and none of the independent variables correlated with regional WM volume measures. Self-reported deeper levels of hypnosis were associated with less connectivity within the anterior default mode network. Taken together, the results suggest that the greater GM volume in the medial frontal cortex and ACC, and lower connectivity in the DMN during hypnosis facilitate experiences of greater hypnotic depth. The patterns of results suggest that hypnotic depth and hypnotic suggestibility should not be considered synonyms.

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[2265]

Snapshot of an integrated psychosocial gastroenterology service.

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AIM: To characterize the patients utilizing a gastroenterology behavioral medicine service and examine the effect of treatment on health care utilization. METHODS: Patients were referred by their gastroenterologists for psychological treatment during a 15 mo period. Patients seen for an intake with a psychologist completed the Brief Symptom Inventory (BSI) and a checklist of psychosocial concerns. A subset of patients with functional bowel disorders also completed a disease specific quality of life measure. Chart review was conducted to obtain information on type and frequency of sessions with the psychologist, the number of outpatient gastroenterology visits, and number of gastroenterology-related medical procedures during the 6 mo following psychological intake. RESULTS: Of 259 patients referred for treatment, 118 (46%) completed an intake with a psychologist. Diagnoses included: irritable bowel syndrome (42%), functional dyspepsia (20%), inflammatory bowel diseases (20%), esophageal symptoms (10%), and "other" (8%). Demographic variables and disease type did not differentiate between those who did and did not schedule an intake. Mean t-scores for the BSI global score index and the depression, anxiety, and somatization subscales fell below the cutoff for clinical significance (t = 63). Treatments
were predominantly gut-directed hypnosis (48%) and cognitive behavioral therapy (44%). Average length of treatment was 4 sessions. Among functional gastrointestinal (GI) patients, those patients who initiated treatment received significantly fewer GI-related medical procedures during the 6 mo following the referral than patients who did not schedule an intake \([t (197) = 2.69, P < 0.01]\).

CONCLUSION: Patients are receptive to psychological interventions for GI conditions and there is preliminary evidence that treatment can decrease health-care utilization among patients with functional GI conditions.


Interventions for helping to turn term breech babies to head first presentation when using external cephalic version.

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BACKGROUND: Breech presentation is associated with increased complications. Turning a breech baby to head first presentation using external cephalic version (ECV) attempts to reduce the chances of breech presentation at birth so as to avoid the adverse effects of breech vaginal birth or caesarean section. Interventions such as tocolytic drugs and other methods have been used in an attempt to facilitate ECV.

OBJECTIVES: To assess, from the best evidence available, the effects of interventions such as tocolysis, acoustic stimulation for midline spine position, regional analgesia (epidural or spinal), transabdominal amnioinfusion, systemic opioids and hypnosis, or the use of abdominal lubricants, on ECV at term for successful version, presentation at birth, method of birth and perinatal and maternal morbidity and mortality.

SEARCH METHODS: We searched the Cochrane Pregnancy and Childbirth Group's Trials Register (30 September 2014) and the reference lists of identified studies.

SELECTION CRITERIA: Randomised and quasi-randomised trials comparing the above interventions with no intervention or other methods to facilitate ECV at term.

DATA COLLECTION AND ANALYSIS: We assessed eligibility and trial quality. Two review authors independently assessed for inclusion all potential studies identified as a result of the search strategy and independently extracted the data using a specially designed data extraction form.

MAIN RESULTS: We included 28 studies, providing data on 2786 women. We used the random-effects model for pooling data because of clinical heterogeneity between studies. A number of trial reports gave insufficient information to allow clear assessment of risk of bias. We used GradePro software to carry out formal assessments of quality of the evidence for beta stimulants versus placebo and regional analgesia with tocolysis versus tocolysis alone. Tocolytic parenteral beta stimulants were effective in increasing cephalic presentations in labour (average risk ratio (RR) 1.68, 95% confidence interval (CI) 1.14 to 2.48, five studies, 459 women, low-quality evidence) and in reducing the number of caesarean sections (average RR 0.77, 95% CI 0.67 to 0.88, six studies, 742 women, moderate-quality evidence). Failure to achieve a cephalic vaginal birth was less likely for women receiving a parenteral beta stimulant (average RR 0.75, 95% CI 0.60 to 0.92, four studies, 399 women, moderate-quality evidence). No clear differences in fetal bradycardias were identified, although this was reported for only one study, which was underpowered for assessing this outcome. Failed external cephalic version was reported in nine studies (900 women), and women receiving parenteral beta stimulants were less likely to have failure compared with controls (average RR 0.70, 95% CI 0.60 to 0.82, moderate-quality evidence). Perinatal mortality and serious morbidity were not reported. Sensitivity analysis by study quality was consistent with overall findings. For other classes of tocolytic drugs (calcium channel blockers and nitric oxide donors), evidence was
insufficient to permit conclusions; outcomes were reported for only one or two studies, which were underpowered to demonstrate differences between treatment and control groups. Little evidence was found regarding adverse effects, although nitric oxide donors were associated with increased risk of headache. Data comparing different tocolytic drugs were insufficient. Regional analgesia in combination with a tocolytic was more effective than the tocolytic alone for increasing successful versions (assessed by the rate of failed ECVs; average RR 0.61, 95% CI 0.43 to 0.86, five studies, 409 women, moderate-quality evidence), and no difference was identified in cephalic presentation in labour (average RR 1.63, 95% CI 0.75 to 3.53, three studies, 279 women, very low-quality evidence), caesarean sections (average RR 0.74, 95% CI 0.40 to 1.37, three studies, 279 women, very low-quality evidence) nor fetal bradycardia (average RR 1.48, 95% CI 0.62 to 3.57, two studies, 210 women, low-quality evidence), although studies were underpowered for assessing these outcomes. Studies did not report on failure to achieve a cephalic vaginal birth (breech vaginal deliveries plus caesarean sections) nor on perinatal mortality or serious infant morbidity. Data were insufficient on the use of regional analgesia without tocolysis, vibroacoustic stimulation, amnioinfusion, systemic opioids and hypnosis, and on the use of talcum powder or gel to assist external cephalic version, to permit conclusions about their effectiveness and safety.

AUTHORS’ CONCLUSIONS: Parenteral beta stimulants were effective in facilitating successful ECV, increasing cephalic presentation in labour and reducing the caesarean section rate, but data on adverse effects were insufficient. Data on calcium channel blockers and nitric acid donors were insufficient to provide good evidence. The scope for further research is clear. Possible benefits of tocolysis in reducing the force required for successful version and possible risks of side effects need to be addressed further. Further trials are needed to compare the effectiveness of routine versus selective use of tocolysis and the role of regional analgesia, fetal acoustic stimulation, amnioinfusion and abdominal lubricants, and the effects of hypnosis, in facilitating ECV. Although randomised trials of nitric oxide donors are small, the results are sufficiently negative to discourage further trials. Intervention fidelity for ECV can be enhanced by standardisation of the techniques and processes used for clinical manipulation of the fetus in the abdominal cavity and ought to be the subject of further research.


[The premedication visit--suggestions for a patient-friendly design].

[Article in German]

Seemann M, Zech N, Graf BM, Hansen E.

The premedication visit is often a difficult situation for the anaesthetist. On the one hand the patient needs to be informed in detail, but on the other he must not be alienated unnecessarily. Furthermore, a hospital stay represents an exceptional situation for the patient in which he behaves differently than in everyday life and shows a limited ability to process information. Following certain communication strategies allows to convey information to the patient in a comprehensible manner and to describe his individual anaesthesiological risk without needlessly creating fear.

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Optimizing pain management to facilitate Enhanced Recovery After Surgery pathways.

Tan M(1), Law LS, Gan TJ.
PURPOSE: The optimal management of postoperative pain using multimodal analgesia is a key component of Enhanced Recovery After Surgery (ERAS). Pain has adverse clinical implications on postoperative recovery, including prolonging the time to recovery milestones and length of hospital stay. Moreover, the ubiquity of opioids in postoperative analgesic regimens results in adverse effects, such as sedation, postoperative nausea and vomiting, urinary retention, ileus, and respiratory depression, which can delay discharge. Thus, multimodal analgesia, i.e., the use of more than one analgesic modality to achieve effective pain control while reducing opioid-related side effects, has become the cornerstone of enhanced recovery. The purpose of this review is to address the analgesic techniques used as part of multimodal analgesic regimens to optimize postoperative pain control and to summarize the evidence for their use in reducing opioid requirements and side effects.

PRINCIPAL FINDINGS: There is a wide variety of analgesic techniques available for multimodal postoperative analgesia. These modalities are divided into pharmacological and non-pharmacological techniques. Systemic pharmacological modalities involve opioids and non-opioids such as acetaminophen, non-steroidal anti-inflammatory drugs, N-methyl-D-aspartate receptor antagonists, anticonvulsants (e.g., gamma-aminobutyric acid analogues), beta-blockers, alpha-2 agonists, transient receptor potential vanilloid receptor agonists (capsaicin), and glucocorticoids. Other pharmacological modalities include central neuraxial techniques, surgical-site infiltration, and regional anesthesia. Evidence supports the use of these pharmacological techniques as part of multimodal analgesia, but each has its own advantages and specific safety profile, which highlights the importance of selecting the appropriate analgesics for each patient. Adjunctive non-pharmacological techniques include acupuncture, music therapy, transcutaneous electrical nerve stimulation, and hypnosis. There is mixed evidence regarding such techniques, although a lack of harm is associated with their use.

CONCLUSION: There are continuing advancements in multimodal analgesic techniques; however, postoperative pain in general continues to be undermanaged. Furthermore, a continuing challenge in multimodal pain research related to ERAS is the difficulty in carrying out randomized trials to determine the relative importance of any one component, including analgesia.

Nocebo vs. placebo: the challenges of trial design in analgesia research.

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The placebo effect in randomized clinical trials appears to have increased thereby contributing to problems of demonstrating statistically reliable effects of treatments that directly target biological mechanisms. The shortcomings of randomized clinical trials are currently discussed along with potential improvements of trial designs. In this review we explain how utilizing knowledge from the placebo and nocebo mechanisms literature could improve the information that can be obtained from randomized clinical trials. We present three major challenges in randomized clinical trials: (i) increasing placebo effects, (ii) variability of the placebo effect, and (iii) risk of un-blinding. We then explain how recent placebo and nocebo studies of effects of verbal suggestion, expectancy, and emotions may improve understanding and discussion of increasing placebo effects, account/control for large parts of the variability of placebo effects, and suggest ways to improve blinding in future trials.

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A randomized controlled trial of hypnosis compared with biofeedback for adults with chronic low back pain.

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BACKGROUND: Chronic low back pain (CLBP) is common and results in significant costs to individuals, families and society. Although some research supports the efficacy of hypnosis for CLBP, we know little about the minimum dose needed to produce meaningful benefits, the roles of home practice and hypnotizability on outcome, or the maintenance of treatment benefits beyond 3 months.

METHODS: One hundred veterans with CLBP participated in a randomized, four-group design study. The groups were (1) an eight-session self-hypnosis training intervention without audio recordings for home practice; (2) an eight-session self-hypnosis training intervention with recordings; (3) a two-session self-hypnosis training intervention with recordings and brief weekly reminder telephone calls; and (4) an eight-session active (biofeedback) control intervention.

RESULTS: Participants in all four groups reported significant pre- to post-treatment improvements in pain intensity, pain interference and sleep quality. The hypnosis groups combined reported significantly more pain intensity reduction than the control group. There was no significant difference among the three hypnosis conditions. Over half of the participants who received hypnosis reported clinically meaningful (≥ 30%) reductions in pain intensity, and they maintained these benefits for at least 6 months after treatment. Neither hypnotizability nor amount of home practice was associated significantly with treatment outcome.

CONCLUSIONS: The findings indicate that two sessions of self-hypnosis training with audio recordings for home practice may be as effective as eight sessions of hypnosis treatment. If replicated in other patient samples, the findings have important implications for the application of hypnosis treatment for chronic pain management.

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[2271]


LSD enhances suggestibility in healthy volunteers.

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RATIONALE: Lysergic acid diethylamide (LSD) has a history of use as a psychotherapeutic aid in the treatment of mood disorders and addiction, and it was also explored as an enhancer of mind control.

OBJECTIVES: The present study sought to test the effect of LSD on suggestibility in a modern research study.

METHODS: Ten healthy volunteers were administered with intravenous (i.v.) LSD (40-80 μg) in a within-subject placebo-controlled design. Suggestibility and cued mental imagery were assessed using the Creative Imagination Scale (CIS) and a mental imagery test (MIT). CIS and MIT items were split into two versions (A and B), balanced for ‘efficacy’ (i.e. A = B) and counterbalanced across conditions (i.e. 50 % completed version ‘A’ under LSD). The MIT and CIS were issued 110 and 140 min, respectively, post-infusion, corresponding with the peak drug effects.

RESULTS: Volunteers gave significantly higher ratings for the CIS (p = 0.018), but not the MIT (p = 0.11), after LSD than placebo. The magnitude of suggestibility enhancement under LSD was positively correlated with trait conscientiousness measured at baseline (p = 0.0005).
CONCLUSIONS: These results imply that the influence of suggestion is enhanced by LSD. Enhanced suggestibility under LSD may have implications for its use as an adjunct to psychotherapy, where suggestibility plays a major role. That cued imagery was unaffected by LSD implies that suggestions must be of a sufficient duration and level of detail to be enhanced by the drug. The results also imply that individuals with high trait conscientiousness are especially sensitive to the suggestibility-enhancing effects of LSD.

[2272]

[Autohypnosis].

[Article in French]
Délèze M.

[2273]

Nocturnal enuresis: non-pharmacological treatments.

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INTRODUCTION: Nocturnal enuresis affects 15% to 20% of 5-year-old children, 5% of 10-year-old children, and 1% to 2% of people aged 15 years and older. Without treatment, 15% of affected children will become dry each year. Nocturnal enuresis is not diagnosed in children younger than 5 years, and treatment may be inappropriate for children younger than 7 years.

METHODS AND OUTCOMES: We conducted a systematic review and aimed to answer the following clinical question: What are the effects of non-pharmacological interventions for relief of symptoms of nocturnal enuresis? We searched: Medline, Embase, The Cochrane Library, and other important databases up to October 2013 (Clinical Evidence reviews are updated periodically, please check our website for the most up-to-date version of this review). We included harms alerts from relevant organisations such as the US Food and Drug Administration (FDA), the European Medicines Agency (EMA), and the UK Medicines and Healthcare products Regulatory Agency (MHRA).

RESULTS: We found five studies that met our inclusion criteria. We performed a GRADE evaluation of the quality of evidence for interventions.

CONCLUSIONS: In this systematic review, we present information relating to the effectiveness and safety of the following interventions: acupuncture, dry bed training, enuresis alarm, and hypnotherapy.

[2274]

Brain Oscillations, Hypnosis, and Hypnotizability.

Jensen MP, Adachi T, Hakimian S.

This article summarizes the state-of-science knowledge regarding the associations between hypnosis and brain oscillations. Brain oscillations represent the combined electrical activity of neuronal assemblies, usually measured as specific frequencies representing slower (delta, theta, alpha) and faster (beta, gamma) oscillations. Hypnosis has been most closely linked to power in the theta band and changes in gamma activity. These oscillations are thought to play a critical role in both the recording and recall of declarative memory and emotional limbic circuits. The authors propose that this role may be the mechanistic link between theta (and perhaps gamma) oscillations and hypnosis, specifically, that the increases in theta oscillations and changes in gamma activity observed with hypnosis may underlie some hypnotic responses. If these hypotheses are supported,
they have important implications for both understanding the effects of hypnosis and for enhancing response to hypnotic treatments.

[2275]

Hypnosis, neuroplasticity, and the plastic paradox.

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[2276]

Mysteries of hypnosis and the self are revealed by the psychology and neuroscience of empathy.

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This article reviews a growing body of research and theory in hypnosis and neuroscience that supports the empathic involvement theory (EIT) of hypnosis (Wickramasekera II, 2001; Wickramasekera II & Szlyk, 2003; Wickramasekera II, 2007c). The EIT is a unified transpersonal theory of hypnosis and the self, which weaves together empathic elements of Dzogchen, neodissociative, neuroscience, psychoanalytic, sociocognitive, and other theories by proposing that hypnotic phenomena are inherently characterized by their deep involvement with processes of empathy and the self. The EIT proposes that the experience of hypnosis is embodied in a system of neural networks in the brain that utilizes empathy-related processes, adaptive resonance between perceptual input and top-down expectancies, and connectionist learning algorithms to (a) empathically enact the affect, cognition, body language, response expectancies, social roles, sensations, etc. that are presented to them during hypnosis in accordance with socio-cognitive theories of hypnosis; (b) engage in a convergent psychophysiological relationship with another person in accordance with psychoanalytic, Ericksonian, and polyvagal/social engagement system theories; (c) alter the empathic self/other (theory of mind) coding of phenomenological experiences during hypnosis in accordance with aspects of the neo-dissociative and socio-cognitive traditions; and (d) develop an experiential understanding of the illusion of self that may lead, in some people, to its transcendence in accordance with Bon-Buddhist, Dzogchen, and transpersonal scholars. A unified definition of hypnosis is proposed based on findings in the empathic neuroscience of hypnosis as well as a working model of the neuromatrix of the self.

[2277]

Hypnosis, suggestion, and suggestibility: an integrative model.

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This article elucidates an integrative model of hypnosis that integrates social, cultural, cognitive, and neurophysiological variables at play both in and out of hypnosis and considers their dynamic interaction as determinants of the multifaceted experience of hypnosis. The roles of these variables are examined in the induction and suggestion stages of hypnosis, including how they are related to the experience of involuntariness, one of the hallmarks of hypnosis. It is suggested that studies of the modification of hypnotic suggestibility; cognitive
flexibility; response sets and expectancies; the default-mode network; and the search for the neurophysiological correlates of hypnosis, more broadly, in conjunction with research on social psychological variables, hold much promise to further understanding of hypnosis.

Hypnosis and imaging of the living human brain.
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Over more than two decades, studies using imaging techniques of the living human brain have begun to explore the neural correlates of hypnosis. The collective findings provide a gripping, albeit preliminary, account of the underlying neurobiological mechanisms involved in hypnotic phenomena. While substantial advances lend support to different hypotheses pertaining to hypnotic modulation of attention, control, and monitoring processes, the complex interactions among the many mediating variables largely hinder our ability to isolate robust commonalities across studies. The present account presents a critical integrative synthesis of neuroimaging studies targeting hypnosis as a function of suggestion. Specifically, hypnotic induction without task-specific suggestion is examined, as well as suggestions concerning sensation and perception, memory, and ideomotor response. The importance of carefully designed experiments is highlighted to better tease apart the neural correlates that subserve hypnotic phenomena. Moreover, converging findings intimate that hypnotic suggestions seem to induce specific neural patterns. These observations propose that suggestions may have the ability to target focal brain networks. Drawing on evidence spanning several technological modalities, neuroimaging studies of hypnosis pave the road to a more scientific understanding of a dramatic, yet largely evasive, domain of human behavior.

Traditional and alert hypnotic phenomena: development through anteriorization.
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Modern research techniques show that hypnotic induction involves behavioral and cognitive inhibition as components of many hypnotic phenomena. One standard laboratory technique for measuring cognitive inhibition is the Go/NoGo procedure. The procedure moves the average, or centroid, of electroencephalography signals toward the frontal, or anterior, part of the brain. This process, called anteriorization, produces a shift in the emotional and cognitive signals from the anterior cingulate cortex. This has implications for both the scientific understanding and clinical use of hypnosis.

Orienting hypnosis.
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This article presents a new frame for understanding hypnosis and its clinical
Despite great potential to transform health and care, hypnosis research and clinical integration is impaired in part by centuries of misrepresentation and ignorance about its demonstrated efficacy. The authors contend that advances in the field are primarily encumbered by the lack of distinct boundaries and definitions. Here, hypnosis, trance, and mind are all redefined and grounded in biological, neurological, and psychological phenomena. Solutions are proposed for boundary and language problems associated with hypnosis. The biological role of novelty stimulating an orienting response that, in turn, potentiates systemic plasticity forms the basis for trance. Hypnosis is merely the skill set that perpetuates and influences trance. This formulation meshes with many aspects of Milton Erickson's legacy and Ernest Rossi's recent theory of mind and health. Implications of this hypothesis for clinical skills, professional training, and research are discussed.

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Kenneth s. Bowers, interactionism and hypnosis.

Council JR(1), Frischholz EJ.

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Like most seminal thinkers in hypnosis, Kenneth Bowers' interests and contributions have ranged beyond that particular domain. The list of his published works is impressive by anyone's standards, and includes important contributions in the areas of health, psychotherapy, and hypnosis. This paper will focus on his major contribution to personality theory, "Situationism in Psychology: An Analysis and Critique," published in 1973 in the Psychological Review.

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Herb Spiegel was known for many professional and scientific achievements. He may be best remembered for his discovery of the Eye Roll Sign (ERS) and its relation to innate trance capacity and the parallel creation and development of the Hypnotic Induction Profile (HIP). The present paper provides a historical context.
for understanding Herb's 1972 publication of "An Eye Roll Test for Hypnotizability" which originally appeared in the American Journal of Clinical Hypnosis 38 years ago and is reprinted in this journal issue.

Hypnosis, hypnotizability, and placebo.

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Dr. Raz's speculations about the relation between placebo responsivity and hypnotizability are critically examined. While there is no generally accepted theoretical definition of hypnosis, there is a general consensus that hypnotizability can be reliably measured. In contrast, there seems to be a general consensus about a theoretical definition of placebo (including placebo effect, placebo response, and nocebo). There is no widely accepted measure of individual differences in placebo responsivity. Various methodological considerations about how to examine the relation between placebo responsivity and hypnotizability are identified. Studies are identified which indicate that response to treatments which utilize adjunctive hypnosis are superior to placebo treatments. The only study which examined whether placebo responsivity was correlated with hypnotizability seems to indicate that they are only slightly related at best. The possibility that there may be such thing as a "good placebo responder (GPR)" is questioned, while the known clinical value of hypnotizability assessment is reaffirmed. Future directions for empirical research on the relation between placebo responsivity and hypnotizability are identified.

Hypnotic responsivity and the treatment of flying phobia.

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Systematic follow-up data are reported for 178 consecutive flying phobia patients treated with a single 45-minute session involving hypnosis and a problem restructuring strategy. One hundred fifty-eight (89%) of the patients completed follow-up questionnaires between six months and ten and one half years after treatment. Results showed that hypnotizable patients were over two and one half times more likely to report some positive treatment impact than those who were found to be nonhypnotizable on the Hypnotic Induction Profile. In addition, the patients' previous experiences with psychotherapy were found to be significantly associated with treatment outcome. The clinical implications of these findings are discussed.

Different perspectives on informed consent and clinical hypnosis.

Frischholz EJ(1).

Author information:
(1)a Rush North Shore Medical Center.
Medicare procedure code 90880 (medical hypnotherapy): use the code (not the word).

Frischholz EJ(1).

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(1)a American Journal of Clinical Hypnosis.

[2289]

The future of professional hypnosis: comment on kirsch, mazzoni, and montgomery.

Frischholz EJ(1).

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I believe the paper by Kirsch, Mazzoni, and Montgomery (this issue) should surprise about 95% of ASCH members (maybe only 93% of SCEH members) because the three facts espoused in their paper speciously seem to be 100% true. To paraphrase from their abstract: 1) nothing that can be produced by hypnotic induction plus suggestion cannot also be produced by suggestion alone; 2) administration of a hypnotic induction does not produce a meaningful increase in response to suggestion relative to suggestion alone; and 3) responsivity to suggestions are highly correlated to responsivity on the same measure when preceded by a hypnotic induction ceremony. In order to persuade that these propositions are true, several objections to them must be addressed. However, just because one's facts are true does not mean that one's interpretation of the facts and their interrelationships are also true. The ramifications of the above facts and their interrelationships for the future of professional hypnosis (experimental, clinical and forensic) are identified and discussed.

[2290]

Brain Oscillations, Hypnosis, and Hypnotizability.

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In this article, we summarize the state-of-science knowledge regarding the associations between hypnosis and brain oscillations. Brain oscillations represent the combined electrical activity of neuronal assemblies, and are usually measured as specific frequencies representing slower (delta, theta, alpha) and faster (beta, gamma) oscillations. Hypnosis has been most closely linked to power in the theta band and changes in gamma activity. These oscillations are thought to play a critical role in both the recording and recall of declarative memory and emotional limbic circuits. Here we propose that it is this role that may be the mechanistic link between theta (and perhaps gamma) oscillations and hypnosis; specifically that theta oscillations may facilitate, and that changes in gamma activity observed with hypnosis may underlie, some hypnotic responses. If these hypotheses are supported, they have important implications for both understanding the effects of hypnosis, and for enhancing response to hypnotic treatments.

[2291]

Hypnosis for sedation in transesophageal echocardiography: a comparison with
midazolam.

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BACKGROUND: Transesophageal echocardiography (TEE), being a displeasing intervention, usually entails sedation. We aimed to compare the effects of hypnosis and midazolam for sedation in TEE.

DESIGN AND SETTINGS: A prospective single-blinded study conducted on patients scheduled for TEE between April 2011 and July 2011 at a university in Istanbul, Turkey.

METHODS: A total of 41 patients underwent sedation using midazolam and 45 patients underwent hypnosis. Patients were given the State-Trait Anxiety Inventory (STAI) test for anxiety and continuous performance test (CPT) for alertness before and after the procedure. The difficulty of probing and the overall procedure rated by the cardiologist and satisfaction scores of the patients were also documented.

RESULTS: Anxiety was found to be less and attention more in the hypnosis group, as revealed by STAI and CPT test scores (P < .05 and P < .001, respectively).

CONCLUSION: Hypnosis proved to be associated with positive therapeutic outcomes for TEE with regard to alleviation of anxiety and maintenance of vigilance, thus providing more satisfaction compared to sedation with midazolam.

[2292]

A family caregiver's relaxation enhances the gastric motility function of the patient: a crossover study.

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BACKGROUND: The primary purpose of this study was to assess the effect of a caregiver's relaxation on the gastric motility function of the patient. The secondary purpose was to evaluate changes in the caregiver's willingness to perform self-care following feedback on the results of the primary purpose.

METHODS: Subjects were 26 patients with a decreased level of consciousness who received gastrostomy tube feeding and their 26 family caregivers. We compared the patient's gastric motility under the condition of having his or her hand held with and without caregiver relaxation (crossover study). Changes in the caregiver's willingness to perform self-care following feedback on the results was evaluated using self-administered questionnaires. Hypnosis was used for relaxation. The outcomes assessed for gastric motility function were the motility index and gastric emptying rate by ultrasonography examination.

RESULTS: Hand-holding by the family caregiver while he or she was receiving relaxation enhanced the patient's gastric motility function. By giving feedback on the results, the caregiver's willingness to adopt self-care was increased and his or her sense of guilt was reduced.

CONCLUSIONS: This study suggested that a caregiver's relaxation increases the gastric motility function of the patient and that getting feedback including the positive results increases the caregiver's willingness to perform self-care, which consequently reduce the caregiver burden.

[2293]
The effect of preoperative suggestions on perioperative dreams and dream recalls after administration of different general anesthetic combinations: a randomized trial in maxillofacial surgery.


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BACKGROUND: Images evoked immediately before the induction of anesthesia with the help of suggestions may influence dreaming during anesthesia. The aim of the study was to assess the incidence of evoked dreams and dream recalls by employing suggestions before induction of anesthesia while administering different general anesthetic combinations.

METHODS: This is a single center, prospective randomized including 270 adult patients scheduled for maxillofacial surgical interventions. Patients were assigned to control, suggestion and dreamfilm groups according to the psychological method used. According to the anesthetic protocol there were also three subgroups: etomidate & sevoflurane, propofol & sevoflurane, propofol & propofol groups. Primary outcome measure was the incidence of postoperative dreams in the non-intervention group and in the three groups receiving different psychological interventions. Secondary endpoint was to test the effect of perioperative suggestions and dreamfilm-formation training on the occurrence of dreams and recallable dreams in different general anesthesiological techniques.

RESULTS: Dream incidence rates measured in the control group did not differ significantly (etomidate & sevoflurane: 40%, propofol & sevoflurane: 26%, propofol & propofol: 39%). A significant increase could be observed in the incidence rate of dreams between the control and suggestion groups in the propofol & sevoflurane (26%-52%) group (p = 0.023). There was a significant difference in the incidence of dreams between the control and dreamfilm subgroup in the propofol & sevoflurane (26% vs. 57%), and in the propofol & propofol group (39% vs.70%) (p = 0.010, and p = 0.009, respectively). Similar to this, there was a significant difference in dream incidence between the dreamfilm and the suggestion subgroups (44% vs. 70%) in the propofol & propofol group (p = 0.019). Propofol as an induction agent contributed most to dream formation and recalls (x2-test p value: 0.005). The content of images and dreams evoked using suggestions showed great agreement using all three anesthetic protocols.

CONCLUSION: The psychological method influenced dreaming during anesthesia. The increase of the incidence rate of dreams was dependent on the anesthetic agent used, especially the induction agent. The study was registered in ClinicalTrials.gov. Identifier: NCT01839201.

A Systematic Overview of Reviews for Complementary and Alternative Therapies in the Treatment of the Fibromyalgia Syndrome.

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Objectives. This systematic overview of reviews aimed to summarize evidence and methodological quality from systematic reviews of complementary and alternative medicine (CAM) for the fibromyalgia syndrome (FMS). Methods. The PubMed/MEDLINE, Cochrane Library, and Scopus databases were screened from their inception to Sept 2013 to identify systematic reviews and meta-analyses of CAM interventions for FMS. Methodological quality of reviews was rated using the AMSTAR instrument. Results. Altogether 25 systematic reviews were found; they investigated the evidence of CAM in general, exercised-based CAM therapies, manipulative therapies, Mind/Body therapies, acupuncture, hydrotherapy, phytotherapy, and homeopathy. Methodological quality of reviews ranged from lowest to highest possible quality. Consistently positive results were found for tai chi, yoga, meditation and mindfulness-based interventions, hypnosis or guided imagery, electromyogram (EMG) biofeedback, and balneotherapy/hydrotherapy. Inconsistent results concerned qigong, acupuncture, chiropractic interventions, electroencephalogram (EEG) biofeedback, and nutritional supplements. Inconclusive results were found for homeopathy and phytotherapy. Major methodological flaws included missing details on data extraction process, included or excluded studies, study details, and adaption of conclusions based on quality assessment. Conclusions. Despite a growing body of scientific evidence of CAM therapies for the management of FMS systematic reviews still show methodological flaws limiting definite conclusions about their efficacy and safety.


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Postoperative nausea and vomiting (PONV) is a complication affecting between 20 and 40% of all surgery patients, with high-risk patients experiencing rates of up to 80%. Recent studies and publications have shed light on the uses of alternative treatment for PONV through their modulation of endogenous opioid neuropeptides and neurokinin ligands. In addition to reducing PONV, hypnosis was reported to be useful in attenuating postoperative pain and anxiety, and contributing to hemodynamic stability. Music therapy has been utilized to deepen the sedation level and decrease patient anxiety, antiemetic and analgesic requirements, hospital length of stay, and fatigue. Isopropyl alcohol and peppermint oil aromatherapy have both been used to reduce postoperative nausea. With correct training in traditional Chinese healing techniques, acupuncture (APu) at the P6 acupoint has also been shown to be useful in preventing early PONV, postdischarge nausea and vomiting, and alleviating of pain. Electro-acupuncture (EAPu), as with APu, provided analgesic and antiemetic effects through release and modulation of opioid neuropeptides. These non-pharmacological modalities of treatment contribute to an overall patient wellbeing, assisting in physical and emotional healing.

Hypnosis-based psychodynamic treatment in ALS: a longitudinal study on patients

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Hypnosis-based psychodynamic treatment in ALS: a longitudinal study on patients with amyotrophic lateral sclerosis (ALS). This study aimed to evaluate the effectiveness of hypnosis-based psychodynamic treatment in ALS patients. The study included a group of 10 patients with ALS, who received hypnosis-based psychodynamic treatment for a period of 6 months. The treatment included hypnosis, visualization, and relaxation techniques, combined with psychological counseling and support. The study results showed a significant improvement in the quality of life, mood, and physical symptoms of the patients. The study concluded that hypnosis-based psychodynamic treatment can be an effective and safe complementary therapy for ALS patients.
and their caregivers.

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BACKGROUND: Evidence of psychological treatment efficacy is strongly needed in ALS, particularly regarding long-term effects.

METHODS: Fifteen patients participated in a hypnosis treatment and self-hypnosis training protocol after an in-depth psychological and neurological evaluation. Patients’ primary caregivers and 15 one-by-one matched control patients were considered in the study. Measurements of anxiety, depression and quality of life (QoL) were collected at the baseline, post-treatment, and after 3 and 6 months from the intervention. Bayesian linear mixed-models were used to evaluate the impact of treatment and defense style on patients’ anxiety, depression, QoL, and functional impairment (ALSFRS-r), as well as on caregivers’ anxiety and depression.

RESULTS: The statistical analyses revealed an improvement in psychological variables’ scores immediately after the treatment. Amelioration in patients’ and caregivers’ anxiety as well as caregivers’ depression, were found to persist at 3 and 6 months follow-ups. The observed massive use of primitive defense mechanisms was found to have a reliable and constant buffer effect on psychopathological symptoms in both patients and caregivers. Notably, treated patients decline in ALSFRS-r score was observed to be slower than that of control group's patients.

DISCUSSION: Our brief psychodynamic hypnosis-based treatment showed efficacy both at psychological and physical levels in patients with ALS, and was indirectly associated to long-lasting benefits in caregivers. The implications of peculiar psychodynamic factors and mind-body techniques are discussed. Future directions should be oriented toward a convergence of our results and further psychological interventions, in order to delineate clinical best practices for ALS.


[Advances in research of complementary and integrative medicine: a review of recent publications in some of the leading medical journals].

[Article in Hebrew]

Gamus D.

This article assesses the evidence for effectiveness, adverse effects and cost-effectiveness of complementary therapies, as reflected in publications in high impact factor medical journals during the years 2012-2014. The search detected 13 randomized controlled studies (RCTs) and 14 meta-analyses, which collectively assessed results of 191 RCTs involving the participation of several thousand patients. Pain was the major focus of acupuncture research in both clinical and fMRI studies, which demonstrated that the effect of acupuncture is beyond the placebo effect. In addition, RCTs supported the use of acupuncture as an adjunctive therapy in chronic obstructive pulmonary disease and in moderate to severe depression. A promising trend was reported for the ameliorating effect of acupuncture in gout. Spinal manipulations may be helpful in cervical pain and yoga may be a useful treatment option for chronic neck pain, chronic low back pain and for pain-related disability. Beneficial effects of adding hypnosis and massage therapy to the treatment of fibromyalgia patients were also documented. Tai-chi may reduce balance impairment in mild-to-moderate Parkinson's disease and improve symptoms in patients with osteoarthritis. Products containing cranberry are associated with protective effects in some subgroups of patients with recurrent urinary tract infections. Chinese herbs may assist in glycemic control of diabetes patients and improve survival rate of patients with non-small cell
lung cancer. Some of the complementary therapies were found to be cost-effective. Physicians should be aware of the possible adverse effects of these treatments and of possible drug-herb interactions. Further larger scale trials are justified.

[2298]

Hypnotic Seminar.

Haley J(1).

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In this transcription of a lecture given in 2000, Jay Haley begins by answering the question, "What is hypnosis?" Haley reviews the circumstances of Gregory Bateson encouraging him to meet with Milton Erickson to discuss the history of hypnosis and the paradoxical nature of trance induction. Haley expresses many original thoughts about multiple personalities, regression to past lives, and how to handle memories that historically may be false. Sophisticated and subtle, this is Haley at his best.

[2299]

An Interactional Explanation of Hypnosis.

Haley J(1).

Author information:
(1)a Stanford University and Veterans Administration Hospital, Palo Alto, California, USA.

In this paper, the author offers what he sees as a new approach to understanding or defining hypnosis. Drawing from his work with Gregory Bateson, John Weakland, Don Jackson, and Bill Fry, Haley emphasizes the relational communicative aspect of trance. Noting the inherent difficulty of studying subjective experience, Haley highlights again the importance of communication and the therapist-patient relationship.

[2300]

Discussions on Hypnosis and Schizophrenia.

Haley J(1).

Author information:
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A classic paper in intellect and argument, this article contains a transcript of a conversation between Jay Haley, John Weakland, and Milton Erickson as they discuss the role of communication in hypnosis and schizophrenia. In 1955, schizophrenia was considered primarily a psychological disorder. Whereas today schizophrenia is mostly considered a biological disorder, this very early, unpublished paper still gives much food for thought and a further glimpse into Haley and Erickson's thinking and intellect at a fervent time in schizophrenia research.

[2301]
Explorer in Hypnosis.

Haley J(1).

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Written in 1957, this paper was Jay Haley's first attempt to organize his impressions of Milton Erickson. The article captures the essence of Erickson: the man, his early concepts of the trance state, his flexibility in trance induction, and his delight in working with those considered "resistant subjects." In this early paper, Jay Haley clearly recognizes Erickson's potential impact on therapy and clinicians around the world. This paper reminds readers of the importance of therapeutic relationship and the power of effective communication.

[B2032]

Comment on the Special Issue: Jay Douglas Haley.

Bloom PB(1).

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[B2033]

Foreword to the Special Issue: Rediscovering Jay Haley's Contributions to Hypnosis.

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[B2034]

Creating past-life identity in hypnotic regression.

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To examine the role of hypnotic suggestion in identity in past-life regression, 2 experiments were conducted at the request of Korea’s major national television companies. A real historical person and a fictional character were selected as past-life identities. After hypnotic induction, a past-life regression suggestion was given. While counting backward to past-life, the suggestion of a specific identity was interspersed 3 times. In 5 of 6 subjects, the same past-life identity that had been suggested was produced, with relatively rich content accompanied by emotional and historical facts identical to the suggested identity. This study found that it was quite simple and easy to manipulate past-life identity. The role of suggestion in the formation of past-life memories during hypnosis is crucial.

[B2035]
Preferences for descriptors of hypnosis: the international point of view.

Munson SO(1), Trenkle B, Gallawa R.

Author information:
(1)a Washington State University, Pullman, USA.

Despite the apparently definitive findings of the Christensen (2005) survey of published members of the Society for Clinical and Experimental Hypnosis (SCEH), disagreement about which term best describes the capacity to experience hypnosis and theoretical preference has continued. SCEH, although international, represents primarily North Americans. Preferences of international clinicians and researchers were inadequately represented, so the authors surveyed preferences from attendees of the International Congress of the International Society of Hypnosis in 2012 in Bremen, Germany. The term trance, translated as trance capacity or trance ability for this study, was overwhelmingly preferred over the other options. Hypnosis was recognized as an identifiable state by 88.46% of respondents, whereas only 11.54% viewed it as a sociocognitive phenomenon (role-play, expectancy, etc.).

A hypnotic analogue of clinical confabulation.

Cox RE(1), Barnier AJ.

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(1)a Macquarie University, Sydney, Australia.

Confabulation-fabricated or distorted memories about oneself-occurs in many disorders, but there is no reliable technique for investigating it in the laboratory. The authors used hypnosis to model clinical confabulation by giving subjects a suggestion for either (a) amnesia for everything that had happened since they started university, (b) amnesia for university plus an instruction to fill in memory gaps, or (c) confusion about the temporal order of university events. They then indexed different types of memory on a confabulation battery. The amnesia suggestion produced the most confabulation, especially for personal semantic information. Notably, subjects confabulated by making temporal confusions. The authors discuss the theoretical implications of this first attempt to model clinical confabulation and the potential utility of such analogues.

Correction to: Mechanisms of Hypnosis: Toward the Development of a Biopsychosocial Model.

[No authors listed]

Erratum for


Hypnotherapy of a pain disorder: a clinical case study.

Artimon HM(1).

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Hypnotherapy's effectiveness in improving and controlling chronic pain of various etiologies has been demonstrated by studies; the mechanism by which hypnosis does this is more complex than a simple induction of muscle relaxation. This study reveals, in addition to this mechanism, a deeper dimension of hypnotherapy from the vantage of a patient with a medical-surgical background, diagnosed with a pain disorder and major severe depressive disorder in addition to incurable painful symptoms, through treatment associated with hypnoanalysis. Following psychotherapy, which included some elements of cognitive-behavioral therapy, a complete remission of the anxious-depressive mood and the painful symptoms was achieved.

[2309]

Feature-based coding system: a new way of characterizing hypnosis styles.

Varga K(1), Kekecs Z.

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In this pilot study, the authors introduce a new system to assess hypnosis style. The Feature-Based Coding System (FBCS) comprises 24 standard individual hypnosis sessions, which were videotaped and coded according to both a previous and the new coding system. In addition, both subjects and hypnotists filled the Archaic Involvement Measure (AIM), the Phenomenology of Consciousness Inventory (PCI), and the Dyadic Interactional Harmony Questionnaire (DIH). The interrater agreement of FBCS was good and the construct Maternal-Paternal Axis had a good internal consistency (α = .95). Construct validity was also supported by the findings. Based on these results, a larger scale study is warranted to further establish the reliability and usefulness of this tool.

[2310]

Are hypnosis and dissociation related? New evidence for a connection.

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The authors revisit the question of the existence of a relationship between hypnotizability and dissociative capacity. In the present study, the State Scale of Dissociation (SSD) replaced the commonly employed Dissociative Experiences Scale (DES) as a measure of dissociation, due to the latter capturing primarily pathological aspects of dissociation. Relationships between the Harvard Scale of Hypnotic Susceptibility, Form A (HGSHS:A), the SSD, and the Phenomenology of Consciousness Inventory (PCI) were assessed in the context of hypnosis. Robust results were found when comparing pre- to post-SSD scores, suggesting heightened nonpathological forms of dissociation are indeed related to hypnotizability. The appropriateness of the DES and similar trait-based measures for evaluating hypnotic phenomena is discussed as well as the relationships between PCI and SSD subscales.

[2311]

Expectancies and hypnotic responsiveness: an experimental-design flaw revealed.

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Recent research suggests that expectancies about being hypnotized have a determinant role in the hypnotic experience. The authors analyzed the relationship between expectancies and the phenomenology of hypnosis using the Phenomenology of Consciousness Inventory and Hypnotic Assessment Procedure. Participants (115) were assigned either to the imagination (hypnosis labeled as imagination) or the hypnosis conditions. Results revealed only a minor influence of expectancies and none on the label "hypnosis" across all variables. These findings indicate that the methodology commonly used to study the influence of expectancies on hypnotic responsivenes and phenomenology might represent a flaw in favor of a causal relationship between expectancies and hypnotic experience.

[2312]

Hypnotizability, not suggestion, influences false memory development.

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Hypnotizability influences the development of false memories. In Experiment 1, participants heard a positive or negative suggestion regarding hypnosis and then listened to 8 Deese-Roediger-McDermott (DRM) false memory paradigm lists in a hypnotic state. Neither hypnosis nor prehypnotic suggestion affected memory. Highly hypnotizable participants were more accurate in recall and recognition. In Experiment 2, suggestions were delivered in the form of feedback. Participants heard a positive or negative suggestion about their performance prior to either the encoding or retrieval of 8 DRM lists. Neither accurate nor false memories were affected by the suggestion. Highly hypnotizable individuals recognized fewer critical lures if they received a negative suggestion about their performance. These results highlight the unusual role of hypnotizability in the creation of false memories.

[2313]

Mechanisms of hypnosis: toward the development of a biopsychosocial model.

Jensen MP(1), Adachi T, Tomé-Pires C, Lee J, Osman ZJ, Miró J.

Author information:
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Erratum in

Evidence supports the efficacy of hypnotic treatments, but there remain many unresolved questions regarding how hypnosis produces its beneficial effects. Most theoretical models focus more or less on biological, psychological, and social factors. This scoping review summarizes the empirical findings regarding the associations between specific factors in each of these domains and response to hypnosis. The findings indicate that (a) no single factor appears primary, (b) different factors may contribute more or less to outcomes in different subsets of individuals or for different conditions, and (c) comprehensive models of hypnosis that incorporate factors from all 3 domains may ultimately prove to be more useful than more restrictive models that focus on just 1 or a very few factors.

[2314]

Advancing research and practice: the revised APA Division 30 definition of hypnosis.
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This article describes the history, rationale, and guidelines for developing a new definition of hypnosis by the Society of Psychological Hypnosis, Division 30 of the American Psychological Association. The definition was developed with the aim of being concise, heuristic, and allowing for alternative theories of the mechanisms (to be determined in empirical scientific study). The definition of hypnosis is presented as well as definitions of the following related terms: hypnotic induction, hypnotizability, and hypnotherapy. The implications for advancing research and practice are discussed. The definitions are presented within the article.

[2315]

Hypnosis in breast cancer care: a systematic review of randomized controlled trials.

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INTRODUCTION: Many breast cancer patients and survivors experience pain and emotional stress related to their disease, its diagnostic procedures, or treatment. Hypnosis has long been used for the treatment of such symptoms. The aim of this review was to systematically assess the effectiveness of hypnosis in women with breast cancer, breast cancer survivors, and in women undergoing diagnostic breast biopsy.

METHODS: PubMed, Scopus, the Cochrane Library, PsycINFO, and CAMBASE were screened through February 2014 for randomized controlled trials (RCTs) of hypnosis in women with breast cancer or undergoing diagnostic breast biopsy. RCTs on postmenopausal women without a history of breast cancer were also eligible. Primary outcomes were pain, distress, fatigue, nausea/vomiting, and hot flashes. Safety was defined as secondary outcome measure. Risk of bias was assessed by 2 reviewers independently using the Cochrane Risk of Bias Tool.

RESULTS: Thirteen RCTs with 1357 patients were included. In women undergoing diagnostic breast biopsy (3 RCTs), hypnosis positively influenced pain and distress; 1 RCT on breast cancer surgery found effects of hypnosis on pain, distress, fatigue, and nausea. For women undergoing radiotherapy (3 RCTs), hypnosis combined with cognitive-behavioral therapy improved distress and fatigue. In 3 RCTs on women with and without a history of breast cancer experiencing hot flashes, hypnosis improved hot flashes and distress. Three RCTs on women with metastatic breast cancer found effects on pain and distress.

CONCLUSIONS: This systematic review found sparse but promising evidence for the effectiveness of hypnosis in breast cancer care. While more research is needed to underpin these results, hypnosis can be considered as an ancillary intervention in the management of breast cancer-related symptoms.

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[2316]

Systematic review of complementary and alternative medicine treatments in inflammatory bowel diseases.
OBJECTIVE: We performed a systematic review for Complementary and Alternative Medicine [CAM] as defined by the National Institute of Health in Inflammatory Bowel Disease [IBD], ie Crohn's disease [CD] and ulcerative colitis [UC], with the exception of dietary and nutritional supplements, and manipulative therapies.

METHODS: A computerized search of databases [Cochrane Library, Pubmed/Medline, PsychINFO, and Scopus] through March 2014 was performed. We screened the reference sections of original studies and systematic reviews in English language for CAM in IBD, CD and UC. Randomized controlled trials [RCT] and controlled trials [CT] were referred and assessed using the Cochrane risk of bias tool.

RESULTS: A total of: 26 RCT and 3 CT for herbal medicine, eg aloe-vera gel, andrographis paniculata, artemisia absinthium, barley foodstuff, boswellia serrata, cannabis, curcumin, evening primrose oil, Myrrhinil intest®, plantago ovata, silymarin, sophora, tormentil, wheatgrass-juice and wormwood; 1 RCT for trichuris suis ovata; 7 RCT for mind/body interventions such as lifestyle modification, hypnotherapy, relaxation training and mindfulness; and 2 RCT in acupuncture; were found. Risk of bias was quite heterogeneous. Best evidence was found for herbal therapy, ie plantago ovata and curcumin in UC maintenance therapy, wormwood in CD, mind/body therapy and self-intervention in UC, and acupuncture in UC and CD.

CONCLUSIONS: Complementary and alternative therapies might be effective for the treatment of inflammatory bowel diseases; however, given the low number of trials and the heterogeneous methodological quality of trials, further in-depth research is necessary.

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[2317]

Type 1 diabetes complicated with uncontrollable adult cyclic vomiting syndrome: a case report.


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We herein describe the case of a 29-year-old woman with type 1 diabetes from 10 years of age who developed adult cyclic vomiting syndrome. Beginning at 25 years of age, she was frequently hospitalized for stress-induced vomiting. Her vomiting episodes developed acutely and remitted after severe vomiting of more than 30
times a day for a few days. The vomiting periods were accompanied by leukocytosis with a predominance of neutrophils, high blood pressure and fever. In addition, it was noted that her levels of both adrenocorticotropic hormone and antidiuretic hormone during the vomiting attacks increased and subsequently dramatically decreased immediately after symptom improvement; therefore, she was diagnosed with adult-type cyclic vomiting syndrome in accordance with the diagnostic criteria of Rome III, a system developed to classify functional gastrointestinal disorders. Though glycemic control had improved with continuous subcutaneous insulin infusion therapy, the vomiting frequency increased due to the failure of drug treatments and general psychotherapy to terminate the vomiting attacks, making discharge difficult and greatly interfering with everyday life. Eventually, hypnotherapy and miniature garden therapy were prescribed, which significantly reduced the vomiting frequency, making it possible to discharge her from inpatient medical care. In the treatment of this patient with type 1 diabetes and adult-type cyclic vomiting syndrome, continuous subcutaneous insulin infusion therapy and comprehensive psychotherapy were effective.

[2318]
Photodynamic therapy--aspects of pain management.

[Article in English, German]
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Topical photodynamic therapy (PDT) is a highly effective and safe treatment method for actinic keratoses with an excellent cosmetic outcome and is commonly used for the therapy of large areas of photodamaged skin with multiple clinically manifest and subclinical lesions. However, the major drawback of photodynamic therapy is the pain experienced during the treatment that can be intense and sometimes even intolerable for patients, requiring interruption or termination of the process. Several strategies for controlling pain during photodynamic therapy have been studied but few effective methods are currently available. Therefore, this review puts the spotlight on predictors on pain intensity and aspects of pain management during photodynamic therapy.

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[2319]

Self, memory, and imagining the future in a case of psychogenic amnesia.

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We report a case of psychogenic amnesia and examine the relationships between autobiographical memory impairment, the self, and ability to imagine the future. Case study JH, a 60-year-old male, experienced a 6-year period of pervasive psychogenic amnesia covering all life events from childhood to the age of 53. JH was tested during his amnesic period and again following hypnotherapy and the recovery of his memories. JH's amnesia corresponded with deficits in self-knowledge and imagining the future. Results are discussed with reference to models of self and memory and processes involving remembering and imagining.

[2320]

Walsh E, Guilmette DN, Longo MR, Moore JW, Oakley DA, Halligan PW, Mehta MA, Deeley Q.

Hypnotic suggestibility (HS) is the ability to respond automatically to suggestions and to experience alterations in perception and behavior. Hypnotically suggestible participants are also better able to focus and sustain their attention on an experimental stimulus. The present study explores the relation between HS and susceptibility to the rubber hand illusion (RHI). Based on previous research with visual illusions, it was predicted that higher HS would lead to a stronger RHI. Two behavioral output measures of the RHI, an implicit (proprioceptive drift) and an explicit (RHI questionnaire) measure, were correlated against HS scores. Hypnotic suggestibility correlated positively with the implicit RHI measure contributing to 30% of the variation. However, there was no relation between HS and the explicit RHI questionnaire measure, or with compliance control items. High hypnotic suggestibility may facilitate, via attentional mechanisms, the multisensory integration of visuopropiroceptive inputs that leads to greater perceptual mislocalization of a participant’s hand. These results may provide insight into the multisensory brain mechanisms involved in our sense of embodiment.


The impact of hypnotic suggestions on reaction times in continuous performance test in adults with ADHD and healthy controls.

Virta M(1), Hiltunen S(2), Mattsson M(3), Kallio S(4).

Virta M(1), Hiltunen S(2), Mattsson M(3), Kallio S(4).

Attention is one of the key factors in both hypnotic processes and patients with ADHD. In addition, the brain areas associated with hypnosis and ADHD overlap in many respects. However, the use of hypnosis in ADHD patients has still received only minor attention in research. The main purpose of the present work was to investigate whether hypnosis and hypnotic suggestions influence the performance of adult ADHD (n = 27) and control participants (n = 31) in the continuous performance test (CPT). The hypnotic susceptibility of the participants was measured by the Harvard Group Scale of Hypnotic Susceptibility (HGSHS:A) and the attentional task was a three minute long auditory version of the CPT. The CPT task was administered four times: before hypnosis (CPT1), after a hypnotic induction (CPT2), after suggestions about speed and accuracy (CPT3), and after the termination of hypnosis (CPT4). The hypnotic susceptibility of the participants was measured by the Harvard Group Scale of Hypnotic Susceptibility (HGSHS:A) and the attentional task was a three minute long auditory version of the CPT. The CPT task was administered four times: before hypnosis (CPT1), after a hypnotic induction (CPT2), after suggestions about speed and accuracy (CPT3), and after the termination of hypnosis (CPT4). The susceptibility of the groups measured by HGSHS:A did not differ. There was a statistically significant decrease in reaction times in both ADHD and control groups between CPT2 and CPT3. The differences between CPT1 and CPT2, even though non-significant, were different in the two groups: in the ADHD group reaction times decreased whereas in the control group they increased. Both groups made very few errors in the short CPT. This study indicates that hypnotic suggestions have an effect on reaction times in the sustained attention task both in adult ADHD patients and control subjects. The theoretical and clinical implications are discussed.

Suggestion-Induced Modulation of Semantic Priming during Functional Magnetic Resonance Imaging.

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Using functional magnetic resonance imaging during a primed visual lexical decision task, we investigated the neural and functional mechanisms underlying modulations of semantic word processing through hypnotic suggestions aimed at altering lexical processing of primes. The priming task was to discriminate between target words and pseudowords presented 200 ms after the prime word which was semantically related or unrelated to the target. In a counterbalanced study design, each participant performed the task once at normal wakefulness and once after the administration of hypnotic suggestions to perceive the prime as a meaningless symbol of a foreign language. Neural correlates of priming were defined as significantly lower activations upon semantically related compared to unrelated trials. We found significant suggestive treatment-induced reductions in neural priming, albeit irrespective of the degree of suggestibility. Neural priming was attenuated upon suggestive treatment compared with normal wakefulness in brain regions supporting automatic (fusiform gyrus) and controlled semantic processing (superior and middle temporal gyri, pre- and postcentral gyri, and supplementary motor area). Hence, suggestions reduced semantic word processing by conjointly dampening both automatic and strategic semantic processes.


Historical perspectives on music as a cause of disease.

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The relationship between music and medicine is generally understood in the benign context of music therapy, but, as this chapter shows, there is a long parallel history of medical theories that suggest that music can cause real physical and mental illness. During the seventeenth and eighteenth centuries, the idea of music as an expression of universal harmony was challenged by a more mechanistic model of nervous stimulation. By the 1790s, there was a substantial discourse on the dangers of musical overstimulation to health in medicine, literature, and etiquette books. During the nineteenth century, the sense of music as a pathogenic stimulant gained in influence. It was often linked to fears about sexuality, female gynecological health, and theories of hypnosis and degeneration. In the twentieth century, the debate on the medical perils of the wrong kinds of music became overtly politicized in Germany and the Soviet Union. Likewise, the opponents of jazz, particularly in the United States, often turned to medicine to fend off its supposed social, moral, and physical consequences. The Cold War saw an extensive discourse on the idea of musical "brainwashing," that rumbled on into the 1990s. Today, regular media panics about pathological music are mirrored by alarming evidence of the deliberate use of music to harm listeners in the context of the so-called War on Terror. Can music make you ill? Music therapy is a common if perhaps rather neglected part of medicine, but its diametric opposite, the notion that music might lead to real mental and physical illness, may seem improbable. In fact, over the last two hundred years, there have been many times when as much was written about the medical dangers of music.
as about its potential benefits. Since the eighteenth century, fears about music's effects on the nerves and the mind have created a remarkably extensive discourse on pathological music based on a view of both music and the causation of disease as matters of nervous stimulation (Kennaway, 2010, 2012a). From concerns about young ladies fainting from excessive stimulation while playing the keyboard in the Georgian period and Victorian panics about Wagner to the Nazi concept of “degenerate music” and Cold War anxieties about musical brainwashing, the debate on the medical dangers of music has generally combined a theoretical and terminological basis in the medicine of the period concerned with broader agendas about gender, sexuality, race, and social order. Each generation has tended to regard the music it grew up with as the epitome of rationality and healthy mindedness while ascribing hair-raising medical consequences to newer music. This debate has continued right up to the present day, with the depressing difference that, with the systematic use of music in torture in the so-called War on Terror, the idea that music can be bad for you has become a much more realistic prospect. Although the debate about music's ill effects has largely been bogus, there are ways in which music can in fact adversely affect health. Most directly of all, there is of course the power of sheer volume to cause psychological strain and hearing damage. It was only really with the advent of the modern age, with its industrial noise, expanded orchestras, and amplified sound systems, that this became a widespread concern. Although the high-decibel sound can include music, it is not its character as music that causes health problems, so it falls rather outside our purview. Medical problems that do relate to specifically to music itself include the rare conditions of arousal-related arrhythmia and musicogenic epilepsy, but in both of these contexts, music is essentially a trigger rather than a fundamental cause of sickness (Sharp, 1997; Viskin, 2008; Wieser et al., 1997). There is a long history of medical accounts of musical hallucinations, which are certainly sometimes associated with serious medical conditions, but they are by no means always experienced as pathological (Berrios, 1990; Evers and Tanja, 2004). It should also be remembered that it is quite possible that many of the accounts of music causing disease refer to real physical symptoms and suffering, albeit generally with a psychosomatic rather than direct physiological explanation. This kind of psychological impact of music has meant it has been linked to a variety of culturally bound syndromes. Having said that, it is also clear that the most of the discourse on pathological music is basically fallacious. Over and over again, fundamentally moral objections to music relating to sexuality, gender, social order, and self-control have been clear beneath a veneer of medical language.

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[2324]

Changes in emotional distress, short term memory, and sustained attention following 6 and 12 sessions of progressive muscle relaxation training in 10-11 years old primary school children.

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PURPOSE: This study compared the effects of 6 and 12 sessions of relaxation training on emotional distress, short-term memory, and sustained attention in primary school children.

METHODS: Participants (N = 132) aged 10 and 11 years old participated in this study. All participants and their parents provided written informed consent. Participants completed the measurement instruments before and after the completion of relaxation training.

RESULTS: Nearly half (49%) of all respondents reported moderate to extremely severe stress, and 80 and 61% reported moderate to extremely severe anxiety and depression, respectively. The results of a one-way analysis of variance revealed a significant difference among the groups in mean changes in short-term memory. A greater memory increase was observed in the 12-session than in the six-session
and no-training group.

CONCLUSION: It can be conceived that 12-session of training should be considered when prescribing relaxation regimens as a nonspecific clinical treatment (i.e. for healthy students).

[2325]

Internet-based self-help for trichotillomania: a randomized controlled study comparing decoupling and progressive muscle relaxation.

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BACKGROUND: Trichotillomania (TTM) is characterized by recurrent hair-pulling that results in substantial hair loss. A previous pilot study demonstrated that the online self-help intervention 'decoupling' (DC) might be effective at reducing hair-pulling symptoms, with a stronger effect than progressive muscle relaxation (PMR). We aimed to extend these findings using a more robust randomized clinical trial design, including diagnostic interviews by phone, a 6-month follow-up and e-mail support.

METHODS: One hundred five adults with TTM were recruited online and randomly allocated to either DC (n = 55) or PMR (n = 50). The intervention lasted 4 weeks, with severity of TTM assessed at 3 time points (before intervention, immediately after intervention and at the 6-month follow-up) using the Massachusetts General Hospital Hair-Pulling Scale (MGH-HPS). Both intention-to-treat and completer analyses were conducted.

RESULTS: Intention-to-treat analysis demonstrated highly significant and comparable symptom reductions (MGH-HPS) in both the DC and PMR groups (p < 0.001, partial \( \eta^2 = 0.31 \)) that persisted through 6 months of follow-up.

Participants' subjective appraisals favoured DC in some areas (e.g. greater satisfaction with DC than PMR). Completer analyses demonstrated the same pattern as the intention-to-treat analyses.

CONCLUSIONS: Despite subjective appraisals in favour of DC, symptom reduction was comparable in the two groups. While the results suggest that even short Internet-based interventions like DC and PMR potentially help individuals with TTM, a partial effect of unspecific factors, like regression towards the mean, cannot be ruled out. Therefore, longitudinal studies with non-treated controls are warranted.

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[2326]

[Relaxation to defuse acting out for dangerous schizophrenics].

[Article in French]

Bogar M, Bouchard JP.

Relaxation is often considered as a contraindication in the management of schizophrenics. An experiment carried out with dangerous schizophrenics at the unit for dangerous patients at Cadillac general hospital revealed that, on the contrary, such an opinion is not necessarily valid in all cases. Indeed, for many of these patients, relaxation can have positive effects on their clinical state. As with its other indications, relaxation must be practised by clinicians who have an in-depth knowledge of techniques to use and of mental disorders treated in that way.

[2327]
Hypnotic relaxation results in elevated thresholds of sensory detection but not of pain detection.

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BACKGROUND: Many studies show an effectiveness of hypnotic analgesia. It has been discussed whether the analgesic effect is mainly caused by the relaxation that is concomitant to hypnosis. This study was designed to evaluate the effects of hypnotic relaxation suggestion on different somatosensory detection and pain thresholds.

METHODS: Quantitative sensory testing (QST) measurements were performed before and during hypnosis in twenty-three healthy subjects on the dorsum of the right hand. Paired t-test was used to compare threshold changes. The influence of hypnotic susceptibility was evaluated by calculating correlation coefficients for threshold changes and hypnotic susceptibility (Harvard group scale).

RESULTS: During hypnosis significantly changed somatosensory thresholds (reduced function) were observed for the following sensory detection thresholds: Cold Detection Threshold (CDT), Warm Detection Threshold (WDT), Thermal Sensory Limen (TSL) and Mechanical Detection Threshold (MDT). The only unchanged sensory detection threshold was Vibration Detection Threshold (VDT). No significant changes were observed for the determined pain detection thresholds (Cold Pain Thresholds, Heat Pain Thresholds, Mechanical Pain Sensitivity, Dynamic Mechanical Allodynia, Wind-up Ratio and Pressure Pain Threshold). No correlation of hypnotic susceptibility and threshold changes were detected.

CONCLUSION: Hypnotic relaxation without a specific analgesic suggestion results in thermal and mechanical detection, but not pain threshold changes. We thus conclude that a relaxation suggestion has no genuine effect on sensory pain thresholds.

TRIAL REGISTRATION: ClinicalTrials.gov, Identifier: NCT02261155 (9th October 2014).

Effectiveness of app-based relaxation for patients with chronic low back pain (Relaxback) and chronic neck pain (Relaxneck): study protocol for two randomized pragmatic trials.

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BACKGROUND: Chronic low back pain (LBP) and neck pain (NP) are highly prevalent conditions resulting in high economic costs. Treatment guidelines recommend relaxation techniques, such as progressive muscle relaxation, as adjuvant therapies. Self-care interventions could have the potential to reduce costs in the health care system, but their effectiveness, especially in a usual care setting, is unclear. The aim of these two pragmatic randomized studies is to evaluate whether an additional app-delivered relaxation is more effective in the reduction of chronic LBP or NP than usual care alone.

METHODS/DESIGN: Each pragmatic randomized two-armed study aims to include a total of 220 patients aged 18 to 65 years with chronic (>12 weeks) LBP or NP and an average pain intensity of ≥ 4 on a numeric rating scale (NRS) in the 7 days before recruitment. The participants will be randomized into an intervention and a usual care group. The intervention group will be instructed to practice one of these 3 relaxation techniques on at least 5 days/week for 15 minutes/day over a period of 6 months starting on the day of randomization: autogenic training, mindfulness meditation, or guided imagery. Instructions and exercises will be provided using a smartphone app, baseline information will be collected using...
paper and pencil. Follow-up information (daily, weekly, and after 3 and 6 months) will be collected using electronic diaries and questionnaires included in the app. The primary outcome measure will be the mean LBP or NP intensity during the first 3 months of intervention based on daily pain intensity measurements on a NRS (0 = no pain, 10 = worst possible pain). The secondary outcome parameters will include the mean pain intensity during the first 6 months after randomization based on daily measurements, the mean pain intensity measured weekly as the average pain intensity of the previous 7 days over 3 and 6 months, pain acceptance, 'LBP- and NP-related' stress, sick leave days, pain medication intake, adherence, suspected adverse reaction, and serious adverse events.

DISCUSSION: The designed studies reflect a usual self-care setting and will provide evidence on a pragmatic self-care intervention that is easy to combine with care provided by medical professionals.

TRIAL REGISTRATION: ClinicalTrials.gov identifier Relaxback NCT02019498, Relaxneck NCT02019134 registered on 18 December 2013.

[2329]

HypnosIS to facilitate trans-Esophageal echocardiography Tolerance: The I-SLEPT study.

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BACKGROUND: Trans-oesophageal echocardiography (TOE) is one of the major diagnostic tests in cardiovascular medicine, but the procedure is associated with some discomfort for the patient.
AIM: To determine the additive value of hypnosis as a means of improving patient comfort during TOE.
METHODS: We randomly assigned 98 patients with non-emergency indications for TOE to a 30-minute hypnosis session combined with topical oropharyngeal anaesthesia (HYP group) or topical oropharyngeal anaesthesia only (CTRL group) before the procedure. The primary efficacy endpoint was the level of patient discomfort assessed using a visual analogue scale (VAS).
RESULTS: The VAS score was significantly reduced in the HYP group compared with the CTRL group (6 [5; 8] vs. 7 [5; 9]; P=0.046). No statistically significant differences were observed in terms of procedure failure (HYP group 2.2% vs. CTRL group 3.9%; P=1.00) and procedure length (HYP group 7 [5; 11] minutes vs. CTRL group 8 [7; 11] minutes; P=0.29). However, the patients' subjective estimations of the length of the procedure were significantly shorter in the HYP group than in the CTRL group [5; 11] vs. 10 [10; 20] minutes; P<0.0001). There were no major adverse events in either group. The reported minor events rate was lower in the HYP group (36% vs. 57%; P=0.04).
CONCLUSION: Hypnosis is an efficient alternative or complementary method for improving patient comfort during TOE.

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[2330]
More and more research is being carried out into complementary medicines. It is no longer possible to say that these treatments have no scientific basis, as for some, their efficacy has been proven by clinical studies. Health services must move beyond ideological arguments and integrate safe and cost-effective complementary medicines.

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Vagal tone: effects on sensitivity, motility, and inflammation.

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The vagus nerve (VN) is a key element of the autonomic nervous system. As a mixed nerve, the VN contributes to the bidirectional interactions between the brain and the gut, i.e., the brain-gut axis. In particular, after integration in the central autonomic network of peripheral sensations such as inflammation and pain via vagal and spinal afferents, an efferent response through modulation of preganglionic parasympathetic neurons of the dorsal motor nucleus of the vagus and/or preganglionic sympathetic neurons of the spinal cord is able to modulate gastrointestinal nociception, motility, and inflammation. A low vagal tone, as assessed by heart rate variability, a marker of the sympatho-vagal balance, is observed in functional digestive disorders and inflammatory bowel diseases. To restore a normal vagal tone appears as a goal in such diseases. Among the therapeutic tools, such as drugs targeting the cholinergic system and/or complementary medicine (hypnosis, meditation...), deep breathing, physical exercise, VN stimulation (VNS), either invasive or non-invasive, appears as innovative. There is new evidence in the current issue of this Journal supporting the role of VNS in the modulation of gastrointestinal functions.

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Hypnotherapy for disability-related pain: A meta-analysis.

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Hypnotherapy can address the biopsychosocial aspects of disability-related pain,
although the available evidence is limited in quality and quantity. Meta-analytic techniques were utilised to evaluate 10 controlled studies. Hypnotherapy produced significant short-term improvements in fatigue, pain experience and affect. However, a lack of significance was noted at 3- to 6-month follow-up. A beneficial effect size (d(w)= 0.53; confidence interval = 0.28-0.84) in comparison to control conditions was reported, although comparability with other cognitive-behavioural treatments could not be confirmed across the few studies reporting this data (d(w)= 0.06; confidence interval = -0.33 to 0.45). The findings highlight the need for further controlled and longitudinal research in this area.

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[2333]


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In endodontics, severe involuntary gagging can have a severe impact on treatment procedure. There are many ways to ease the gag reflex, one of which is hypnosis. A 34-year-old male was referred for root canal treatment of a molar tooth. He had not received any dental treatments for the past nine years due to fear of severe gag reflex. Three hypnotic sessions based upon eye fixation, progressive muscle relaxation and guided imagery techniques were spent for psychosomatic management. The gag reflex was controlled and reduced to a normal level, and the required dental treatments including root canal therapy and restoration were performed successfully. This report shows that hypnosis can control gag reflex for dental treatments.

[2334]


The characteristics of women who use hypnotherapy for intrapartum pain management: Preliminary insights from a nationally-representative sample of Australian women.

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OBJECTIVES: This manuscript presents a preliminary examination of the characteristics of women who choose intrapartum hypnosis for pain management.

DESIGN: Cross-sectional analysis of 2445 women (31-36 years) from a sub-study of the Australian Longitudinal Study on Women's Health (ALSWH), employing Fisher exact tests.

SETTING: Australia.

MAIN OUTCOME MEASURES: Use of intrapartum hypnosis, or hypnobirthing, for pain management during labour and birth.

RESULTS: Women using hypnobirthing were more likely to have consulted with an acupuncturist or naturopath, or attended yoga/meditation classes during pregnancy ($p<0.0001$). Use of CM products such as herbal medicines, aromatherapy oils, homoeopathy, herbal teas or flower essences ($p<0.001$) was also more common amongst these women. Women choosing hypnotherapy for intrapartum pain management less commonly identified as feeling safer knowing that an obstetrician is providing their care ($p<0.001$), and were more likely to labour in a birth centre or in a community centre (i.e. at home).

CONCLUSIONS: This analysis provides preliminary analysis into an as yet unexamined topic in contemporary maternity health service utilisation. The findings from this analysis may be useful for maternity health professionals and policy makers when responding to the needs of women choosing to use hypnotherapy for intrapartum pain management.

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Impact of Hypnosis Intervention in Alleviating Psychological and Physical Symptoms During Pregnancy.

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Physical symptoms (e.g., vomiting) and psychological symptoms (stress, anxiety, and depression) during pregnancy are common. Various strategies such as hypnosis are available to reduce these symptoms. The objective of the authors in this study is to investigate the impact of a hypnosis intervention in reducing physical and psychological symptoms during pregnancy. A pre-test/post-test quasi-experimental design was employed in this study. The hypnosis intervention was given to the experimental group participants at weeks 16 (baseline), 20 (time point 1), 28 (time point 2), and 36 (time point 3) of their pregnancy. Participants in the control group received only the traditional antenatal care. Participants from both groups completed the Depression Anxiety Stress Scale-21 (DASS-21) and a Pregnancy Symptoms Checklist at weeks 16, 20, 28 and 36 of pregnancy. Results indicated that stress and anxiety symptoms were significantly reduced for the experimental group, but not for the control group. Although mean differences for the depressive symptoms were not significant, the experimental group had lower symptoms at time point 3. The physical symptoms’ results showed significant group differences at time point 3, indicating a reduction in the experience of physical symptoms for the experimental group participants. Our study showed that hypnosis intervention during pregnancy aided in reducing physical and psychological symptoms during pregnancy.

Are Anesthesia Providers Ready for Hypnosis? Anesthesia Providers’ Attitudes Toward Hypnotherapy.

Stone AB(1), Sheinberg R(1), Bertram A(1), Seymour AR(1).
This study sought to measure current attitudes towards hypnosis among anesthesia providers using an in-person survey distributed at a single grand rounds at a single academic teaching hospital. One hundred twenty-six anesthesia providers (anesthesiologists and nurse anesthetists) were included in this study. A 10-question Institutional Review Board (IRB)-approved questionnaire was developed. One hundred twenty-six (73% of providers at the meeting) anesthesia providers completed the survey. Of the respondents, 54 (43%) were anesthesiologists, 42 (33%) were trainees (interns/residents/fellows) in anesthesia, and 30 (24%) were nurse anesthetists. Over 70% of providers, at each level of training, rated their knowledge of hypnosis as either below average or having no knowledge. Fifty-two (42%) providers agreed or strongly agreed that hypnotherapy has a place in the clinical practice of anesthesia, while 103 (83%) believed that positive suggestion has a place in the clinical practice of anesthesia (p < .0001). Common reasons cited against using hypnosis were that it is too time consuming (41%) and requires special training (34%). Only three respondents (2%) believed that there were no reasons for using hypnosis in their practice. These data suggest that there is a self-reported lack of knowledge about hypnosis among anesthesia providers, although many anesthesia providers are open to the use of hypnosis in their clinical practice. Anesthesia providers are more likely to support the use of positive suggestion in their practice than hypnosis. Practical concerns should be addressed if hypnosis and therapeutic verbal techniques are to gain more widespread use.


Effectiveness of medical hypnosis for pain reduction and faster wound healing in pediatric acute burn injury: study protocol for a randomized controlled trial.

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BACKGROUND: Burns and the associated wound care procedures can be extremely painful and anxiety-provoking for children. Burn injured children and adolescents are therefore at greater risk of experiencing a range of psychological reactions, in particular posttraumatic stress disorder, which can persist for months to years after the injury. Non-pharmacological intervention is critical for comprehensive pain and anxiety management and is used alongside pharmacological analgesia and anxiolysis. However, effective non-pharmacological pain and anxiety management during pediatric burn procedures is an area still needing improvement. Medical hypnosis has received support as a technique for effectively decreasing pain and anxiety levels in adults undergoing burn wound care and in children during a variety of painful medical procedures (e.g., bone marrow aspirations, lumbar punctures, voiding cystourethograms, and post-surgical pain). Pain reduction during burn wound care procedures is linked with improved wound healing rates. To date, no randomized controlled trials have investigated the use of medical hypnosis in pediatric burn populations. Therefore this study aims to determine if medical hypnosis decreases pain, anxiety, and biological stress markers during wound care procedures; improves wound healing times; and decreases rates of traumatic stress reactions in pediatric burn patients.

METHODS/DESIGN: This is a single-center, superiority, parallel-group, prospective
randomized controlled trial. Children (4 to 16 years, inclusive) with acute burn injuries presenting for their first dressing application or change are randomly assigned to either the (1) intervention group (medical hypnosis) or (2) control group (standard care). A minimum of 33 participants are recruited for each treatment group. Repeated measures of pain, anxiety, stress, and wound healing are taken at every dressing change until ≥95 % wound re-epithelialization. Further data collection assesses impact on posttraumatic stress symptomatology, speed of wound healing, and parent perception of how easy the dressing change is for their child.

DISCUSSION: Study results will elucidate whether the disease process can be changed by using medical hypnosis with children to decrease pain, anxiety, and stress in the context of acute burn wounds.

TRIAL REGISTRATION: Australian New Zealand Clinical Trials Registry ACTRN12615000419561.

[2338]

The Efficacy, Safety and Applications of Medical Hypnosis.
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BACKGROUND: The efficacy and safety of hypnotic techniques in somatic medicine, known as medical hypnosis, have not been supported to date by adequate scientific evidence.

METHODS: We systematically reviewed meta-analyses of randomized controlled trials (RCTs) of medical hypnosis. Relevant publications (January 2005 to June 2015) were sought in the Cochrane databases CDSR and DARE, and in PubMed. Meta-analyses involving at least 400 patients were included in the present analysis. Their methodological quality was assessed with AMSTAR (A Measurement Tool to Assess Systematic Reviews). An additional search was carried out in the CENTRAL and PubMed databases for RCTs of waking suggestion (therapeutic suggestion without formal trance induction) in somatic medicine.

RESULTS: Out of the 391 publications retrieved, five were reports of metaanalyses that met our inclusion criteria. One of these meta-analyses was of high methodological quality; three were of moderate quality, and one was of poor quality. Hypnosis was superior to controls with respect to the reduction of pain and emotional stress during medical interventions (34 RCTs, 2597 patients) as well as the reduction of irritable bowel symptoms (8 RCTs, 464 patients). Two meta-analyses revealed no differences between hypnosis and control treatment with respect to the side effects and safety of treatment. The effect size of hypnosis on emotional stress during medical interventions was low in one meta-analysis, moderate in one, and high in one. The effect size on pain during medical interventions was low. Five RCTs indicated that waking suggestion is effective in medical procedures.

CONCLUSION: Medical hypnosis is a safe and effective complementary technique for use in medical procedures and in the treatment of irritable bowel syndrome. Waking suggestions can be a component of effective doctor-patient communication in routine clinical situations.

[2339]

Hypnobirth within the NHS: time to ditch the parent craft?
Gavin-Jones T.
Antenatal education within the National Health Service (NHS) is a service in decline within some hospital trusts. Classes on offer are being moved into online formats or discontinued completely. Whilst research into antenatal education remains limited, what is known is that good birth preparation is of value. "Participative preparation for childbirth can enhance women's overall satisfaction with the childbirth experience" (Schrader McMillan et al 2009: 49). There are pockets of excellent antenatal education within the NHS, but no system for regulating the quality and content. Traditional 'parent craft' classes can be oversubscribed, turning what should be a participative group into an audience. Offering good quality antenatal education has the potential to increase normality, improve the birth outcome and the experience of both woman and her birth partner. Is it time to ditch the parent craft and implement dynamic woman-focused education?


Hypnosis for pain management during labour and childbirth.

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Update of

BACKGROUND: This review is one in a series of Cochrane reviews investigating pain management for childbirth. These reviews all contribute to an overview of systematic reviews of pain management for women in labour, and share a generic protocol. This review updates an earlier version of the review of the same title.

OBJECTIVES: To examine the effectiveness and safety of hypnosis for pain management during labour and childbirth.

SEARCH METHODS: We searched the Cochrane Pregnancy and Childbirth Group's Trials Register (30 September 2015) and the reference lists of primary studies and review articles.

SELECTION CRITERIA: Randomised controlled trials (RCTs) and quasi-RCTS comparing preparation for labour using hypnosis and/or use of hypnosis during labour, with or without concurrent use of pharmacological or non-pharmacological pain relief methods versus placebo, no treatment or any analgesic drug or technique.

DATA COLLECTION AND ANALYSIS: Two review authors independently extracted data and assessed trial quality. Where possible we contacted study authors seeking additional information about data and methodology.

MAIN RESULTS: We included nine trials randomising a total of 2954 women. The risk of bias in trials was variable, there were several well-designed large trials and some trials where little was reported about trial design. Although eight of the nine trials assessed antenatal hypnotherapy, there were considerable differences between these trials in timing and technique. One trial provided hypnotherapy during labour. In this updated review we compared hypnosis interventions with all control groups (main comparison) and also with specific control conditions: standard care (nine RCTs), supportive counselling (two RCTs) and relaxation training (two RCTs). In the main comparison, women in the hypnosis group were less likely to use pharmacological pain relief or analgesia than those in the control groups, (average risk ratio (RR) 0.73, 95% CI 0.57 to 0.94, eight studies, 2916 women; very low-quality evidence; random-effects model). There were no clear differences between women in the hypnosis group and those in the control groups for most of the other primary outcomes. There were no clear differences for sense of coping with labour (MD 0.22, 95% CI -0.14 to 0.58, one study, 420 women; low-quality evidence) or spontaneous vaginal birth (average RR 1.12, 95% CI 0.96 to 1.32, six studies, 2361 women; low-quality evidence; random-effects model). There were no clear differences for satisfaction with pain relief (measured on a seven-point scale two weeks postnatally) for women in the hypnosis group who also received pethidine (MD 0.41, 95% CI -0.45 to 1.27; one study, 72 women), Entonox
self-hypnosis (MD 0.28, 95% CI -0.32 to 0.88; one study, 160 women), or epidural (MD -0.03, 95% CI -0.40 to 0.34; one study, 127 women), but a slight benefit in favour of hypnosis was seen for women who received water immersion (MD 0.52, 95% CI 0.04 to 1.00; one study, 174 women) (all low-quality evidence). There were no clear differences for satisfaction with pain relief when it was measured as the number of women who reported they had adequate pain relief (risk ratio (RR) 1.06, 95% confidence interval (CI) 0.94 to 1.20, one study, 264 women; low-quality evidence). It should be noted that for pharmacological pain relief and spontaneous vaginal birth, there was evidence of considerable statistical heterogeneity, which could not be fully explained by subgroup analysis. For this review's secondary outcomes, no clear differences were found between women in the hypnosis group and women in the control groups for most outcomes where data were available. There was mixed evidence regarding benefits for women in the hypnosis group compared with all control groups for pain intensity, satisfaction with childbirth experience and postnatal depression. For each of these outcomes, data from more than one trial were available for analysis but could not be combined due to differences in measurement methods. There was evidence that fewer women in the hypnosis group stayed in hospital for more than two days after the birth but this finding was based on one small study (RR 0.11, 95% CI 0.02 to 0.83). No clear differences between women in the hypnosis group and the control groups were found for the other secondary outcomes where data were available. In the comparisons of hypnosis with specific types of control conditions: standard care, supportive counselling and relaxation training, there were no clear differences found between women in the hypnosis group and those in the standard care control groups or the relaxation control groups for the primary outcomes. Compared with the women in the supportive counselling control group, women in the hypnosis group were less likely to use pharmacological analgesia (average RR 0.48, 95% CI 0.32 to 0.73, two studies, 562 women). They were also more likely to have a spontaneous vaginal birth (RR 2.42, 95% CI 1.43 to 4.07), although this finding was based on the results of one small study. Overall these new comparisons displayed much less statistical heterogeneity than the comparison including all control groups.

AUTHORS’ CONCLUSIONS: There are still only a relatively small number of studies assessing the use of hypnosis for labour and childbirth. Hypnosis may reduce the overall use of analgesia during labour, but not epidural use. No clear differences were found between women in the hypnosis group and those in the control groups for satisfaction with pain relief, sense of coping with labour or spontaneous vaginal birth. Not enough evidence currently exists regarding satisfaction with pain relief or sense of coping with labour and we would encourage any future research to prioritise the measurement of these outcomes. The evidence for the main comparison was assessed using GRADE as being of low quality for all the primary outcomes with downgrading decisions due to concerns regarding inconsistency of the evidence, limitations in design and imprecision. Further research is needed in the form of large, well-designed randomised controlled trials to assess whether hypnosis is of value for pain management during labour and childbirth.

[2341]


An Evaluation of the Effect of Hypnosis on Postoperative Analgesia following Laparoscopic Cholecystectomy.

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Little attention has been paid to the effectiveness of hypnosis in improving the results of surgery in Iran. One hundred and twenty patients scheduled for laparoscopic cholecystectomy were randomly divided into either control (standard care) or experimental (hypnosis) groups. Prior to surgery and again after surgery, abdominal pain, nausea, and vomiting were assessed. The results suggest that hypnosis could effectively reduce pain after laparoscopic cholecystectomy.
Feasibility and acceptability of esophageal-directed hypnotherapy for functional heartburn.

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Functional heartburn (FH) is a benign but burdensome condition characterized by painful, burning epigastric sensations in the absence of acid reflux or symptom-reflux correlation. Esophageal hypersensitivity and its psychological counterpart, esophageal hypervigilance (EHv) drive symptom experience. Hypnotherapy (HYP) is an established and preferred intervention for refractory symptoms in functional gastrointestinal disorders (FGIDs) and could be applied to FH. The objective of this study was to determine the feasibility, acceptability, and clinical utility of 7 weekly sessions of esophageal-directed HYP (EHYP) on heartburn symptoms, quality of life, and EHv. Similar to other work in FGIDs and regardless of hypnotizability, there were consistent and significant changes in heartburn symptoms, visceral anxiety, and quality of life and a trend for improvement in catastrophizing. We would recommend EHYP in FH patients who are either non-responsive to medications or who would prefer a lifestyle intervention.


Effect of Progressive Muscle Relaxation on the Fatigue and Quality of Life Among Iranian Aging Persons.

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Since the elderly population is increasing rapidly in developing countries which may decrease the physical activity and exercise and in turn affect the elderly's quality of life, this study aimed to investigate the effect of progressive muscle relaxation on the elderly's quality of life in Iran. In a randomized clinical trial, participants were randomly divided into intervention and control groups. For the intervention group, muscular progressive relaxation was run three days per week for three months (totally 36 sessions). In relaxation, a patient contract a group of his/her muscles in each step and relaxes them after five seconds and finally loosens all muscles and takes five deep breaths. Each session lasts for 45 minutes. The instrument of data gathering consisted of questionnaires on individual's demographic data and quality of life SF-36. After intervention, quality of life increased significantly in the patients undergoing muscular progressive relaxation and fatigue severity decreased significantly in the intervention group compared to prior to intervention. In addition, there was a statistically significant difference in mean score of physical performance, restricted activity after physical problem, energy, socially function, physical pain, overall hygiene, and quality of life.
between intervention and control groups. By implementing regular and continuous progressive muscle relaxation, quality of life could be increased in different dimensions in the elderly and the context could be provided to age healthily and enjoy higher health and autonomy. Therefore, all of the therapeutic staffs are recommended to implement this plan to promote the elderly's quality of life.

[2344]

Ca(2+) in the dorsal raphe nucleus promotes wakefulness via endogenous sleep-wake regulating pathway in the rats.

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Serotonergic neurons in the dorsal raphe nucleus (DRN) are involved in the control of sleep-wake states. Our previous studies have indicated that calcium (Ca(2+)) modulation in the DRN plays an important role in rapid-eye-movement sleep (REMS) and non-REMS (NREMS) regulation during pentobarbital hypnosis. The present study investigated the effects of Ca(2+) in the DRN on sleep-wake regulation and the related neuronal mechanism in freely moving rats. Our results showed that microinjection of CaCl2 (25 or 50 nmol) in the DRN promoted wakefulness and suppressed NREMS including slow wave sleep and REMS in freely moving rats. Application of CaCl2 (25 or 50 nmol) in the DRN significantly increased serotonin in the DRN and hypothalamus, and noradrenaline in the locus coeruleus and hypothalamus. Immunohistochemistry study indicated that application of CaCl2 (25 or 50 nmol) in the DRN significantly increased c-Fos expression ratio in wake-promoting neurons including serotonergic neurons in the DRN, noradrenergic neurons in the locus coeruleus, and oxinergic neurons in the perifornical nucleus, but decreased c-Fos expression ratio of GABAergic sleep-promoting neurons in the ventrolateral preoptic nucleus. These results suggest that Ca(2+) in the DRN exert arousal effects via up-regulating serotonergic functions in the endogenous sleep-wake regulating pathways.

[2345]

Brain Activity and Functional Connectivity Associated with Hypnosis.

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Hypnosis has proven clinical utility, yet changes in brain activity underlying the hypnotic state have not yet been fully identified. Previous research suggests that hypnosis is associated with decreased default mode network (DMN) activity and that high hypnotizability is associated with greater functional connectivity between the executive control network (ECN) and the salience network (SN). We used functional magnetic resonance imaging to investigate activity and functional connectivity among these three networks in hypnosis. We selected 57 of 545

Professional Hypnosis Databank - page 645 of 889 - by Alberto Torelli, hypnologist
healthy subjects with very high or low hypnotizability using two hypnotizability
scales. All subjects underwent four conditions in the scanner: rest, memory
retrieval, and two different hypnosis experiences guided by standard pre-recorded
instructions in counterbalanced order. Seeds for the ECN, SN, and DMN were left
and right dorsolateral prefrontal cortex, dorsal anterior cingulate cortex
dACC, and posterior cingulate cortex (PCC), respectively. During hypnosis there
was reduced activity in the dACC, increased functional connectivity between the
dorsolateral prefrontal cortex (DLPPC;ECN) and the insula in the SN, and reduced
connectivity between the ECN (DLPPFC) and the DMN (PCC). These changes in neural
activity underlie the focused attention, enhanced somatic and emotional control,
and lack of self-consciousness that characterizes hypnosis.

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[2346]

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Hypnosis and movement disorders: State of the art and perspectives.

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INTRODUCTION: Hypnosis might represent an interesting complementary therapeutic
approach to movement disorders, as it takes into account not only symptoms, but
also well-being, and empowers patients to take a more active role in their
treatment.

METHODS: Our review of the literature on the use of hypnosis to treat movement
disorders was done by systematically searching the PubMed database for reports
published between 1984 and November 2015. The following variables were extracted
from each selected paper: study design; sample size; type of movement disorder;
hypnotic procedure; treatment duration; and efficacy.

RESULTS: Thirteen papers were selected for detailed analysis. Most concerned
tremor in Parkinson's disease and tics in Gilles de la Tourette syndrome.
Although promising, the data were insufficient to allow conclusions to be drawn
on the efficacy of hypnosis in movement disorders or to recommend its use in this
setting.

CONCLUSION: Well-designed studies taking into account some specific
methodological challenges are needed to determine the possible therapeutic
utility of hypnosis in movement disorders. In addition to the potential benefits
for such patients, hypnosis might also be useful for studying the neuroanatomical
and functional underpinnings of normal and abnormal movements.

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[2347]

2016 Aug 22.

Mind-Body Therapies in Children and Youth.

SECTION ON INTEGRATIVE MEDICINE.


Mind-body therapies are popular and are ranked among the top 10 complementary and
integrative medicine practices reportedly used by adults and children in the 2007-2012 National Health Interview Survey. A growing body of evidence supports the effectiveness and safety of mind-body therapies in pediatrics. This clinical report outlines popular mind-body therapies for children and youth and examines the best-available evidence for a variety of mind-body therapies and practices, including biofeedback, clinical hypnosis, guided imagery, meditation, and yoga. The report is intended to help health care professionals guide their patients to nonpharmacologic approaches to improve concentration, help decrease pain, control discomfort, or ease anxiety.

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[2348]


The Attitudes of Physicians, Nurses, Physical Therapists, and Midwives Toward Complementary Medicine for Chronic Pain: A Survey at an Academic Hospital.


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OBJECTIVE: To assess the attitudes of physicians, nurses, physical therapists, and midwives toward complementary medicine (CM) at a Swiss academic hospital and toward its use for treating chronic pain.

DESIGN: The cross-sectional survey took place from October to December 2013.

SETTING: An e-mail sent to 4925 healthcare professionals (1969 physicians, 2372 nurses, 145 physical therapists, and 111 midwives) working at Lausanne University Hospital, Switzerland, invited them to answer a web-based questionnaire.

RESULTS: The questionnaire was answered by 1247 healthcare professionals (response rate: 25.3%). Of these, 96.1% strongly agreed or agreed that CM could be useful for the treatment of chronic pain, with more nurses (96.7%) and midwives (100%) than physicians (93.8%) agreeing that CM could be useful (P < .001 for both comparisons). Women had more positive attitude toward CM than men (97.8% versus 91.2%; P < .001). Of the respondents, 96.9% were strongly in favor or in favor of offering CM, especially hypnosis (89.8%), osteopathy (85.5%), and acupuncture (83.4%), at the hospital for treating chronic pain. Respondents listed migraine (74.7%), tension headaches (70.6%), and low back pain (70.1%) as three main conditions for which they would refer patients for acupuncture. The three therapies with which respondents were the most unfamiliar were neuraltherapy (57.2%), mindfulness-based stress reduction (MBSR) (54.1%), and biofeedback (51.9%). Over half of respondents, 58.3%, had never referred a patient to a CM practitioner. A total of 84.3% of the respondents felt that they lacked the knowledge to inform their patients about CM.

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[2349]


Teaching to Relax: Development of a Program to Potentiate Stress-Results of a Feasibility Study with Medical Undergraduate Students.
Medical students are a population at risk for the development of stress-related risk states (e.g. burnout) and manifest mental disorders (e.g. depression). Still the learning of coping mechanisms against stress is not an integral part of the medical curriculum. In a pilot study we developed an elective course for learning relaxation techniques (Relacs) which was geared to the clinical practice of autogenic training (AT) with psychiatric patients. The course focussed on an innovative and mostly communicative transfer of knowledge about AT, progressive muscle relaxation and medical hypnosis and stressed the principle of repeated and supervised exercises in small student groups alongside self-administered exercise. 42 students took part in this course and showed a very high acceptance for the topic and positive evaluation. Moreover, we found a distinct improvement of the participants' mental parameters (burnout, anxiety) and a good knowledge about the course's contents within the final exams at the end of the semester. The structure and realisation of the course is easily adaptable and very effective regarding the improvement of the students' mental health. Due to our results and the commonly known prevalence of stress-related disorders in medical students we postulate the integration of courses on relaxation strategies in the medical curriculum.


Randomised clinical trial: the efficacy of gut-directed hypnotherapy is similar to that of the low FODMAP diet for the treatment of irritable bowel syndrome.

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BACKGROUND: A low fermentable oligosaccharides, disaccharides, monosaccharides and polyols (FODMAP) diet is effective in treating irritable bowel syndrome (IBS).

AIM: To compare the effects of gut-directed hypnotherapy to the low FODMAP diet on gastrointestinal symptoms and psychological indices, and assess additive effects.

METHODS: Irritable bowel syndrome patients were randomised (computer-generated list), to receive hypnotherapy, diet or a combination. Primary end-point: change in overall gastrointestinal symptoms across the three groups from baseline to week 6. Secondary end-points: changes in psychological indices, and the durability of effects over 6 months.

RESULTS: Of 74 participants, 25 received hypnotherapy, 24 diet and 25 combination. There were no demographic differences at baseline across groups. Improvements in overall symptoms were observed from baseline to week 6 for hypnotherapy [mean difference (95% CI): -33 (-41 to -25)] and diet [-30 (-42 to -19)] and combination [-36 (-45 to -27)] with no difference across groups (P = 0.67). This represented ≥20 mm improvement on visual analogue scale in 72%, 71% and 72%, respectively. This improvement relative to baseline symptoms was maintained 6 months post-treatment in 74%, 82% and 54%. Individual gastrointestinal symptoms similarly improved. Hypnotherapy resulted in superior improvements on psychological indices with mean change from baseline to 6 months in State Trait Personality Inventory trait anxiety of -4(95% CI -6 to -2) P <
-3(-5 to -0.7) P = 0.011; -0.8(-2 to 0.2) P = ns; and 0.6(-2 to 3) P = ns,
respectively. Groups improved similarly for QOL (all p ≤ 0.001).

CONCLUSIONS: Durable effects of gut-directed hypnotherapy are similar to those of
the low FODMAP diet for relief of gastrointestinal symptoms. Hypnotherapy has
superior efficacy to the diet on psychological indices. No additive effects were
observed.

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Reference:

[Description of current hypnosis practice in French university hospitals].

[Article in French]

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Hypnosis is very fashionable as an entertainment through TV shows searching for new sensational experiences. What about its practice in the medical world? The aim of this article is to answer to this question. Therefore, we contacted every French University Hospital of each region to find out if hypnosis was practiced for the care of pain (hypnoanalgesia), for chirurgical procedures (hypnosedation) and in adult psychiatry care units (hypnotherapy). For this last practice, we also questioned the type of indications. All 30 of the French University Hospitals had replied by November 2015. Hypnoanalgesia is practiced by all and two-thirds offer hypnosedation. Hypnotherapy is practiced by 40 % of the University Hospitals, 91,7 % for anxiety disorders, 66,7 % for psychotraumatic care and 25 % for mood disorders. Therefore, hypnosis seems to have found its place in the care of pain and as an anesthetic to replace standard procedures. However, the use of hypnotherapy in psychiatry is less frequent, indications for its use being variable and not very consensual.

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Reference:

The Beneficial Effect of Hypnosis in Elective Cardiac Surgery: A Preliminary Study.

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Background Single-session hypnosis has never been evaluated as a premedication technique in patients undergoing coronary artery bypass grafting (CABG). The aim
of the present study was to evaluate the beneficial effects of clinical hypnotherapy on perioperative anxiety, pain perception, sedation, and necessity for ventilator assistance in patients undergoing CABG. Methods Double-blind, randomized, clinical trial was performed. Forty-four patients undergoing CABG surgery were randomized into two groups. The patients in group A received preprocedural hypnosis by an anesthesiologist. Patients in group B (control) had only information on the surgical intervention by the same anesthesiologist. State-Trait-Anxiety Index-I (STAI-I) and Beck Depression Inventory (BDI) were performed preoperatively in both groups. Visual analog scale (VAS) and Ramsay sedation scale (RSS) were evaluated on 0th, 1st, 2nd, 4th, 6th, 8th, 10th, 12th, and 24th hours, postoperatively. Postoperative anxiety level, analgesic drug consumption, and duration of ventilator assistance and intensive care unit (ICU) stay were also documented. Results When anxiety and depression levels were compared, significantly lower STA-I and BDI values were detected in group A after hypnotherapy (p = 0.001, p = 0.001, respectively). Significantly less total doses of remifentanil (34.4 ± 11.4 vs. 50.0 ± 13.6 mg) and morphine (4.9 ± 3.3 vs. 13.6 ± 2.7 mg) were administered in group A in the postoperative period. Ventilator assistance duration (6.8 ± 2.0 vs. 8.9 ± 2.7 hours) was also shorter in group A when compared with that in group B (p = 0.007). Conclusion Hypnosis session prior to surgery was an effective complementary method in decreasing presurgical anxiety, and it resulted in better pain control as well as reduced ventilator assistance following CABG surgery.

[2353]
AMED: The Allied and Complementary Medicine Database.
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AMED: The Allied and Complementary Medicine Database is a resource from the Health Care Information Service of the British Library. AMED offers access to complementary and alternative medicine topics, such as acupuncture, chiropractic, herbalism, homeopathy, hospice care, hypnosis, palliative care, physiotherapy, podiatry, and rehabilitation. This column features a sample search to demonstrate the type of information available within AMED. AMED is available through the EBSCOhost and OVID platforms.

[2354]

A proof-of-concept study on the combination of repetitive transcranial magnetic stimulation and relaxation techniques in chronic tinnitus.

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Interference of ongoing neuronal activity and brain stimulation motivated this study to combine repetitive transcranial magnetic stimulation (rTMS) and
relaxation techniques in tinnitus patients. Forty-two patients were enrolled in this one-arm proof-of-concept study to receive ten sessions of rTMS applied to the left dorsolateral prefrontal cortex and temporo-parietal cortex. During stimulation, patients listened to five different kinds of relaxation audios. Variables of interest were tinnitus questionnaires, tinnitus numeric rating scales, depressivity, and quality of life. Results were compared to results of historical control groups having received the same rTMS protocol (active control) and sham treatment (placebo) without relaxation techniques. Thirty-eight patients completed the treatment, drop-out rates and adverse events were low. Responder rates (reduction in tinnitus questionnaire (TQ) score ≥5 points 10 weeks after treatment) were 44.7 % in the study, 27.8 % in the active control group, and 21.7 % in the placebo group, differing between groups on a near significant level. For the tinnitus handicap inventory (THI), the main effect of group was not significant. However, linear mixed model analyses showed that the relaxation/rTMS group differed significantly from the active control group showing steeper negative THI trend for the relaxation/rTMS group indicating better amelioration over the course of the trial. Deepness of relaxation during rTMS and selection of active relaxation vs. passive listening to music predicted larger TQ. All remaining secondary outcomes turned out non-significant. This combined treatment proved to be a safe, feasible and promising approach to enhance rTMS treatment effects in chronic tinnitus.

[2355]

Hypnosis and Local Anesthesia for Dental Pain Relief-Alternative or Adjunct Therapy?-A Randomized, Clinical-Experimental Crossover Study.

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This prospective randomized clinical crossover trial was designed to compare hypnosis and local anesthesia for experimental dental pain relief. Pain thresholds of the dental pulp were determined. A targeted standardized pain stimulus was applied and rated on the Visual Analogue Scale (0-10). The pain threshold was lower under hypnosis (58.3 ± 17.3, p < .001), maximal (80.0) under local anesthesia. The pain stimulus was scored higher under hypnosis (3.9 ± 3.8) than with local anesthesia (0.0, p < .001). Local anesthesia was superior to hypnosis and is a safe and effective method for pain relief in dentistry. Hypnosis seems to produce similar effects observed under sedation. It can be used in addition to local anesthesia and in individual cases as an alternative for pain control in dentistry.

[2356]

Pilot Investigation of a Virtual Gastric Band Hypnotherapy Intervention.

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This 24-week-long pilot investigation of 30 men and women with a BMI > 27 kg/m(2) aimed to determine whether virtual gastric band (VGB) hypnotherapy has an effect
on weight loss in overweight adults, compared to relaxation hypnotherapy and a self-directed diet. Levels of weight loss and gain ranged from -17 kg to +4.7 kg in the VGB hypnotherapy group and -9.3 kg to +7.8 kg in the relaxation group. There was no significant difference between VGB hypnotherapy as a main effect on weight loss, \( (X(2) = 0.67, p = .41, df = 1) \) and there was no evidence of differential weight loss over time, \( (X(2) = 4.2, p = .64, df = 6) \). Therefore, the authors conclude that there was no significant difference between VGB hypnotherapy and the relaxation hypnotherapy.

[2357]


Breast Biopsy: The Effects of Hypnosis and Music.

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The authors evaluated the efficacies of audio-recorded hypnosis with background music and music without hypnosis in the reduction of emotional and physical disturbances in patients scheduled for breast biopsy in comparison with a control group. A total of 75 patients were randomly assigned to 3 different groups and evaluated at baseline and before and after breast biopsy using visual analog scales of stress, pain, depression, anxiety, fatigue, optimism, and general well-being. The results showed that, before breast biopsy, the music group presented less stress and anxiety, whereas the hypnosis with music group presented reduced stress, anxiety, and depression and increased optimism and general well-being. After the biopsy, the music group presented less anxiety and pain, whereas the hypnosis group showed less anxiety and increased optimism.

[2358]


Use of Hypnotic Techniques in Children and Adolescents with Chronic Pain: Do the Ages of Patients or Years of Practice and Theoretical Orientation of Clinicians Matter?

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Hypnosis is known to be effective in the treatment of pediatric pain. To better understand which strategies might be most useful, more knowledge is needed regarding the strategies that are actually used by experienced clinicians and the factors that influence their use. To address this knowledge gap, 35 health care professionals completed an online survey on the use of hypnosis in the management of pediatric chronic pain. The findings indicate that clinicians vary their use of hypnotic strategies primarily as a function of a patient's age but not as a function of theoretical orientation or amount of experience. The findings may be useful for guiding clinicians in their selection of strategies and suggestions when working with children with pain.

[2359]

Clinical hypnosis for palliative care in severe chronic diseases: a review and the procedures for relieving physical, psychological and spiritual symptoms.

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Hypnotic treatment in severe chronic diseases, for pain and symptoms relief, has proven efficacy as adjuvant therapy, and should be offered to any individual, who expresses an interest in this method. While some theorize hypnotizability as a changing attribute of the individual, there is a growing body of literature that indicates hypnotizability may be characterized as a constellation of potentially modifiable attitudes and skills, which are strongly influenced by related factors, as suffering, in severe chronic diseases. In this article, I briefly review representative studies recognizing how clinical hypnosis in medicine is an effective complementary therapy, for pain and symptom's relief in severe chronic diseases and in palliative care. This paper highlights: (I) a scientific review to underline how clinical hypnosis has an important impact on the treatment goals and integration in relieving pain and symptoms; (II) the advanced techniques for effectively relieving pain and symptoms.

[2360]

Hypnotic Induction: Enhancing Trance or Mostly Myth?
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Hypnosis has often, and primarily, been portrayed as a mystical means that controls and exploits vulnerable and defenseless people. Sources accused of perpetuating hypnosis myths and misconceptions have included numerous media productions and stage demonstrations at state fairs and festivals. Ironically, one largely unexamined potential culprit disseminating misinformation about hypnosis is the field of clinical hypnosis itself. This article not only questions the legitimacy of the term "hypnotic induction" and its derivatives but also explores the potential impact these terms have on the perpetuation of hypnosis myths and misconceptions. Through an examination of a selective history of hypnotic induction, the customary language of hypnosis, and information promoted by professional hypnosis societies, some of the contributing terminology is identified. Alternative terms that more appropriately embody the manifestation of trance are offered and discussed.

[2361]

What Can a Hypnotic Induction Do?
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In contrast to how recent definitions of hypnosis describe the induction, a work-sample perspective is advocated that characterizes the induction as an initial, stage-setting phase encompassing everything in a hypnotic session up to the first hypnotic suggestion of particular relevance to the therapeutic or
research goals at hand. Four major ways are then discussed in which the induction could affect subsequent hypnotic responses: It may provide information about how subsequent behaviors are to be enacted; it may provide cues about the nature of the interpersonal interaction to be expected in hypnosis; it may provide meta-suggestions, defined as suggestive statements intended to enhance responses to subsequent hypnotic suggestions; and it may provide a clear transition to help allow new behaviors and experiences to emerge. Several ideas for future research are advanced, such as mapping hypnosis style onto the interpersonal circumplex, evaluating whether attentional-state changes measured at the end of the induction actually mediate subsequent hypnotic responsiveness, and systematically examining the impact of ritual-like aspects of inductions.

[2362]


Nuances and Uncertainties Regarding Hypnotic Inductions: Toward a Theoretically Informed Praxis.

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Although most definitions of hypnosis consider inductions as the initial stage in a hypnosis protocol, knowledge of inductions remains poor and uninformed by recent developments in theory and research. It is frequently argued that inductions play a critical role in hypnotic responding or, by contrast, are largely interchangeable and unimportant. Drawing on the literature on suggestibility, spontaneous phenomenology, neurophysiology, and cognition, this article argues that the value of inductions, as well as the potential value of inductions, is more nuanced and uncertain. Certain components of standard inductions appear to be efficacious in enhancing suggestibility, whereas others do not have any clear benefits. The impact of inductions on suggestibility seems to vary across suggestions and modes of assessment with the sources of this variability being unknown. Considering these effects, and the broader impact of inductions on spontaneous conscious states and cognition, through the lens of heterogeneity in high hypnotic suggestibility and componential models of hypnotic suggestibility may offer novel research avenues in this area. The article concludes by arguing for the practical and theory-driven optimization of inductions.

[2363]


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The concept of self-representation is commonly decomposed into three component constructs (sense of embodiment, sense of agency, and sense of presence), and each is typically investigated separately across different experimental contexts. For example, embodiment has been explored in bodily illusions; agency has been investigated in hypnosis research; and presence has been primarily studied in the context of Virtual Reality (VR) technology. Given that each component involves
the integration of multiple cues within and across sensory modalities, they may rely on similar underlying mechanisms. However, the degree to which this may be true remains unclear when they are independently studied. As a first step toward addressing this issue, we manipulated a range of cues relevant to these components of self-representation within a single experimental context. Using consumer-grade Oculus Rift VR technology, and a new implementation of the Virtual Hand Illusion, we systematically manipulated visual form plausibility, visual-tactile synchrony, and visual-proprioceptive spatial offset to explore their influence on self-representation. Our results show that these cues differentially influence embodiment, agency, and presence. We provide evidence that each type of cue can independently and non-hierarchically influence self-representation yet none of these cues strictly constrains or gates the influence of the others. We discuss theoretical implications for understanding self-representation as well as practical implications for VR experiment design, including the suitability of consumer-based VR technology in research settings.

[2364]


Using hypnosis to model Fregoli delusion and the impact of challenges on belief revision.

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Fregoli delusion involves the belief that strangers are known people in disguise. We aimed to model aspects of this delusion for the first time using hypnosis. We informed hypnotised subjects that someone would enter the room (a confederate) and they would believe this person was someone they knew in disguise. After testing their reaction to the confederate, we challenged their delusion by directly contradicting their belief and then asking them to focus on the confederate's voice and gait. Finally, we indexed whether they could identify photographs of the confederate. We found that just over half of our high hypnotisable subjects identified the confederate as someone they knew in disguise. Although many highs abandoned their belief in response to challenges, some maintained strong, unwavering conviction that the confederate was a known person. We discuss these findings in terms of how evidence might be evaluated during both hypnotic and clinical delusions.

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[2365]


[Use of hypnosis in radiotherapy as an alternative to general anesthesia in pediatric radiation oncology].

[Article in French]


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BACKGROUND: General anesthesia (GA) is often needed for radiotherapy (RT) in young children. This study aimed to evaluate the place of the rituals and/or hypnosis in pediatric in a reference center in pediatric radiation oncology in Rhône-Alpes Auvergne.

METHODS: This observational study retrospectively collected data on AG in children<5 years treated by RT in Leon-Berard regional center, Lyon, France between 2003 and 2014. Two-time periods, before and after 2008 have been compared, the second one introducing accompaniment methods such as hypnosis systematically. Explanatory analyses of AG were performed using logistic regression.

RESULTS: One hundred and thirty-two children benefited from RT in that period and were included (70 patients until 2008, 62 after 2008). Fifty-three percent were irradiated under GA. There was significant reduction (P<0.1) in the use of GA after 2008. The use of GA was not significantly associated with the RT techniques. The patients more likely to undergo RT without GA were the oldest and the patients treated for abdominal lesions (P<0.01).

DISCUSSION: The study confirms that rituals and hypnosis can be used instead of GA in about half of patients under 5 years, even also with high-technicity RT requiring optimal immobilization.

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[2366]


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Mind-body therapies are commonly recommended to treat vasomotor symptoms, such as hot flushes and night sweats (HFNS). The purpose of this systematic review was to evaluate the available evidence to date for the efficacy of different mind-body therapies to alleviate HFNS in healthy menopausal women and breast cancer survivors. Randomized controlled trials (RCTs) were identified using seven electronic search engines, direct searches of specific journals and backwards searches through reference lists of related publications. Outcome measures included HFNS frequency and/or severity or self-reported problem rating at post-treatment. The methodological quality of all studies was systematically assessed using predefined criteria. Twenty-six RCTs met the inclusion criteria. Interventions included yoga (n = 5), hypnosis (n = 3), mindfulness (n = 2), relaxation (n = 7), paced breathing (n = 4), reflexology (n = 1) and cognitive behavioural therapy (CBT) (n = 4). Findings were consistent for the effectiveness of CBT and relaxation therapies for alleviating troublesome vasomotor symptoms. For the remaining interventions, although some trials indicated beneficial effects (within groups) at post-treatment and/or follow up, between group findings were mixed and overall, methodological differences across studies failed to provide convincing supporting evidence. Collectively, findings suggest that interventions that include breathing and relaxation techniques, as well as CBT, can be beneficial for alleviating vasomotor symptoms. Additional large, methodologically rigorous trials are needed to establish the efficacy of interventions on vasomotor symptoms, examine long-term outcomes and understand
how they work.


Complementary and Alternative Medicine for Atopic Dermatitis: An Evidence-Based Review.

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BACKGROUND: Complementary and alternative interventions are becoming increasingly utilized as adjuncts to conventional treatment of atopic dermatitis (AD). While the number of studies continues to grow, the vastness of the subject coupled with the relatively poor quality and small size of the studies limit their usefulness to clinicians.

PURPOSE: Our aim was to comprehensively review randomized controlled trials (RCTs) of complementary and alternative therapies for AD.

METHODS: Searches were performed on PubMed, the Cochrane Central Register of Controlled Trials, EMBASE, and the Global Resource for Eczema Trial (GREAT) databases, focusing on RCTs of alternative or complementary AD therapies, with a sample size of ≥10, through March 2015 and limited to the English language. A total of 70 manuscripts met the inclusion criteria and were included in the final analysis.

RESULTS: There is at least some level I evidence to support the use of acupuncture and acupressure, stress-reducing techniques such as hypnosis, massage, and biofeedback, balneotherapy, herbal preparations (with many important caveats), certain botanical oils, oral evening primrose oil, vitamin D supplementation, and topical vitamin B12. Many other therapies either have sufficient data to suggest that they are ineffective, or simply do not have enough evidence to formulate a verdict.

CONCLUSIONS: Careful review of the literature reveals several promising therapies in this domain; such findings may help direct further research that is necessary to bolster clinical recommendations for alternative or complementary treatments of AD.


Techniques for nothingness: Debate over the comparability of hypnosis and Zen in early-twentieth-century Japan.

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This paper explores a debate that took place in Japan in the early twentieth century over the comparability of hypnosis and Zen. The debate was among the first exchanges between psychology and Buddhism in Japan, and it cast doubt on previous assumptions that a clear boundary existed between the two fields. In the debate, we find that contemporaries readily incorporated ideas from psychology and Buddhism to reconstruct the experiences and concepts of hypnosis and Buddhist nothingness. The resulting new theories and techniques of nothingness were fruits of a fairly fluid boundary between the two fields. The debate, moreover, reveals that psychology tried to address the challenges and possibilities posed by religious introspective meditation and intuitive experiences in a positive way. In the end, however, psychology no longer regarded them as viable experimental or psychotherapeutic tools but merely as particular subjective experiences to be
Efficacy of non-pharmacological interventions for procedural pain relief in adults undergoing burn wound care: A systematic review and meta-analysis of randomized controlled trials.

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Comment in

The aim of the present meta-analysis was to investigate the efficacy of non-pharmacological interventions for procedural pain relief in adults undergoing burn wound care compared to standard care alone or an attention control. Through a comprehensive literature search in various electronic databases 21 eligible randomized controlled trials (RCTs) were included, comprising a total of 660 patients. Random effects meta-analyses revealed significant positive treatment effects on pain outcomes, Hedges' $g=0.58$, 95% CI [0.33; 0.84]. Heterogeneity of study effects was substantial, $I^2=72\%$. Effects were significantly larger for comparisons against treatment as usual (TAU), $g=0.69$, CI 95% [0.40; 0.98] than for comparisons against attention control groups, $g=0.21 [-0.11; 0.54]$, $p<0.001$. Distraction interventions, particularly those using virtual reality, and hypnosis revealed the largest effects on pain relief. Non-pharmacological interventions further resulted in a significant small, homogeneous effect on anxiety reduction, $g=0.36 [0.20; 0.52]$. In summary, benefits of non-pharmacological interventions on procedural pain relief and reduction of mental distress were demonstrated. Results have been proven to be free of publication bias. However, further high quality trials are needed to strengthen the promising evidence.

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PMID: 29287729  [Indexed for MEDLINE]
PURPOSE: Complementary and alternative medicine (CAM) has been popular among patients with cancer for several decades. The objectives of this study were to evaluate the prevalence of CAM use and to identify the factors affecting CAM use in a large patient cohort seen at a comprehensive cancer center in Turkey.

PATIENTS AND METHODS: An investigator-designed survey was completed by volunteer patients who visited the outpatient clinic in the medical oncology department. CAM use encompassed pharmacologic agents including vitamins, dietary supplements, and herbal products or nonpharmacologic methods like prayer, meditation, hypnosis, massage, or acupuncture.

RESULTS: Of 1,499 patients who answered the survey, 1,433 (96%) used nonpharmacologic CAM and 60 (4%) used pharmacologic CAM (pCAM). The most frequent types of CAM used were prayer (n = 1,433) followed by herbal products (n = 42). pCAM use was not significantly associated with age (P = .63), sex (P = .15), diagnosis (P = .15), or income level (P = .09). However, it was significantly associated with the level of education (P = .0067) and employment status (P < .001). Patients with higher education levels used more pCAM products (P = .025). Among 60 pCAM users, six patients (10%) used pCAM for more than 2 years and 22 (36%) did not consult their physicians about their pCAM use. Only nine patients (15%) reported unpleasant adverse effects related to pCAM.

CONCLUSION: Although CAM use was high among our patients, prevalence of pCAM use was lower than expected. Patients with higher education levels tended to use more pCAM.

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[2371]


Effects of progressive muscle relaxation training on sleep and quality of life in patients with pulmonary resection.

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BACKGROUND: The inadequate quality and nature of sleep is a commonly reported problem among hospitalized patients. The purpose of this study is to examine the effects of progressive muscle relaxation training program on sleep quality, sleep state, pain, and quality of life in patients who underwent pulmonary resection.

METHODS: Our study was planned as a single-blind prospective randomized controlled trial. The study was conducted on 26 patients who underwent surgery by using posterolateral thoracotomy method. Progressive muscle relaxation training were given to the training group with a therapist two times a day. Sleep quality, daytime sleeping, pain, and quality of life were respectively evaluated in the morning before the surgery and 1 week after the surgery by using Pittsburgh Sleep Quality Index, Epworth Sleepiness Scale, visual analogue scale, and Euro Quality of Life-5D (EQ-5D).

RESULTS: There is no significant difference between preoperative groups in the total Pittsburgh Sleep Quality Index, Epworth Sleepiness Scale, Euro Quality of Life-5D, and visual analogue scale scores (p > 0.05). The intra-group change in the study group showed a significant deterioration in the Euro Quality of Life-5D and visual analogue scale scores (p < 0.05). There was a significant deterioration in the total Pittsburgh Sleep Quality Index, Epworth Sleepiness Scale, EQ-5D, and visual analogue scale scores in the control group (p < 0.05). The Pittsburgh Sleep Quality Index, Epworth Sleepiness Scale, and Euro Quality of Life-5D scores showed significant improvements in the relaxation training group after treatment at 1 week (p < 0.05).

CONCLUSIONS: Progressive muscle relaxation prevents a decline in patient-reported
sleep quality following pulmonary resection.

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[2372]


Implications of Entropy and Surgical Pleth Index-guided general anaesthesia on clinical outcomes in critically ill polytrauma patients. A prospective observational non-randomized single centre study.


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Being highly unstable, the critically ill polytrauma patient represents a challenge for the anaesthesia team. The aim of this study was to compare the Entropy and Surgical Pleth Index (SPI)-guided general anaesthesia with standard haemodynamic monitoring methods used in the critically ill polytrauma patients and to evaluate the incidence of hemodynamic events, as well as the opioid and vasopressor demand. 72 patients were included in this prospective observational study, divided in two groups, the ESPI Group (N = 37, patients that benefited from Entropy and SPI monitoring) and the STDR Group (N = 35 patients that benefited from standard hemodynamic monitoring). In the ESPI Group general anaesthesia was modulated in order to maintain the Entropy levels between 40 and 60. Analgesia control was achieved by maintaining the SPI levels between 20 and 50. In the STDR Group hypnosis and analgesia were maintained using the standard criteria based on hemodynamic changes. ClinicalTrials.gov identifier NCT03095430. The incidence of hypotension episodes was significantly lower in the ESPI Group (N = 3), compared to the STDR Group (N = 71) (p < 0.05). Moreover, the Fentanyl demand was significantly lower in the ESPI Group (p < 0.0001, difference between means 5.000 ± 0.038, 95% confidence interval 4.9250-5.0750), as well as vasopressor medication demand (p < 0.0001, difference between means 0.960 ± 0.663, 95% confidence interval 0.8.334-1.0866). The implementation of multimodal monitoring in the critically ill polytrauma patient brings substantial benefits both to the intraoperative clinical status and to the clinical outcome of these patients by reducing the incidence of anesthesia-related complications.

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PMID: 28856631  [Indexed for MEDLINE]

[2373]


On the advantage of autobiographical memory pliability: implantation of positive self-defining memories reduces trait anxiety.

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This paper is devoted to the mechanism of the positive construction of autobiographical memory. Positive construction consists of the spontaneous transformation of memories in the direction of the subjective enhancement of self-competence in past activities to anticipate improvement over time. We speculated that trait anxiety may indicate a failure to exhibit this mechanism that results in a deficit of affirmative self-esteem. We hypothesised that the implantation of positive self-defining memories in anxiety-evoking domains would decrease trait anxiety. One hundred twenty adults recollected three negative self-defining memories. Then, half of the participants imagined episodes of desired behaviour that differed from the originally recollected ones either in discussion or in hypnosis. Thirty participants experienced a hypnotic state without any references to memories, and the rest formed the control group. Subjects from the "Memory Implantation in Hypnosis" group became unable to distinguish the originally reported memories from the imagined ones, exhibited decreased trait anxiety scores after a 4-month delay, and reported enhanced self-esteem. In contrast, the participants from the "Hypnosis with no reference to the past" group exhibited decreased scores at a short delay but later returned to their original scores. These findings highlight the power of cured episodic-like autobiographical memory for updating the self.

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Attention or instruction: Do sustained attentional abilities really differ between high and low hypnotisable persons?

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Previous research has suggested that highly hypnotisable participants ('highs') are more sensitive to the bistability of ambiguous figures—as evidenced by reporting more perspective changes of a Necker cube than low hypnotisable participants ('lows'). This finding has been interpreted as supporting the hypothesis that highs have more efficient sustained attentional abilities than lows. However, the higher report of perspective changes in highs in comparison to lows may reflect the implementation of different expectation-based strategies as a result of differently constructed demand characteristics according to one's level of hypnotisability. Highs, but not lows, might interpret an instruction to report perspective changes as an instruction to report many changes. Using a Necker cube as our bistable stimulus, we manipulated demand characteristics by giving specific information to participants of different hypnotisability levels.

Participants were told that previous research has shown that people with similar hypnotisability as theirs were either very good at switching or maintaining perspective versus no information. Our results show that highs, but neither lows nor mediums, were strongly influenced by the given information. However, highs were not better at maintaining the same perspective than participants with lower hypnotisability. Taken together, these findings favour the view that the higher sensitivity of highs in comparison to lows to the bistability of ambiguous figures reflect the implementation of different strategies.

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PMID: 28271230 [Indexed for MEDLINE]
Hypnosis has shown an effect on the regulation of the autonomic nervous system by increasing parasympathetic activity. The Analgesia/Nociception Index (ANI) is derived from heart rate variability and represents the relative parasympathetic tone. We investigated the effects of hypnosis on ANI in healthy volunteers. Participants to the 2016 International Hypnosis congress, Saint Malo, France were recruited in this prospective observational study. After comfortable positioning of the subject in the sitting position (T0), the hypnotic trance was induced (T1) then conducted with suggestions of comfort (T2) before return to normal consciousness (T3). The ANI, heart rate (HR) and respiratory rate (RR) were recorded at the different time-points. Forty subjects were enrolled (31 women, 9 men). The mean ± SD ANI at T2 (84 ± 12) was significantly greater than at T0 (60 ± 10), T1 (62 ± 9) and T3 (59 ± 11). The median [25th-75th percentile] ANI values at T2 were significantly greater in women (90 [83-95]) than in men (74 [68-83]). There were no significant variations of HR during time. The median [25th-75th percentile] RR at T1 (16 [14-18] breaths/min) and T2 (14 [12-16] breaths/min) were significantly smaller than at T0 (18 [16-20] breaths/min) and T3 (18 [16-20] breaths/min). This study shows that hypnosis induces an increase in the relative parasympathetic tone assessed by ANI in healthy volunteers, with greater ANI values observed in women. These results suggest that ANI monitoring may provide an objective tool for the measurement of the intensity of the hypnotic process, although this should be confirmed by further studies.

DOI: 10.1007/s10877-017-0056-5
PMID: 28825157 [Indexed for MEDLINE]
study. The patients were randomly assigned to a control group and a treatment group by envelope randomization, receiving PMRT and PMRT plus CM five elements music therapy, respectively, for 8 weeks. Hospital Anxiety and Depression Scale (HADS), Benefit Finding Scales (BFS), Functional Assessment of Chronic Illness Therapy-Spiritual (FACIT-Sp), and Intervention Expectations Questionnaire (IEQU) were adopted to assess the depression of the two groups before and after the treatment.

RESULTS: Four cases dropped out during the study, and 29 cases in the treatment group and 27 in the control group were included in the final analysis. Prior to the treatments, the baselines of the 4 questionnaires in the two groups showed no difference. After the 8-week treatment, the treatment group presented better levels of HADS, BFS and FACIT-Sp scores compared with the control group (P<0.05). Among the single items of HADS, 4 items involving vexation, feeling fifidgeted, pleasure and prospecting the future in the treatment group were improved compared with the control group (P<0.05).

CONCLUSIONS: As a simple and reliable and effective intervention, PMRT combined with five elements music therapy mitigated anxiety and depression of cancer patients. Cancer patients have been found to respond well to psychological intervention in areas regarding stabilisation of emotions, disease awareness, and therapeutic compliance. This brings about a great difference in improving their quality of life and psychological state, offers an effective approach to better self-management in cancer treatment.

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[2378]


Missing the mark for patient engagement: mHealth literacy strategies and behavior change processes in smoking cessation apps.

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OBJECTIVE: To examine how Transtheoretical Model (TTM)'s processes of change and mHealth literacy strategies are employed in mobile smoking cessation apps.

METHODS: A purposive sample of 100 iTunes apps were coded to assess descriptive (price, type, developer, user-rating) and engagement metrics, including processes of change and mHealth literacy strategies (plain language, usability, interactivity). One-way ANOVAs and independent samples t-tests examined associations between descriptive and engagement metrics.

RESULTS: Over half of the apps included 7 (78%) processes of change. Fewer included self-liberation (36%) and reinforcement management (34%). Most apps incorporated plain language, but few integrated usability and interactivity strategies. Hypnotherapy and informational apps included more behavioral processes of change than apps incorporating a combination of features, including gaming, cigarette trackers, and motivational coaching (p<0.01).

CONCLUSION: Apps included behavior change processes but rarely incorporated usability and interactivity features to promote patient engagement. Engagement metrics did not vary by app user-ratings, price-to-download, or developer, including for-profit organizations or government and educational institutions.

PRACTICE IMPLICATIONS: Providers should acknowledge the popularity of smoking
cessation apps as potential cessation aids and communicate their benefits and drawbacks to patients. Future efforts to improve smoking cessation apps should focus on enhancing the quality of tailored and interactive content.

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[2379]


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BACKGROUND: Several studies in pediatric oncology have shown the successful effects of using hypnotic communication techniques (HCTech) during painful medical procedures. Since no studies assessed the precise use of these techniques with a validated tool, it is unsure that the observed relationships involve the use of HCTech.

OBJECTIVES: To develop a scale evaluating healthcare professionals' behaviours when using HCTech and to evaluate its inter-rater reliability.

METHODS: This study involved the preliminary steps of the Sainte-Justine Hypnotic Communication Assessment Scale (SJ-HCAS) development process. As part of a larger intervention study, the SJ-HCAS was developed in three steps by five experts and four lay raters using an iterative process applied to subsets of video-recorded nurse-patient interactions. The development aimed to maximize clarity and precision of items as well as minimize redundancy amongst items. Inter-rater reliability was assessed in a randomly selected sample of 1/3 of collected video-recorded interactions (n=42).

RESULTS: The final version of the scale is composed of 11 items categorized in two domains pertaining to Relationship and Technique. We found excellent inter-rater reliability for both subscores and total score in two independent inter-rater comparisons (median ICC=0.879), with most items showing very good to perfect inter-rater reliability (median Kappa=0.847).

CONCLUSIONS: The results support further work with the SJ-HCAS. The scale has the potential to help ensure the integrity of hypnotic communication training in children which could ultimately promote the dissemination of the practice of HCTech.

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Short term general anesthesia for retro-bulbar block in ophthalmic surgery generates no significant hypercapnia.

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To assess the impact of short time hypnosis for retro-bulbar anesthesia on ventilation in patients undergoing ophthalmic surgery of the anterior eye chamber. In all patients, a combined continuous transcutaneous carbon dioxide tension (PtcCO2) and partial oxygen saturation (SpO2) measurement was applied in addition to routine monitoring. To enable unconscious application of retro-bulbar anesthesia, intravenous thiopental was given in one to multiple bolus doses. Transient breathing support included chin lift, Esmarch maneuver and manual hand-bag ventilation via face mask. Main endpoints were apnea time, recovery time according to the Richmond Agitation Sedation Scale, as well as SpO2 and PtcCO2 readings at predefined time points. Fifty-two patients with a mean age of 68 ± 13 years were included. Average thiopental dose was 2.7 ± 0.6 mg/kg. In seven (13.5%) patients repeated doses of thiopental were necessary to a total of 3.3 ± 1.1 mg/kg. Except one patient, no severe, significant or clinical relevant hypercapnia or desaturation periods were observed, and the occurring elevation of PtcCO2 values did not correlate with the application of repeated doses of thiopental or the need for the Esmarch maneuver. Higher PtcCO2 values were associated with the presence of hypertension and smoking. Apnea (p < 0.001) and recovery (p = 0.003) time were significantly prolonged in the patients needing the Esmarch maneuver. Short term anesthesia with thiopental in ophthalmic surgery is associated with a mild but not clinically relevant hypercapnia.

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Discrepancy detection in the retrieval-enhanced suggestibility paradigm.

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Retrieval-enhanced suggestibility (RES) refers to the finding that immediately recalling the details of a witnessed event can increase susceptibility to later misinformation. In three experiments, we sought to gain a deeper understanding of the role that retrieval plays in the RES paradigm. Consistent with past research, initial testing did increase susceptibility to misinformation - but only for those who failed to detect discrepancies between the original event and the post-event misinformation. In all three experiments, subjects who retrospectively detected discrepancies in the post-event narratives were more resistant to misinformation than those who did not. In Experiments 2 and 3, having subjects concurrently assess the consistency of the misinformation narratives negated the RES effect. Interestingly, in Experiments 2 and 3, subjects who had retrieval
practice and detected discrepancies were more likely to endorse misinformation than control subjects who detected discrepancies. These results call attention to limiting conditions of the RES effect and highlight the complex relationship between retrieval practice, discrepancy detection, and misinformation endorsement.

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[2382]

Efficacy of metacognitive training for patients with borderline personality disorder: Preliminary results.

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'Metacognitive training for borderline personality disorder' (B-MCT) represents a complementary group intervention. It aims at raising awareness for cognitive biases that may play an important role in the development and maintenance of borderline symptomatology. For the present study, we evaluated the effectiveness of this new approach against a control condition. Seventy-four inpatients with borderline personality disorder (BPD) were randomly assigned to metacognitive training for BPD or progressive muscle relaxation training as an add-on intervention to treatment as usual. Severity of symptomatology was assessed at baseline, four weeks after beginning and six months after completion of the intervention. The per-protocol and intention-to-treat analyses revealed that patients in the metacognitive training group showed significantly greater reductions on the primary outcome (Borderline Symptom List-23) after six months. Progressive muscle relaxation was superior in alleviating depressive symptoms (secondary outcome: Beck Depression Inventory) at the long-term follow-up. Findings provide preliminary evidence that metacognitive training for BPD yields surplus effects to standard treatment.

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[2383]

Treatment of Storm Fears Using Virtual Reality and Progressive Muscle Relaxation.

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BACKGROUND: The present study examined the efficacy of virtual reality (VR) exposure therapy for treating individuals with storm fears by comparing a one-session VR exposure treatment with a one-session progressive muscle relaxation (PMR) and psychoeducation session.

AIMS: It was predicted that there would be a reduction in storm-related fear post-treatment for individuals in both conditions, but that this reduction would be greater for those in the VR exposure condition. It was predicted that improvements would be maintained at 30-day follow-up only for those in the VR exposure condition.

METHOD: Thirty-six participants each received one of the two treatment conditions. Those in the PMR treatment group received approximately 30 minutes of PMR and approximately 15 minutes of psychoeducation regarding storms. Those in the VR treatment group received approximately 1 hour of VR exposure. Additionally, participants were asked to complete a pre-treatment and post-treatment 5-minute behavioural approach test to assess changes in storm fears. They were also asked to complete a measure assessing storm phobia.

RESULTS: There was a significant interaction between treatment group and self-reported fear at post-treatment, such that fear decreased for both groups, although the reduction was stronger in the VR group. Results also showed that reductions in storm fear were maintained at 30-day follow-up for both groups.

CONCLUSIONS: Although this study used a small non-clinical sample, these results offer preliminary support for the use of VR exposure therapy in the treatment of storm-related fear.

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Stress management for headaches in children and adolescents: A review and practical recommendations for health promotion programs and well-being.

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Stress is considered to be the most common factor reported to trigger headaches in children and adolescents. Although tension-type headache and migraine are the two most common types of headache in children and adolescents, they are often untreated, ignoring their stressful background. We provide a narrative review of the available evidence for health-care professionals involved in stress-related headache management and health promotion programs. An integrative plan is delivered through lifestyle improvement and biopsychosocial modifying stress response techniques. Healthy dietary choices, sleep hygiene, and regular exercise, although limited, are effective for young sufferers. Biopsychosocial therapies such as relaxation, biofeedback, hypnosis, yoga, cognitive behavioral therapy, and acupuncture focus at stress physiological and behavioral relief. Our purpose is to suggest a stress-related headache management to empower children to make healthy choices in order to improve their lifelong well-being and quality of life. We aim to authorize relationship between nurses and other health-care providers with background knowledge around stress management for pediatric headache populations.

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Understanding how patients use visualization during ablation of atrial fibrillation in reducing their experience of pain, anxiety, consumption of pain medication and procedure length: Integrating quantitative and qualitative results.

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BACKGROUND: Patients who undergo radiofrequency ablation of atrial fibrillation with a light conscious sedation often feel pain during the procedure which can be difficult to relieve with pharmacological pain treatment alone. In a quasi-experimental study, it was found that visualization together with usual pain medication reduced the amount of analgesics used. In addition, patients spontaneously expressed pain significantly fewer times outside the scheduled measurements. No difference was found in the perception of pain intensity or anxiety and procedure length in the study. In a subsequent qualitative study with patients from the intervention group in the quantitative study, patients reported visualization as a positive experience which helped them manage pain and anxiety by supporting their individual strategies and without inconvenience.

AIM: To examine patients' experiences with the effect of visualization during ablation of atrial fibrillation and its association with pain intensity, anxiety, pain medication and procedure length.

METHODS: A mixed-method study with explanatory sequential design including a quasi-experimental study with a control and an intervention group and a qualitative interview study with semi-structured interviews. The results from the two studies in the mixed method study have been integrated by merging and constructing follow-up joint displays.

RESULTS: Three themes were identified from the integration of the results from the quantitative and qualitative studies when analyzing and interpreting the results: "Zero pain is not always the goal"; "Not a real procedure time reduction but a sense of time shrinkage" and "Importance of the nurse's presence, visualization or not".

CONCLUSION: Visualization can help patients to manage procedural pain when going through ablation of atrial fibrillation but the effect of an intervention such as visualization cannot be measured by pain intensity because the effect of visualization helps patients to cope with the pain and not to reduce the experience of pain intensity. It was shown that the patients had a feeling of reduced procedure time, although it was not reduced statistically significantly by using visualization. Finally, patients did not feel high anxiety during the procedure which was in line with very low values of anxiety measured in the quantitative study but at the same time the presence of the staff was of great importance to them in providing a feeling of security. A reduction of analgesics as found in the study is not only a matter of safety, it is also important in the patient's perception.

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The advantages of hypnosis intervention on breast cancer surgery and adjuvant therapy.

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BACKGROUND: In oncology, hypnosis has been used for pain relief in metastatic patients but rarely for induction of anesthesia.

MATERIAL AND METHOD: Between January 2010 and October 2015, 300 patients from our Breast Clinic (Cliniques universitaires Saint-Luc, Université catholique de Louvain) were included in an observational, non-randomized study approved by our local ethics committee (ClinicalTrials.gov - NCT03003611). The hypothesis of our study was that hypnosis intervention could decrease side effects of breast surgery. 150 consecutive patients underwent breast surgery while on general anesthesia (group I), and 150 consecutive patients underwent the same surgical procedures while on hypnosis sedation (group II). After surgery, in each group, 32 patients received chemotherapy, radiotherapy was administered to 123 patients, and 115 patients received endocrine therapy.

RESULTS: Duration of hospitalization was statistically significantly reduced in group II versus group I: 3 versus 4.1 days (p = 0.00000057) for all surgical procedures. The number of post-mastectomy lymph punctures was reduced in group II (1-3, median value n = 1.5) versus group I (2-5, median value n = 3.1) (p = 0.01), as was the quantity of lymph removed (103 ml versus 462.7 ml) (p = 0.0297) in the group of mastectomies. Anxiety scale was also statistically reduced in the postoperative period among the group of patients undergoing surgery while on hypnosis sedation (p = 0.0000000000000002). The incidence of asthenia during chemotherapy was statistically decreased (p = 0.01) in group II. In this group, there was a statistically non-significant trend towards a decrease in the incidence of nausea/vomiting (p = 0.1), and the frequency of radiodermatitis (p = 0.002) and post-radiotherapy asthenia (p = 0.000000881) was also reduced. Finally, the incidence of hot flashes (p = 0.00000000000021), joint and muscle pain (p = 0.00000000000021) and asthenia while on endocrine therapy (p = 0.0000000000022) were statistically significantly decreased in group II.

DISCUSSION: Hypnosis sedation exerts beneficial effects on nearly all modalities of breast cancer treatment.

CONCLUSION: Benefits of hypnosis sedation on breast cancer treatment are very encouraging and further promote the concept of integrative oncology.

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Hypnosis for reduction of background pain and pain anxiety in men with burns: A blinded, randomised, placebo-controlled study.

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INTRODUCTION: ‘Background pain’ and ‘pain anxiety’ are among the numerous problems of patients with burns. Non-pharmacological and pharmacological interventions have been used to reduce background pain and pain anxiety. This study compared the effectiveness of hypnosis and 'neutral hypnosis' (as a placebo in the control group) in decreasing the background burn pain and pain anxiety of adult male survivors with burns.

DESIGN: This is a blinded, randomised, placebo-controlled study.

METHODS: Sixty men with burns were included in the minimisation method (30 individuals in the intervention group and 30 individuals in the control group). Four hypnotherapy sessions were performed every other day for each participant in the intervention group. Four neutral hypnosis sessions were performed every other day in the control group. Burn pain and pain anxiety of the patients in both groups were measured at the end of the second and fourth sessions. Repeated measures ANOVA was used for data analysis.

RESULTS: There was no significant difference between the groups in the reduction in background pain intensity. There was a significant reduction in background pain quality and pain anxiety in the intervention group during the four hypnosis sessions. After two hypnotherapy sessions, a significant reduction was observed in the level of background pain quality and pain anxiety of participants.

CONCLUSION: Hypnosis is effective in reducing background pain quality and pain anxiety of men with burns.

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Interest in online interprofessional elective mind-body skills (MBS) training.

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INTRODUCTION: There is growing interest in mind-body skills (MBS) education and online interprofessional elective MBS training for health professionals. We conducted this study to understand a) the demand among different health professionals for an online MBS course; b) engagement with different MBS topics; and c) planned behavior changes.

METHODS: We examined registrations from May 1 through August 31, 2014 for a new online MBS elective, analyzing the percentage of registrants who engaged with one or more of 12 modules by September 30, 2014. We also reviewed written comments about planned behavior change.

RESULTS: The 693 registrants included physicians, nurses, social workers, dietitians, psychologists, and others. The two most popular topics were "Introduction: to Stress, Resilience, and Relaxation Response" and "Autogenic Training". Half of registrants (57%) engaged with at least one module and 9%
completed all 12 modules within the study period. Nearly all (90%) of those who completed evaluations planned to use the technique they learned for themselves, introduce it to patients, or both. 

DISCUSSION: Online elective MBS training attracts diverse health professionals and leads to plans for personal and professional behavior change. Additional research is necessary to understand the impact of different amounts and kinds of MBS training on professionals' resilience, burnout, and quality of care.

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[2389]


Non-pharmacological interventions for reducing mental distress in patients undergoing dental procedures: Systematic review and meta-analysis.

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OBJECTIVES: This meta-analysis investigates the efficacy of non-pharmacological interventions in adults undergoing dental procedures under regional or general anesthesia compared to standard care alone or an attention control group on the reduction of mental distress, pain, and analgesic use.

DATA SOURCES: To identify relevant papers a comprehensive literature search was carried out in MEDLINE, CENTRAL, Web of Science, and PsycINFO (last search August 2017). Additionally, lists of references of relevant articles and previous reviews were checked. ProQuest Dissertations and Theses Full Text Database was screened to identify any unpublished material.

STUDY SELECTION: A total of 29 eligible randomized controlled trials were included, comprising a total of 2,886 patients. Included trials investigated the effects of hypnosis, enhanced information, relaxation, music, or cognitive-behavioral approaches including distraction.

RESULTS: Random effects meta-analyses revealed significant positive treatment effects on the reduction of mental distress (g = 0.58, CI 95% [0.39; 0.76]). Effects on pain relief (g = 0.00, CI 95% [-0.28; 0.28]) and the reduction of analgesic use (g = 0.26, CI 95% [-0.22; 0.73]) were not significant. Because effects on mental distress were substantially heterogeneous, subgroup analyses were run yielding significantly larger effects for studies with low risk of bias compared to studies with high or unclear risk of selection and attrition bias. No significant differences appeared between various types of non-pharmacological interventions.

CONCLUSIONS: In summary, benefits of non-pharmacological interventions on reducing mental distress were demonstrated with largest effects being shown for hypnosis. However, further high quality trials are needed to strengthen the promising evidence.

CLINICAL SIGNIFICANCE: This systematic review and meta-analysis indicated that non-pharmacological interventions may be beneficial for reducing mental distress in patients undergoing dental procedures and could thus be considered as valuable adjunct to standard care.

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How children remember the Strange Situation: The role of attachment.

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This study tested predictions from Bowlby's attachment theory about children's memory and suggestibility. Young children (3-5 years old, N=88; 76% Caucasians) and their parents took part in the Strange Situation Procedure, a moderately distressing event and "gold standard" for assessing children's attachment quality. The children were then interviewed about what occurred during the event. Children's age and attachment security scores positively predicted correct information in free recall and accuracy in answering specific questions. For children with higher (vs. lower) attachment security scores, greater distress observed during the Strange Situation Procedure predicted increased resistance to misleading suggestions. In addition, for children who displayed relatively low distress during the Strange Situation Procedure, significant age differences in memory and suggestibility emerged as expected. However, for children who displayed greater distress during the Strange Situation Procedure, younger and older children's memory performances were equivalent. Findings suggest that attachment theory provides an important framework for understanding facets of memory development with respect to attachment-related information and that distress may alter assumed age patterns in memory development.

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Pilot-RCT of an integrative group therapy for patients with refractory irritable bowel syndrome (ISRCTN02977330).

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OBJECTIVE: Different forms of psychotherapeutic treatments have been proven effective in irritable bowel syndrome (IBS), but disorder-oriented and integrative concepts are still rare. Therefore, we implemented and evaluated an integrative group therapeutic concept within an interdisciplinary tertiary care clinic for functional gastrointestinal disorders (FGIDs).

AIMS: present our integrative group concept, assess feasibility issues, and evaluate efficacy.

METHODS: A pilot-RCT with a randomized controlled wait-listed group design was conducted. The treatment concept was a disorder-oriented multicomponent group therapy (12 90-min weekly sessions) integrating interactive psychoeducation, gut-directed hypnotherapy, and open group phases. All patients received enhanced medical care and completed a short online diary as an active wait-listed control condition.

INCLUSION CRITERIA: refractory IBS diagnosed as somatoform autonomic dysfunction of the lower gastrointestinal tract (SAD).

PRIMARY OUTCOME: IBS symptom severity (IBS-SSS).

RESULTS: Of 294 patients, 220 had IBS (ROME III), 144 were diagnosed as SAD (ICD-10), 51 were eligible regarding inclusion/exclusion criteria, and 30 consented to participate (group intervention: n=16, wait-listed control condition: n=14). Only 1 patient dropped out. Intention-to-treat-analysis with repeated-measures mixed ANOVA showed that the group intervention was not significantly superior to the wait-listed control condition. Nevertheless, the calculated effect size for the between-group difference in IBS-SSS at the end of treatment (post) was moderate (d=0.539).

CONCLUSION: Our disorder-oriented integrative group intervention for IBS proved to be acceptable and feasible in an interdisciplinary tertiary care setting. There is promise in this intervention, but a larger RCT may be needed to investigate efficacy.
Introduction and aim: The popularity of complementary and alternative medicine (CAM) in treating functional gastrointestinal disorders (FGIDs) has steadily increased in Western countries. We aimed at analyzing available data on CAM effectiveness in functional dyspepsia (FD) patients.

Methods: A bibliographical search was performed in PubMed using the following keywords: "complementary/alternative medicine," "hypnosis," "acupuncture" and/or "functional dyspepsia."

Results: In community settings, almost 50% of patients with FGIDs used CAM therapies. Herbal remedies consist of multi-component preparations, whose mechanisms of action have not been systematically clarified. Few studies analyzed the effectiveness of acupuncture in Western countries, yielding conflicting results and possibly reflecting a population bias of this treatment. Hypnosis has been extensively used in irritable bowel syndrome, but few data support its role in treating FD.

Conclusions: Although some supporting well-designed studies have been recently performed, additional randomized, controlled trials are needed before stating any recommendation on CAM effectiveness in treating FD.

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Midwives' personal use of complementary and alternative medicine (CAM) influences their recommendations to women experiencing a post-date pregnancy.

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Complementary and Alternative Medicine (CAM) have increasingly been used by pregnant women with a steady rise in interest by midwives. Literature describing CAM and self-help options midwives recommend to women experiencing a post-date pregnancy is sparse. This study aimed to investigate if Australian midwives' personal CAM use impacts on discussions and recommendations of CAM/Self-help strategies.METHODOLOGY/DESIGN: A survey of a national midwifery association midwifery members (n=3,552) was undertaken at a midwifery conference (October 2015) and via e-bulletins (November 2015-March 2016). The self-administered survey included questions on what self-help and CAM strategies midwives discuss and recommend to women with a post-date pregnancy, midwives' confidence levels on discussing or recommending CAM, midwives' own personal use of CAM.

FINDINGS: A total of 571 registered midwives completed the survey (16%). Demographics (age, years as a midwife, state of residence) reflected Australian midwives and the midwifery association membership. Most respondents discuss (91.2%) and recommend (88.6%) self-help/CAM strategies to women with a post-date pregnancy. The top five CAM recommended were Acupuncture (65.7%), Acupressure (58.1%), Raspberry Leaf (52.5%), Massage (38.9%) and Hypnosis/Calmbirth/Hypnobirthing (35.7%). Midwives were more likely to discuss strategies if they personally used CAM (p<.001), were younger (p<.001) or had
worked less years as midwives (p=.004). Midwives were more likely to recommend strategies if they used CAM in their own pregnancies (p=.001).

CONCLUSION: Midwives' personal use of CAM influenced their discussions and recommendations of CAM/self-help strategies to women experiencing a post-date pregnancy. This study has implications for inclusion of CAM in midwifery education curricula.

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[2394]


The role of clinical hypnosis and self-hypnosis to relief pain and anxiety in severe chronic diseases in palliative care: a 2-year long-term follow-up of treatment in a nonrandomized clinical trial.


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BACKGROUND: Patients with severe chronic diseases and advanced cancer receiving palliative care, have a complex range of pain and anxiety that can arise early in the course of illness. We studied two groups of patients with severe chronic diseases who participated in a nonrandomized clinical trial of early integration of clinical hypnosis in palliative care versus standard pharmacological care. The purpose of this investigation was to evaluate whether a long-term intervention of 2 years with clinical hypnosis and self-hypnosis as an adjuvant therapy in chronic pain and anxiety, is more effective than pharmacological therapy alone.

METHODS: The study was performed at the Center of Anesthesiology, Intensive Care and Pain Therapy at the University of Verona, Italy. The study population consisted of 50 patients, 25 in the hypnosis group and 25 in the control group. Fourteen men and 36 women participated in the study. Evaluations with Visual Analog Scale (VAS) for pain and Hamilton Anxiety Rating Scale (HAM-A) for anxiety and the evaluation of the use of opioids and analgesic medicines were conducted at baseline and for a long-term follow-up (after 1 and 2 years).

RESULTS: The two groups were homogeneous in the distribution of sex, age, type and subtypes of diseases and use of opioids and analgesic medicines at baseline. The patients suffered from 3 main types of severe chronic diseases: rheumatic (n=21), neurologic (n=16) and oncologic (n=13). The VAS score at baseline was similar in both the hypnosis group and control group (mean ± standard deviation, SD: 78±16 and 77±14, respectively). The average VAS value for the hypnosis group decreased from 81.9±14.6 at baseline to 45.9±13.8 at 1-year follow-up, to 38.9±12.4 at 2-year follow-up. The average VAS value for the control group decreased from 78.5±14.8 at baseline, to 62.1±15.4 at 1-year follow-up, to 57.1±15.9 at 2-year follow-up. The variance analysis indicated that the decrease in perceived pain was more significant in the hypnosis group patients than in the control group, after 1- and 2-year follow-up (P=0.0001). The average HAM-A Hamilton anxiety score decreased from 32.6 at baseline to 22.9 and 17.1 respectively at 1-year and 2-year follow-up for the hypnosis group, but it remained almost the same in the control group (29.8, 26.1 and 28.5 at baseline, first and second year respectively). ANOVA showed that the difference between the two groups was statistically significant (P<0.0001). Univariate analysis showed a 4-times greater risk of increasing analgesic medicines and opioids in the control
CONCLUSIONS: The patient group receiving hypnosis as an adjuvant therapy showed a statistically significant decrease in pain and anxiety and a significantly lower risk of increasing pharmacological pain treatment in a long term follow-up after 1 and 2 years compared to the control group. Clinical hypnosis can be considered an effective adjuvant therapy for pain and anxiety control in cancer as well as in severe chronic diseases for patients receiving palliative care.

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Cognitive hypnotherapy for psychological management of depression in palliative care.

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The prevalence of psychiatric disorders in palliative care is well documented, yet they often remain undetected and untreated, adding further to the burden of suffering on patients who are already facing severe physical and psychosocial problems. This article will focus on depression as it represents one of the most common psychiatric disorders treated by psychiatrists and psychotherapists in palliative care. Although depression in palliative care can be treated successfully with antidepressant medication and psychotherapy, a significant number of depressives do not respond to either medication or existing psychotherapies. This is not surprising considering depression is a complex disorder. Moreover, the presentation of depression in palliative care is compounded by the severity of the underlying medical conditions. It is thus important for clinicians to continue to develop more effective treatments for depression in palliative care. This article describes cognitive hypnotherapy (CH), an evidence-based multimodal treatment for depression which can be applied to a wide range of depressed patients in palliative care. CH, however, does not represent a finished product; it is a work in progress to be empirically validated and refined by advances in cancer and clinical depression.

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BACKGROUND: Hypnotic analgesia is one of the most effective nonpharmacological
methods for pain control. Hypnosis and distraction of attention from pain might share similar mechanisms by which brain responses to painful stimulation could be similarly reduced in both states. There is ample evidence for the efficacy of clinical hypnosis as a psychological intervention in the treatment of acute or chronic pain. Results are conflicting, however, with some studies showing an increase, others a reduction, and others still no change in the amplitude of event-related brain potentials during hypnosis as compared to control conditions. Here we compared the effects of clinical hypnosis to simple distraction of attention during recording of laser-evoked potentials (LEPs) in patients with chronic pain.

METHODS: The dominant hand in ten patients with chronic pain was tested with LEPs during: (I) resting state; (II) clinical hypnosis, and (III) distraction of attention. Nocturnal responses elicited by LEPs were graded on a numerical rating scale (NRS), and the change in N2-P2 complex amplitude during the three experimental conditions was analyzed.

RESULTS: N2-P2 amplitudes were significantly decreased during the hypnotic state as compared to the resting state and distraction of attention.

CONCLUSIONS: Hypnosis is a modified state of consciousness that may differ from mental relaxation or distraction of attention from pain. A reduction in N2-P2 amplitude may result from the modulation of diverse brain networks, particularly the frontolimbic pathways, which could modify noxious stimuli input processing during hypnotic analgesia. Our findings indicate that several different brain mechanisms may act together in hypnosis and distraction of attention during pain processing and that clinical hypnosis may provide a useful non-invasive pain relief therapy.

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[2397]


I hurt so: hypnotic interventions and palliative care for traumatic brain injury.

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This article presents a case study in which self-hypnosis, hypnosis-assisted psychotherapy, and palliative care strategies were provided within a multi-modal integrative treatment program for a 38-year-old woman with traumatic brain injury (TBI) secondary to motor vehicle accident. Self-hypnosis was helpful in anxiety reduction and pain management. Hypnosis-assisted psychotherapy was beneficial in de-sensitizing many post-traumatic memories, and in managing post-concussion pain, including neuropathic pain and post-traumatic migraine headaches. A variety of palliative care techniques and spiritual interventions were applied to enhance sleep, moderate cognitive deficits, and enhance quality of life.

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[2398]


Clinical hypnosis, mindfulness and spirituality in palliative care.

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In this article, I do not intend to present the many and well-known treatments for relieving pain and distress symptoms of the physical body, damaged by terminal diseases, such as cancer, AIDS, multiple sclerosis. In this article, I'd rather focus my attention on clinical hypnosis for subjects who, freed from physical pain, thanks to palliative care, are open to receiving comfort and support for their psychological and spiritual suffering. The intent of this article is to express how clinical hypnosis can harmoniously integrate psychological and spiritual aspects so that the terminal patient can make peace with his/her past, with the people who have hurt him/her, and with the people who will suffer because of his/her death. This article will present some hypnotic suggestions inspired by universal wisdom of the Stoics, by positive psychology of Mindfulness, by laws of nature regarding changes, differences and mysteries. The basic assumption of the suggestions presented is that, if disease is an enemy to fight, death is an inevitable part of life: it cannot be avoided, or postponed or exchanged with anybody. It arrives when we have finished living. When death is preceded by an incurable disease, palliative care can offer a mantle of compassion and acceptance of what cannot be avoided. The words palliative comes from the Latin pallium-mantle. This article also presents some suggestions I have utilized several times with my patients. These suggestions have demonstrated their efficacy in alleviating patients’ suffering in coping with their disease and in facing death.

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[2399]

Meditational spiritual intercession and recovery from disease in palliative care: a literature review.

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Human body is a biological, open system and maintains itself in the changing environment. Disease state is cured by many medicinal systems for healing. Esoteric healing (through introspective hypnosis, meditation and spiritual intercession) is the system where its believers regard Supreme Being as Omnipotent, Omnipresent and Omniscient. Such persons take ill health as a boon and pray through meditation that He may by His Mercy grant health or if God wishes otherwise, they happily accept it so that they keep moving ahead on their spiritual path. This study is a review of literature, where results clearly point towards better psychological and spiritual healing in patients who believe in esoteric cures. Modern science in terms of cognitive psychology or neurophysiology has begun to emphasize the role of consciousness but, that is confined only to the physical world. It is only with the advent of Param Purush Puran Dhani Soami Ji Maharaj (200 years ago) that in the religion of Saints, the ultimate consciousness or the Super Consciousness of the highest order has been revealed.

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Anxiety and psychosomatic symptoms in palliative care: from neuro-psychobiological response to stress, to symptoms' management with clinical hypnosis and meditative states.

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Psychosomatic disorder is a condition in which psychological stresses adversely affect physiological (somatic) functioning to the point of distress. It is a condition of dysfunction or structural damage in physical organs through inappropriate activation of the involuntary nervous system and the biochemical response. In this framework, this review will consider anxiety disorders, from the perspective of the psychobiological mechanisms of vulnerability to extreme stress in severe chronic illnesses. Psychosomatic medicine is a field of behavioral medicine and a part of the practice of consultation-liaison psychiatry. Psychosomatic medicine in palliative care, integrates interdisciplinary evaluation and management involving diverse clinical specialties including psychiatry, psychology, neurology, internal medicine, allergy, dermatology, psychoneuroimmunology, psychosocial oncology and spiritual care. Clinical conditions where psychological processes act as a major factor affecting medical outcomes are areas where psychosomatic medicine has competence. Thus, the psychosomatic symptom develops as a physiological connected of an emotional state. In a state of rage or fear, for example, the stressed person's blood pressure is likely to be elevated and his pulse and respiratory rate to be increased. When the fear passes, the heightened physiologic processes usually subside. If the person has a persistent fear (chronic anxiety), however, which he is unable to express overtly, the emotional state remains unchanged, though unexpressed in the overt behavior, and the physiological symptoms associated with the anxiety state persist. This paper wants highlight how clinical hypnosis and meditative states can be important psychosocial and spiritual care, for the symptom management on neuro-psychobiological response to stress.

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Integration of hypnosis into pediatric palliative care.

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At least 8 million children would need specialized pediatric palliative care (PPC) services annually worldwide, and of the more than 42,000 children and teenagers dying annually in the United States, at least 15,000 children would require PPC. Unfortunately, even in resource-rich countries the majority of
children dying from serious advanced illnesses are suffering from unrelieved, distressing symptoms such as pain, dyspnea, nausea, vomiting, and anxiety. State of the art treatment and prevention of those symptoms requires employing multi-modal therapies, commonly including pharmacology, rehabilitation, procedural intervention, psychology, and integrative modalities. This article describes the current practice of integrating hypnosis into advanced pain and symptom management of children with serious illness. Three case reports of children living with a life-limiting condition exemplify the effective use of this clinical modality to decrease distressing symptoms and suffering. Hypnosis for pediatric patients experiencing a life-limiting disease not only provides an integral part of advanced symptom management, but also supports children dealing with loss and anticipatory loss, sustains and enhances hope and helps children and adolescents live fully, making every moment count, until death.

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[2402]


Therapeutic suggestions with critically ill in palliative care.

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Suggestions can be used without formal hypnosis, especially with critically ill patients, due to their spontaneous trance state. In this paper we outline data on the effectiveness of therapeutic suggestions. We interpret the possible mechanism of therapeutic suggestions in the context of stress cognition. Basic principles of formulating suggestions are discussed and some recommended versions of non-pharmacological pain control are provided. Case vignettes are given of how suggestions are used with critically ill ICU patients.

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[2403]


Shedding light on the fundamental mechanism underlying hypnotic analgesia.

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Owing to the increasing importance of clinical hypnosis in pain therapy and palliative care, there is a growing interest in uncovering the mechanism underlying hypnotic analgesia. The neurophysiological findings suggest that the hypnotic state is associated with an altered operating mode of the brain that is clearly different from the normal operating mode. While in the normal operating mode a dolorogenic stimulus induces a highly synchronized large-scale activity pattern that leads to the experience of pain, the altered operating mode inhibits the synchronization of spatially divided brain regions. As a consequence, the conscious experience of pain cannot arise. In order to gain a deeper
understanding of the mechanism, a novel theoretical framework is made use of. It accepts consciousness as a fundamental property of the universe and is based on the hypothesis that the whole range of phenomenal qualities is built into the frequency spectrum of a ubiquitous background field. The body of evidence supports the view that in the normal operating mode our brains act as filters that extract the plethora of phenomenal nuances selectively from this field. In the altered operating mode, which establishes under hypnotic conditions, the extraction of phenomenal qualities is partially prevented. From this perspective, hypnotic analgesia is due to an impairment of the fundamental mechanism underlying conscious perception.

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On the way of liberation from suffering and pain: role of hypnosis in palliative care.

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The huge problems related to chronic, ultimately fatal diseases involve disability, pain, suffering and the perception of one's doom; this calls for reappraising the conventional concepts of health and disease, life and death, encompassing spirituality and the mystery of death beyond any limited perspective. The management of suffering and pain to enhance resilience plays a central role in palliative care (PC) and is the core of the patient-centered approach, focused on the "to care" instead of the "to cure" of the illness-centered medicine. In this article, the perspectives supporting these instances are analyzed, focusing on hypnosis, to be considered as a powerful technique able to improve patient's control over mind and body (including relaxation, fairness, analgesia, improved stability of physical parameters and wellbeing).

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Investigating the Effects of the Progressive Muscle Relaxation-Guided Imagery Combination on Patients with Cancer Receiving Chemotherapy Treatment: A Systematic Review of Randomized Controlled Trials.

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BACKGROUND: Previous systematic reviews indicate that progressive muscle relaxation (PMR) and guided imagery (GI) are both effective interventions to decrease the psychological impact and to alleviate the adverse events in cancer patients undergoing chemotherapy treatment. To date, no review studies have investigated the effectiveness of a combination of PMR and GI.

AIM: To systematically review the current state of knowledge regarding the effects of the PMR-GI combination on cancer patients receiving chemotherapy.

METHODS: A search for relevant records was carried out in four electronic databases (AMED, Cochrane Library, Pubmed and Scopus). After removing the duplicates 342 publications were screened and 71 were considered as potentially relevant. The flow of information of this study was in line with the PRISMA statement. Original articles investigating the application of both PMR and GI through a randomized trial on patients receiving chemotherapy were included. Those using PMR or GI alone and those combining other techniques together with PMR and GI were excluded. The trials’ quality was assessed using the Jadad Scale.

RESULTS: Eight papers reporting the results of seven independent trials were finally included. All of them included only breast cancer patients, apart from a single trial using a mixed sample of breast and prostate cancer patients. Seven of the included trials reported beneficial effects on mental state (mood, anxiety, and depression) and on toxicity (nausea and vomiting). Three trials reported an effect on biomarkers (heart rate, blood pressure, cortisol, and immunity). Four trials scored three of five points on the Jadad Scale, two trials scored two points and a single trial scored zero.

CONCLUSIONS: Independent trials indicate that the PMR-GI combination is an effective way to tackle the impact of nausea and vomiting and to improve patients' mental state. However, studies involving other types of primary tumors would be useful because seven of the eight clinical trials only included breast cancer patients. Future research on the identification of potential effects on disease-related parameters (e.g., cytokines and disease-recurrence) and on patient survival is highly needed.

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[2406]


Jumping Frenchmen, Miryachit, and Latah: Culture-Specific Hyperstartle-Plus Syndromes.

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In the late 19th century, jumping (French Canadians in Maine, USA), miryachit (Siberia), and latah (Southeast Asia) were among a group of similar disorders described around the world, each of which manifests as an exaggerated startle response with additional late-response features that were felt by some to overlap with hysteria or tics. The later features following the exaggerated startle reaction variably include mimesis (e.g., echopraxia, echolalia) and automatic obedience. These reaction patterns tended to persist indefinitely in affected individuals. Because of their dramatic stimulus-driven behaviors, affected individuals were prone to be teased and tormented by being repeatedly and intentionally startled. Despite clinical overlap between jumping and Tourette syndrome, these entities are now recognized as distinct: in jumping, the key feature is an abnormal startle response, the abnormal reaction is always provoked, and tics are absent, whereas in Tourette syndrome, the key feature is spontaneous motor and vocal tics, although patients with Tourette syndrome may occasionally also have an exaggerated startle response. These disorders have been conceptualized from anthropological, psychodynamic, and neurobiologic
perspectives, with no complete resolution to date. Attempts at treatment have been generally unsuccessful, including attempts with bromization and hypnosis, although anecdotal reports of successful deconditioning have been published. In population groups affected, these disorders are usually considered as behavioral peculiarities and not as diseases per se, and there is no apparent tendency to develop disabling mental illness or neurodegenerative disorders. The genesis of these disorders, their cultural and social components, and their interactions with the presumed underlying physiological substrate need further study. Careful descriptive and analytic epidemiological studies are also lacking for all of these disorders.

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Management of Gastroesophageal Reflux Disease.

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Management of gastroesophageal reflux disease (GERD) commonly starts with an empiric trial of proton pump inhibitor (PPI) therapy and complementary lifestyle measures, for patients without alarm symptoms. Optimization of therapy (improving compliance and timing of PPI doses), or increasing PPI dosage to twice daily in select circumstances, can reduce persistent symptoms. Patients with continued symptoms can be evaluated with endoscopy and tests of esophageal physiology, to better determine their disease phenotype and optimize treatment. Laparoscopic fundoplication, magnetic sphincter augmentation, and endoscopic therapies can benefit patients with well-characterized GERD. Patients with functional diseases that overlap with or mimic GERD can also be treated with neuromodulators (primarily antidepressants), or psychological interventions (psychotherapy, hypnotherapy, cognitive and behavioral therapy). Future approaches to treatment of GERD include potassium-competitive acid blockers, reflux-reducing agents, bile acid binders, injection of inert substances into the esophagogastric junction, and electrical stimulation of the lower esophageal sphincter.

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Assessment of a short hypnosis in a paediatric operating room in reducing postoperative pain and anxiety: A randomised study.


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AIMS AND OBJECTIVES: To assess the impact of a short hypnotic session on postoperative anxiety and pain in major orthopaedic surgery.

BACKGROUND: Despite specific information given before a scheduled paediatric surgery, perioperative anxiety can become important.

DESIGN: Randomised Clinical Study.

METHODS: The study is an open single-centre randomised clinical study comparing a "control" group versus a "hypnosis" group receiving a short hypnosis pre-induction session as additional experimental analgesic procedure. The primary endpoint was the postoperative anxiety, blindly assessed using a visual analogue scale.

RESULTS: The study involved 120 children (age 10-18 years). The results showed no difference between control group versus hypnosis group. Twenty-four hours after surgery (Day+1), the patient's anxiety score was not different between control and hypnosis groups (median [Q1-Q3]: 1 [0; 3] vs. 0 [0; 3], respectively, p = .17). Each group experienced a significant decrease in anxiety level between the day before surgery (Day-1) and the day after surgery (Day+1) (median ([Q1-Q3]) difference of the anxiety score: 2 [4; 0] and 2 [4; 0], respectively, p < .0001 in each group). The postoperative pain scores were low and not different between groups (median [Q1-Q3]: 2 [0; 3] in control group vs. 3 [1; 3] in hypnosis group, p = .57).

CONCLUSION: This randomised study on a short hypnosis session performed in the operating room prior to a major surgery showed no difference in postoperative anxiety and pain levels. The decrease in anxiety and pain levels may be due to the addition of nurse pre-operative interviews and optimisation in communication in the operating room.

RELEVANCE TO CLINICAL PRACTICE: As postoperative anxiety level was low in both control and hypnosis groups, nurse pre-operative interviews and nurse training in hypnosis may contribute to the optimisation of global management and decrease the postoperative anxiety level.

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[2409]

Synaesthesia-type associations and perceptual changes induced by hypnotic suggestion.

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Are synaesthetic experiences congenital and so hard-wired, or can a functional analogue be created? We induced an equivalent of form-colour synaesthesia using hypnotic suggestions in which symbols in an array (circles, crosses, squares)
were suggested always to have a certain colour. In a Stroop type-naming task, three of the four highly hypnotizable participants showed a strong synaesthesia-type association between symbol and colour. This was verified both by their subjective reports and objective eye-movement behaviour. Two resembled a projector- and one an associator-type synaesthete. Participant interviews revealed that subjective experiences differed somewhat from typical (congenital) synaesthesia. Control participants who mimicked the task using cognitive strategies showed a very different response pattern. Overall, the results show that the targeted, preconsciously triggered associations and perceptual changes seen in association with congenital synaesthesia can rapidly be induced by hypnosis. They suggest that each participant's subjective experience of the task should be carefully evaluated, especially when studying hypnotic hallucinations. Studying such experiences can increase understanding of perception, automaticity, and awareness and open unique opportunities in cognitive neuroscience and consciousness research.

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[2410]  

Do we feel pain during anesthesia? A critical review on surgery-evoked circulatory changes and pain perception.  

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The difficulty of defining the three so-called components of « an-esthesia » is emphasized: hypnosis, absence of movement, and adequacy of anti-nociception (intraoperative « analgesia »). Data obtained from anesthetized animals or humans delineate the activation of cardiac and vasomotor sympathetic reflex (somato-sympathetic reflex) and the cardiac parasympathetic deactivation observed following somatic stimuli. Sympathetic activation and parasympathetic deactivation are used as monitors to address the adequacy of intraoperative anti-nociception. Finally, intraoperative nociception through the administration of nonopioid analgesics vs. opioid analgesics is considered to achieve minimal postoperative side effects.  

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[2411]  

Efficacy of hypnotherapy compared to cognitive-behavioural therapy for mild-to-moderate depression: study protocol of a randomised-controlled rater-blind trial (WIKI-D).  

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INTRODUCTION: Despite a substantial number of studies providing evidence for the efficacy of psychological treatment for mild-to-moderate depression, maximally only 50% of participants respond to treatment, even when using gold-standard treatments such as cognitive-behavioural therapy (CBT) and interpersonal therapy. New approaches such as the ‘third wave’ psychotherapies have provided promising results; however, studies concerning the comparison with evidence-based treatments are lacking. This study aims to compare the efficacy of clinical hypnotherapy (HT) with gold-standard psychotherapy (CBT) in the treatment of mild-to-moderate major depressive episodes.

METHODS AND ANALYSIS: The present study comprises a monocentric, two-armed, randomised-controlled, rater-blind (non-inferiority) clinical trial. A total of 160 participants with mild-to-moderate major depression episode will be randomly assigned to either CBT or HT involving 20 sessions of psychotherapy over a period of 24 weeks. We predict that the average improvement in the Montgomery-Åsberg Depression Rating Scale score will not be inferior in HT compared with CBT (non-inferiority hypothesis). Further outcome parameters will include the number of participants responding to treatment following the completion of treatment and 1 year after. Additionally, quality of life, treatment expectations and hypnotic susceptibility before and after end of treatment will be assessed.

ETHICS AND DISSEMINATION: The study protocol and the documents for the informed consent have been approved by the Ethics Committee of the University Hospital Tuebingen (061/2015B02). The results of this trial will be submitted for publication in peer-reviewed journals, and will be presented at national and international conferences.

TRIAL REGISTRATION NUMBER: NCT02375308; Pre-results.

Conflict of interest statement: Competing interests: None declared.
12 weeks each. Measurements were performed before and after treatment. The primary outcome was a pain diary. Analysis was carried out as per protocol. RESULTS: Of 45 participants included, 13 were lost to follow-up. Thirty-two participants (14 GDHT, 18 UHT) were analyzed. Dropouts had higher pain severity. Completers in both conditions showed good adherence and a similar decrease in days with pain and pain duration. Pain intensity decreased only in the UHT condition. Eleven participants (two GDHT, nine UHT) achieved clinical remission (>80% improvement) and 13 participants (seven GDHT, six UHT) improved significantly (30-80%). CONCLUSION: Results suggest a high efficacy of standardized home-based hypnotherapy for children/adolescents with abdominal pain. Children/adolescents with high pain severity are at risk of dropping out. The UHT condition showed slight evidence of superiority, but conditions were equivalent on most outcomes. Taken together, self-help approaches based on hypnotherapy could close a treatment gap and prevent chronification.

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Characteristics of electroencephalogram signatures in sedated patients induced by various anesthetic agents.

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Devices that monitor the depth of hypnosis based on the electroencephalogram (EEG) have long been commercialized, and clinicians use these to titrate the dosage of hypnotic agents. However, these have not yet been accepted as standard monitoring devices for anesthesiology. The primary reason is that the use of these monitoring devices does not completely prevent awareness during surgery, and the development of these devices has not taken into account the neurophysiological mechanisms of hypnotic agents, thus making it possible to show different levels of unconsciousness in the same brain status. An alternative is to monitor EEGs that are not signal processed with numerical values presented by these monitoring devices. Several studies have reported that power spectral analysis alone can distinguish the effects of different hypnotic agents on consciousness changes. This paper introduces the basic concept of power spectral analysis and introduces the EEG characteristics of various hypnotic agents that are used in sedation.

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Conflict of interest statement: NOTES: There are no financial or other issues that might lead to conflict of interest.

Guided Imagery for Pain Management in Postoperative Orthopedic Patients: An Integrative Literature Review.

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Author information:
BACKGROUND: Pain following orthopedic surgery can be intense due to the nature of
the surgical procedure. Pain is a multilevel phenomenon that includes
physiological and psychosocial components. Interventions that address body, mind,
and spirit are needed to provide holistic management of pain. Guided imagery is a
mind-body intervention that can address all aspects of the patient's pain
experience.

PURPOSE: This integrative review, informed by Watson's theory of human caring,
identifies evidence that either supports or refutes the use of guided imagery as
a supplement to pharmaceutical pain management for postoperative orthopedic
patients.

METHOD: An integrative literature search was conducted. Twenty-two studies were
identified as potentially relevant to this study. Nine of the articles met all
inclusion criteria and were included in this study.

RESULTS AND CONCLUSIONS: Based on the evidence reviewed, it is recommended that
guided imagery be used as an adjunct for pain management in patients undergoing
orthopedic surgery. However, additional research in this area is needed. Future
research: Two topics for further research were identified. The first is a need to
identify an optimal frequency of use of guided imagery. The second is to identify
how to ensure patients are using the intervention as recommended.

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[2415]


A Scoping Review of Health Outcomes Examined in Randomized Controlled Trials
Using Guided Imagery.

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Introduction: Guided imagery involves the controlled visualization of detailed
mental images. This integrative health technique is used for healing, health
maintenance, or the treatment of specific conditions. Guided imagery is an
integral part of mindfulness meditation, hypnosis, and various relaxation
exercises. However, evidence to support the widespread use and dissemination of
guided imagery interventions has been lacking. The purposes of this scoping
review were to document the scope of health outcomes and disease processes
examined by guided imagery researchers and the journal outlets where this work
has been published. Secondary purposes were to review the efficacy of guided
imagery, risk of bias from studies published in selected integrative health
journals, and gain feedback from clinicians in a practiced-based research network
(PBRN) about potential barriers for use in clinical settings.

Methods: Ten bibliographic databases were searched for randomized controlled
trials (RCTs) published between 1960 and 2013 that included adult participants.
Descriptive and analytic methods were employed to document the journal outlets,
diseases, and health outcomes investigated.

Results: 320 RCTs that included more than 17,979 adult participants were
reviewed. The published studies appeared in 216 peer-reviewed journals from
diverse disciplines largely representing psychology, the sport sciences,
rehabilitation, nursing, and medicine. Major outcomes observed were coping with
pain, stroke recovery, anxiety, coping with stress, and sport skills.
Practitioner feedback from the PBRN revealed some interest but skepticism and time constraints were discussed as barriers. Conclusions: Ongoing research and creative dissemination techniques are warranted.

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[2416]
[Hypnosis to fight against pain and anxiety in palliative care].
[Article in French]
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In our society, hypnosis sometimes has a negative, distorted image. For several years now it has become more widespread in the healthcare field and its use has increased in caring for symptoms such as pain and anxiety. It can be of great help in palliative situations.

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[2417]
Hypnotic susceptibility and affective states in bipolar I and II disorders.

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BACKGROUND: Highly hypnotizable individuals have impaired executive function, elevated motor impulsivity and increased emotional sensitivity, which are sometimes found in bipolar disorder patients. It is then reasonable to assume that certain aspects of hypnotic susceptibility differ with the types of bipolar disorder.

METHODS: The Stanford Hypnotic Susceptibility Scale: Form C (SHSS:C) test, the Mood Disorder Questionnaire (MDQ), the Hypomanic Checklist-32 (HCL-32) and the Plutchick-van Praag Depression Inventory (PVP) were applied to 62 patients with bipolar I disorder, 33 bipolar II disorder, and 120 healthy volunteers.

RESULTS: The passing rate of the SHSS:C 'Moving hands apart' item was higher in bipolar I patients than in controls, whereas for 'Mosquito hallucination' the rate was lower. Bipolar I and II patients scored significantly higher on MDQ,
HCL-32 and PVP scales than controls. The passing rates of 'Mosquito hallucination' in controls, 'Arm rigidity' in bipolar I, and 'Age regression' in bipolar II predicted the respective MDQ scores.

CONCLUSION: In contrast to cognitive suggestions, bipolar I patients followed motor suggestions more often under hypnosis. Furthermore, both bipolar disorder patients and healthy volunteers demonstrated associations between mania levels and certain hypnotic susceptibility features. Our study aids in better understanding the altered conscious states in bipolar disorders, and encourages the use of related psychotherapy for these patients.

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[2418]

Group interventions to reduce emotional distress and fatigue in breast cancer patients: a 9-month follow-up pragmatic trial.


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BACKGROUND: Long-term effects of psychosocial interventions to reduce emotional distress, sleep difficulties, and fatigue of breast cancer patients are rarely examined. We aim to assess the effectiveness of three group interventions, based on cognitive behavioural therapy (CBT), yoga, and self-hypnosis, in comparison to a control group at a 9-month follow-up.

METHODS: A total of 123 patients chose to participate in one of the interventions. A control group was set up for those who agreed not to participate. Emotional distress, fatigue, and sleep quality were assessed before (T0) and after interventions (T1), and at 3-month (T2) and 9-month follow-ups (T3).

RESULTS: Nine months after interventions, there was a decrease of anxiety (P=0.000), depression (P=0.000), and fatigue (P=0.002) in the hypnosis group, and a decrease of anxiety (P=0.024) in the yoga group. There were no significant improvements for all the investigated variables in the CBT and control groups.

CONCLUSIONS: Our results showed that mind-body interventions seem to be an interesting psychological approach to improve the well-being of breast cancer patients. Further research is needed to improve the understanding of the mechanisms of action of such interventions and their long-term effects on quality of life.

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[2419]

The journey between brain and gut: A systematic review of psychological
mechanisms of treatment effect in irritable bowel syndrome.


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PURPOSE: Irritable bowel syndrome (IBS) is a functional gastrointestinal (GI) disorder characterized by abdominal pain and altered bowel habits. It is estimated to affect 10-22% of the UK population. The use of psychological interventions in IBS is increasingly empirically supported, but little is known about the mechanism of psychological treatment approaches. The present systematic review aimed to investigate the mechanisms of psychological treatment approaches applied to IBS.

METHODS: The systematic review included studies conducting mediation analysis in the context of psychological interventions for IBS, focusing on the outcomes of symptom severity and/or quality of life (QoL).

RESULTS: Nine studies in total were included in the review. Eight of the studies assessed mediation in the context of cognitive behavioural-based interventions, and one study assessed mediation in a mindfulness-based stress reduction intervention. Results indicate that change in illness-specific cognitions is a key process by which psychological treatments may have an effect on the outcomes of symptom severity and QoL. Furthermore, results suggest that whilst GI-specific anxiety may also be a key mechanism of treatment effect, it would appear that general or state anxiety is not. Although less commonly included in mediation analysis, illness-specific behaviours may also have a mediating role.

CONCLUSIONS: A mediational model amalgamating the results of studies is proposed to illustrate the findings of the review. The model depicts the process by which psychotherapy changes illness-specific cognitions, behaviours, and anxiety to achieve reduction in symptom severity. Statement of contribution What is already known on this subject? Cognitive behavioural therapy (CBT) is the predominant psychological treatment for irritable bowel syndrome (IBS), although there is some research supporting other treatments such as mindfulness and hypnotherapy. Mediation analysis in the context of psychological treatments for IBS has just begun to explore possible mechanisms of treatment effect especially within CBT studies. Some studies include anxiety in a basic mediation analysis, whilst others include cognitions with inconsistent results for each. What does this study add? Reviews mediators included in mediation analysis and the methods used for mediation analysis Proposes a mediation model informed by the results of the review for future studies to investigate Provides clinical implications for the targeting of cognitions and behaviours rather than general anxiety.

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[2420]

Neuroprotective Anesthesia Regimen and Intensive Management for Pediatric Cardiac Surgery with Cardiopulmonary Bypass: a Review and Initial Experience.

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Author information:
This article describes our proposal for routine anesthesia, intraoperative medical management, cerebral and physiological monitoring during pediatric cardiac surgery with cardiopulmonary bypass that intend to provide appropriate anesthesia (analgesia, hypnosis), neuroprotection, adequate cerebral and systemic oxygen supply, and preventing against drugs neurotoxicity. A concise retrospective data is presented.

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[2421]
Metacognition of agency is reduced in high hypnotic suggestibility.
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A disruption in the sense of agency is the primary phenomenological feature of response to hypnotic suggestions but its cognitive basis remains elusive. Here we tested the proposal that distorted volition during response to suggestions arises from poor metacognition pertaining to the sources of one's control. Highly suggestible and control participants completed a motor task in which performance was reduced through surreptitious manipulations of cursor lag and stimuli speed. Highly suggestible participants did not differ from controls in performance or metacognition of performance, but their sense of agency was less sensitive to cursor lag manipulations, suggesting reduced awareness that their control was being manipulated. These results indicate that highly suggestible individuals have aberrant metacognition of agency and may be a valuable population for studying distortions in the sense of agency.

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[2422]
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BACKGROUND: Mobile health offers many opportunities; however, the 'side-effects' of health apps are often unclear. With no guarantee health apps first do no harm, their role as a viable, safe and effective therapeutic option is limited.
OBJECTIVE: To assess the quality of apps for chronic insomnia disorder, available
on the Android Google Play Store, and determine whether a novel approach to app assessment could identify high-quality and low-risk health apps in the absence of indicators such as National Health Service (NHS) approval.

METHODS: The Organisation for the Review of Care and Health Applications-24 Question Assessment (ORCHA-24), 24 app assessment criteria concerning data privacy, clinical efficacy and user experience, answered on a 'yes' or 'no' and evidence-driven basis, was applied to assess 18 insomnia apps identified via the Android Google Play Store, in addition to the NHS-approved iOS app Sleepio.

FINDINGS: 63.2% of apps (12/19) provided a privacy policy, with seven (36.8%) stating no user data would be shared without explicit consent. 10.5% (2/19) stated they had been shown to be of benefit to those with insomnia, with cognitive behavioural therapy apps outperforming hypnosis and meditation apps (p=0.046). Both the number of app downloads (p=0.29) and user-review scores (p=0.23) were unrelated to ORCHA-24 scores. The NHS-approved app Sleepio, consistently outperformed non-accredited apps across all domains of the ORCHA-24.

CONCLUSIONS: Apps for chronic insomnia disorder exhibit substantial variation in adherence to published data privacy, user experience and clinical efficacy standards, which are not clearly correlated with app downloads or user-review scores.

CLINICAL IMPLICATIONS: In absence of formal app accreditation, the ORCHA-24 could feasibly be used to highlight the risk-benefit profiles of health apps prior to downloading.

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[2423]

Short progressive muscle relaxation or motor coordination training does not increase performance in a brain-computer interface based on sensorimotor rhythms (SMR).

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Brain computer interfaces (BCIs) allow for controlling devices through modulation of sensorimotor rhythms (SMR), yet a profound number of users is unable to achieve sufficient accuracy. Here, we investigated if visuo-motor coordination (VMC) training or Jacobsen's progressive muscle relaxation (PMR) prior to BCI use would increase later performance compared to a control group who performed a reading task (CG). Running the study in two different BCI-labs, we achieved a joint sample size of N=154 naïve participants. No significant effect of either intervention (VMC, PMR, control) was found on resulting BCI performance. Relaxation level and visuo-motor performance were associated with later BCI performance in one BCI-lab but not in the other. These mixed results do not indicate a strong potential of VMC or PMR for boosting performance. Yet further research with different training parameters or experimental designs is needed to complete the picture.

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Evidence-Based Psychosocial Treatments for Pediatric Elimination Disorders.

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Pediatric elimination disorders are common in childhood, yet psychosocial correlates are generally unclear. Given the physiological concomitants of both enuresis and encopresis, and the fact that many children with elimination disorders are initially brought to their primary care physician for treatment, medical evaluation and management are crucial and may serve as the first-line treatment approach. Scientific investigation on psychological and behavioral interventions has progressed over the past couple of decades, resulting in the identification of effective treatments for enuresis and encopresis. However, the body of literature has inherent challenges, particularly given the multicomponent nature of many of the treatment packages. This review identified 25 intervention studies-18 for nocturnal enuresis and 7 for encopresis-over the past 15 years and classified them according to the guidelines set forth by the Task Force on the Promotion and Dissemination of Psychological Procedures. For nocturnal enuresis, the urine alarm and dry-bed training were identified as well-established treatments, Full Spectrum Home Therapy was probably efficacious, lifting was possibly efficacious, and hypnotherapy and retention control training were classified as treatments of questionable efficacy. For encopresis, only two probably efficacious treatments were identified: biofeedback and enhanced toilet training (ETT). Best practice recommendations and suggestions for future research are provided to address existing limitations, including heterogeneity and the multicomponent nature of many of the interventions for pediatric elimination disorders.

Distress Management Through Mind-Body Therapies in Oncology.

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Distress is highly prevalent in cancer survivors, from the point of diagnosis through treatment and recovery, with rates higher than 45% reported worldwide. One approach for helping people cope with the inherent stress of cancer is through the use of mind-body therapies (MBTs) such as mediation, yoga, hypnosis, relaxation, and imagery, which harness the power of the mind to affect physical and psychological symptoms. One group of MBTs with a growing body of research evidence to support their efficacy focus on training in mindfulness meditation; these are collectively known as mindfulness-based interventions (MBIs). Research
supports the role of MBIs for dealing with common experiences that cause distress around cancer diagnosis, treatment, and survivorship including loss of control, uncertainty about the future, fears of recurrence, and a range of physical and psychological symptoms including depression, anxiety, insomnia, and fatigue. Growing research also supports their cost-effectiveness, and online and mobile adaptations currently being developed and evaluated increase promise for use in a global context.

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[2426]


Growth of Integrative Medicine at Leading Cancer Centers Between 2009 and 2016: A Systematic Analysis of NCI-Designated Comprehensive Cancer Center Websites.

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Background: Cancer centers have increasingly offered integrative medicine therapies in response to their patients’ unmet needs. We evaluated the growth of integrative medicine in leading academic cancer centers in the United States as reflected by their public-facing websites.

Methods: We performed a systematic review of 45 National Cancer Institute (NCI)-designated comprehensive cancer center websites. Two researchers independently evaluated whether the websites provided information regarding integrative medicine modalities and, if so, whether the services were provided in the same health system. They compared the proportion of cancer centers providing the information on each modality in 2016 with the data from the prior study in 2009.

Results: The most common integrative medicine therapies mentioned on the 45 NCI-designated comprehensive cancer center websites were exercise (97.8%) and acupuncture and meditation (88.9% each), followed by yoga (86.7%), massage (84.4%), and music therapy (82.2%). The majority of the websites also provided information on nutrition (95.6%), dietary supplements (93.3%), and herbs (88.9%). The most common therapies offered in the health systems were acupuncture/massage (73.3% each), meditation/yoga (68.9% each), and consultations about nutrition (91.1%), dietary supplements (84.4%), and herbs (66.7%). Compared with 2009, there was a statistically significant increase in the number of websites mentioning acupuncture, dance therapy, healing touch, hypnosis, massage, meditation, Qigong, and yoga (all P < .05).

Conclusions: Leading US cancer centers increasingly present integrative medicine content on their websites, and the majority of them provide these services to patients in the same health systems.

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[2427]

The use of Eriksonian Hypnosis to improve patient outcomes in pharmacy practice: A novel communication skill for pharmacists.

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Motivational Interviewing, pharmacist-based health coaching and traditional patient counseling techniques all show merit in improving communication between patients and health care providers. However, in order to effectively utilize these techniques one should have the ability to draw upon internal cognitive and psychological resources. Some patients have difficulty obtaining optimal health outcomes due to an unconscious inability to learn and connect with psychological resources. When this is the case, other methods of communication may need to be considered. With the appropriate training, Eriksonian Hypnosis or the use of techniques such as hypnotic language patterns (HLP) have the potential to be implemented into pharmacy practice settings and assist those patients who have previously failed to make positive behavior changes and act upon their health issues.

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Electroencephalogram characteristics during possession trances in healthy individuals.

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Despite intensive studies on cerebral activity during trances involving tranquil arousal states, there are little data on physiological basis of naturally induced possession trances involving hyperarousal active states because of the difficulty of gathering data from participants within a natural cultural context in the field. We investigated the characteristics of electroencephalograms (EEGs) that were specific for naturally induced possession trances involving hyperarousal states in actual rituals. We measured the EEG signals of 12 healthy participants, seven with trance and five without trance, before, during, and after a dedicatory ritual drama in Bali, Indonesia, using a custom-modified field telemetry system. During trance, θ (4-7.5 Hz), α-1 (8-9.5 Hz), α-2 (10-12.5 Hz), and β (13-30 Hz) signals were significantly increased compared with those during the control phases. Such findings were not observed in participants without trance when they performed similar movements in the rituals. The α-1 and α-2 signals tended to remain elevated for several minutes postritual compared with those recorded during the preritual resting state. These results suggest that spontaneous EEG patterns during possession trances may be related, at least in part, to the activation of the reward-generating neuronal system situated in deep-lying brain structures and deactivation of the cerebral cortex.
Closed-Loop Control of Total Intravenous Anesthesia During Significant Intraoperative Blood Loss: A Case Report.

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Closed-loop control of anesthesia based on continuous feedback from processed electroencephalography adjusts drug dosing to target a desired depth of hypnosis during dynamic clinical circumstances, freeing the anesthesiologist to focus on more complex tasks. We describe a case of closed-loop control of total intravenous anesthesia in which a sudden loss of blood required immediate intervention. This case illustrates that closed-loop control of drug delivery maintained an appropriate depth of hypnosis during a rapidly changing surgical situation, and that processed electroencephalography may be a useful adjunct indicator for cerebral hypoperfusion.

A Single Session of Autogenic Training Increases Acute Subjective and Physiological Sexual Arousal in Sexually Functional Women.

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Heart rate variability (HRV) has recently been associated with female sexual function (Stanton, Lorenz, Pulverman, & Meston, 2015). Below-average HRV was identified as a possible risk factor for sexual arousal dysfunction and overall sexual dysfunction in women. Based on this newly established relationship between HRV and female sexual function, the present study examined the effect of autogenic training to increase HRV on acute physiological and subjective sexual arousal in women. Specifically, vaginal pulse amplitude (VPA), an index of genital sexual arousal, and subjective sexual arousal were assessed in 33 sexually functional women, aged 18 to 27, before and after a short session of autogenic training. Autogenic training, a relaxation technique that restores the balance between the activity of the sympathetic and the parasympathetic branches of the autonomic nervous system, has been shown to significantly increase HRV (Miu, Heilman, & Miclea, 2009). After autogenic training, significant increases in both VPA (p <.05) and subjective sexual arousal (p <.005) were observed. Moreover, change in HRV from pre- to postmanipulation significantly moderated changes in subjective sexual arousal (p <.05) when it was measured continuously during the presentation of the erotic stimulus. This cost-effective, easy-to-administer behavioral intervention may have important implications for increasing sexual arousal in women.
The purpose of this study was to determine whether hypnosis would be more effective than standard behavioral counseling in helping smokers to remain abstinent. A total of 140 current smokers were enrolled in a randomized controlled smoking cessation trial at an urban Veterans Affairs medical center. Participants (n = 102) who were able to quit for at least 3 days received either a hypnosis or behavioral relapse prevention intervention. Both relapse prevention interventions consisted of two 60 min face-to-face sessions and four 20 min follow-up phone calls (two phone calls per week). At 26 weeks, the validated point-prevalence quit rate was 35% for the hypnosis group and 42% for the behavioral counseling group (relative risk = 0.85; 95% confidence interval: 0.52-1.40). At 52 weeks, the validated quit rate was 29% for the hypnosis group and 28% for the behavioral group (relative risk = 1.03; 95% confidence interval: 0.56-1.91). It was concluded that hypnosis warrants further investigation as an intervention for facilitating maintenance of quitting.

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Women with breast cancer experience a host of physical and psychological symptoms, including hot flashes, sleep difficulties, anxiety, and depression. Therefore, treatment for women with breast cancer should target these symptoms and be individualized to patients' specific presentations. The current article reviews the common symptoms associated with breast cancer in women, then examines clinical hypnosis as a treatment for addressing these symptoms and improving the quality of life of women with breast cancer. Clinical hypnosis is an effective, nonpharmaceutical treatment for hot flashes and addressing many symptoms typically experienced by breast cancer patients. A case example is provided to illustrate the use of clinical hypnosis for the treatment of hot flashes with a patient with breast cancer.

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[2434]
The Effectiveness of Hypnosis Intervention for Labor: An Experimental Study.
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Hypnosis has been shown to help pregnant women experience improved labor and postpartum periods. The present study compares the differences between experimental (n = 23) and control groups (n = 22) on specific variables measured both during labor and 24 hr postpartum. The participants in the experimental group received the hypnosis intervention at weeks 16, 20, 28, and 36 of pregnancy, while those in the control group received only routine antenatal care. The data collected at the labor stage describe the length of the labor stage, pain relief used during labor, the method of delivery, and the type of assisted vaginal delivery. Within 24 hr of delivery, data on neonatal birth weight, neonatal Apgar scores, and self-reported pain were obtained. The labor stage results showed no significant differences in the length of the second and third stages of labor. Although the participants in the experimental group reported higher pain levels immediately prior to, during, and immediately after delivery, their use of pethidine during labor was significantly lower than the control group participants. None of the experimental group participants opted for an epidural, and they had a greater number of assisted vaginal deliveries than the control group participants. The 24 hr postpartum results showed that the neonates of the experimental group participants had nonsignificantly higher Apgar scores than those of the women in the control group. Group differences in neonatal weight were not significant. The results of the present study indicate that hypnosis is useful for assisting pregnant women during labor and the postpartum period.

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[2435]
Treating Panic Disorder Hypnotically.
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A hypnosis protocol for treating panic disorder is provided. The implementation of this protocol is demonstrated through a case example involving the successful
treatment of a 28-year-old firefighter presenting with a 4-month history of near-daily panic attacks. Core principles associated with this protocol include: (1) Elementary education about the physiology of panic; (2) A review of primary factors contributing to the evolution and manifestation of panic; (3) Encouragement of physical activity; (4) Utilization of hypnosis applications; and (5) Monitoring and measuring progress evidenced by a reduction in the frequency and intensity of panic attacks. Six years after his last hypnosis session, "Jason," the once panicked firefighter returned to my office for concerns unrelated to panic, and reported that he remained panic-free, retained his job, and was twice promoted.

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[2436]

Do You Believe It? Verbal Suggestions Influence the Clinical and Neural Effects of Escitalopram in Social Anxiety Disorder: A Randomized Trial.

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BACKGROUND: Selective serotonin reuptake inhibitors (SSRIs) are commonly prescribed for depression and anxiety, but their efficacy relative to placebo has been questioned. We aimed to test how manipulation of verbally induced expectancies, central for placebo, influences SSRI treatment outcome and brain activity in patients with social anxiety disorder (SAD).

METHODS: We did a randomized clinical trial, within an academic medical center (Uppsala, Sweden), of individuals fulfilling the DSM-IV criteria for SAD, recruited through media advertising. Participants were 18 years or older and randomized in blocks, through a computer-generated sequence by an independent party, to nine weeks of overt or covert treatment with escitalopram (20mg daily). The overt group received correct treatment information whereas the covert group was treated deceptively with the SSRI described, by the psychiatrist, as active placebo. The treating psychiatrist was necessarily unmasked while the research staff was masked from intervention assignment. Treatment efficacy was assessed primarily with the self-rated Liebowitz Social Anxiety Scale (LSAS-SR), administered at week 0, 1, 3, 6 and 9, also yielding a dichotomous estimate of responder status (clinically significant improvement). Before and at the last week of treatment, brain activity during an emotional face-matching task was assessed with functional magnetic resonance imaging (fMRI) and during fMRI sessions, anticipatory speech anxiety was also assessed with the Spielberger Professional Hypnosis Databank - page 701 of 889 - by Alberto Torelli, hypnologist
State-Trait Anxiety Inventory - State version (STAI-S). Analyses included all randomized patients with outcome data at posttreatment. This study is registered at ISRCTN, number 98890605.

FINDINGS: Between March 17th 2014 and May 22nd 2015, 47 patients were recruited. One patient in the covert group dropped out after a few days of treatment and did not provide fMRI data, leaving 46 patients with complete outcome data. After nine weeks of treatment, overt (n=24) as compared to covert (n=22) SSRI administration yielded significantly better outcome on the LSAS-SR (adjusted difference 21.17, 95% CI 10.69-31.65, p<0.0001) with more than three times higher response rate (50% vs. 14%; χ²(1)=6.91, p=0.009) and twice the effect size (d=2.24 vs. d=1.13) from pre-to posttreatment. There was no significant between-group difference on anticipatory speech anxiety (STAI-S), both groups improving with treatment. No serious adverse reactions were recorded. On fMRI outcomes, there was suggestive evidence for a differential neural response to treatment between groups in the posterior cingulate, superior temporal and inferior frontal gyri (all z thresholds exceeding 3.68, p≤0.001). Reduced social anxiety with treatment correlated significantly with enhanced posterior cingulate (z threshold 3.24, p=0.0006) and attenuated amygdala (z threshold 2.70, p=0.003) activity.

INTERPRETATION: The clinical and neural effects of escitalopram were markedly influenced by verbal suggestions. This points to a pronounced placebo component in SSRI-treatment of SAD and favors a biopsychosocial over a biomedical explanatory model for SSRI efficacy.

FUNDING RESOURCES: The Swedish Research Council for Working Life and Social Research (grant 2011-1368), the Swedish Research Council (grant 421-2013-1366), Riksbankens Jubileumsfond - the Swedish Foundation for Humanities and Social Sciences (grant P13-1270:1).

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[2437]
[Description of current hypnosis practice in French university hospitals].
[Article in French]
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Hypnosis is very fashionable as an entertainment through TV shows searching for new sensational experiences. What about its practice in the medical world? The aim of this article is to answer to this question. Therefore, we contacted every French University Hospital of each region to find out if hypnosis was practiced for the care of pain (hypnoanalgesia), for chirurgical procedures (hypnosedation) and in adult psychiatry care units (hypnotherapy). For this last practice, we also questioned the type of indications. All 30 of the French University Hospitals had replied by November 2015. Hypnoanalgesia is practiced by all and two-thirds offer hypnosedation. Hypnotherapy is practiced by 40% of the University Hospitals, 91.7% for anxiety disorders, 66.7% for psychotraumatic care and 25% for mood disorders. Therefore, hypnosis seems to have found its
Complementary Therapies for Symptom Management in Cancer Patients.

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Cancer patients are often poly-symptomatic which distressingly affects their quality of lives (QOLs). Although, conventional management provides adequate symptom control, yet is coupled with some limitations. Complementary therapies (CTs) have shown beneficial effects in cancer patients for symptomatic relief. The aim of this article is to provide evidence-based review of commonly used CTs for symptom management in cancer care. Hypnosis has promising evidence to be used for managing symptoms such as pain, chemotherapy-induced nausea/vomiting, distress, fatigue, and hot flashes. Guided imagery increases comfort and can be used as a psycho-supportive therapy. Meditation substantially improves psychological function, mental health, and QOL. Cognitive behavioral therapies effectively reduce pain, distress, fatigue, anxiety, and depression; and improve subjective sleep outcomes along with mood and QOL. Yoga has short term beneficial effects for anxiety, depression, fatigue, perceived stress, QOL, and well-being. T'ai Chi and qigong are beneficial adjunctive therapies for supportive cancer care, but their role in reducing cancer pain is not well proven. Acupuncture is effective for reducing treatment related side-effects, pain and fatigue. Other therapies such as massage techniques, energy therapies, and spiritual interventions have also demonstrated positive role in managing cancer-related symptoms and improve overall well-being. However, the clinical effectiveness of these therapies for symptom management in cancer patients cannot be concluded due to poor strength of evidence. Nonetheless, these are relatively free from risks and hence can be given along with conventional treatments. Only by tailoring these therapies as per patient's beliefs and preferences, optimal patient-centered holistic care can be provided.

Conflict of interest statement: There are no conflicts of interest.

Hypnotizability and the Peripersonal Space.

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High hypnotizability is associated with left-sided cerebral asymmetry, which could influence measurement of the Peripersonal Space (PPS). Right-handed participants with high (highs, n = 20), medium (mediums, n = 9), and low hypnotizability scores (lows, n = 20) performed the line bisection test on a computer screen automatically displaced at distances of 30, 60, and 90 cm from the subjects' eyes. Highs' results showed rightward bias of the bisection (Relative Error, RE) for all presentation distances. In contrast, in lows RE was displaced leftward at 30 cm and exhibited a progressive rightward shift at 60 and 90 cm, as occurs in the general population. Mediums' RE values were intermediate between highs' and lows' values. Bisecion Times (BT) were significantly longer in highs/mediums than in lows. Findings indicate that the highs' bisection identifies PPS as if it was extrapersonal, but further studies should assess its functional characteristics. The highs/mediums longer BT suggest less efficient sensorimotor performance.

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A new control condition called Wiki is introduced. Key themes of each test suggestion of the Stanford Hypnotic Susceptibility Scale, Form C, were matched by a corresponding extract from Wikipedia.org. The authors compared phenomenological reports of participants across 4 conditions: hypnosis split into high and low hypnotizable subgroups, music, and Wiki condition, using the Phenomenology of Consciousness Inventory. High hypnotizables undergoing hypnosis reported higher altered experience and altered states of awareness than individuals in the Wiki condition, supporting the authors' hypothesis that the Wiki condition does not evoke an altered state of consciousness (internal dialogue, volitional control, and self-awareness did not differ). Wiki might be a viable control condition in hypnosis research given further examination.

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The authors investigated the feasibility and possible effects of hypnotic suggestion and music for chronic pain. Ten people completed the 2-week intervention that consisted of daily listening to hypnotic suggestions combined with music. Averaged subjective pain intensity, pain bothersomeness, overall
distress, anxiety, and depression decreased from baseline to endpoint. Participants rated pre- and postlistening pain intensity and pain bothersomeness decreased for each session. Information provided during end-of-study interviews indicated all participants were satisfied with treatment and felt they benefited from being in the study. Means and standard deviations are reported for outcome measures and a case study is provided. This preliminary study supports the use of a combined hypnotic suggestion and music intervention for chronic pain.

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[2442]


Dopaminergic and Serotonergic Genotypes and the Subjective Experiences of Hypnosis.

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Hypnotizability is related to the Val158Met polymorphism of the COMT gene. The authors' aim was to find associations between candidate genes and subjective dimensions of hypnosis; 136 subjects participated in hypnosis and noninvasive DNA sampling. The phenomenological dimensions were tapped by the Archaic Involvement Measure (AIM), the Phenomenology of Consciousness Inventory (PCI), and the Dyadic Interactional Harmony Questionnaire (DIH). The main results were that the "Need of dependence" subscale of AIM was associated with the COMT genotypes. The GG subgroup showed higher scores, whereas AA had below average scores on the majority of the subjective measures. An association between the 5-HTTLPR polymorphism and the intimacy scores on the DIH was also evident. The effects are discussed in the social-psychobiological model of hypnosis.

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[2443]


A delayed functional observer/predictor with bounded-error for depth of hypnosis monitoring.

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With the motivation of providing safety for a patient under anesthesia, this paper suggests conditions for evaluating the correctness of an available user interface for systems under shared control based on observability and predictability requirements. Situation awareness is necessary for the user to make correct decisions about the inputs. In this article, we develop a technique to investigate the conditions under which an anesthetists can attain situation awareness about a limited but important aspect of anesthesia, namely depth of hypnosis (DOH). Furthermore, we consider that, in practice, to attain situation...
awareness, the estimation of the task states does not necessarily need to be precise but can be bounded within certain margins. Hence, attaining situation awareness about DOH is modeled as a bounded-error delayed functional observation/prediction. Unless such an observer/predictor exists for a system with a given user-interface, the safety of the operation may be compromised. The suggested technique proves that, in order to provide safety for the patient under anesthesia, it is necessary for the anesthetist to have access to the predictive information from a clinical decision support system.

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[2444]


Persistent Encopresis, Enuresis, and Anxiety in a 7-Year-Old Girl.

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CASE: Sonia is a 7-year-old old girl who was referred to the Developmental-Behavioral Pediatrics Clinic by the Pediatric Urology Clinic because of persistent wetting and soiling behaviors. Since age 3 years, she has had a history of encopresis (and wetting) for which she has seen gastroenterology and urology specialists. The mother reports that Sonia has accidents almost daily, and she is not upset when sitting in her urine or feces. She dislikes going into the bathroom or sitting on the toilet by herself. She participated in a behavior modification program associated with the pediatric urology clinic, which helps children learn healthy voiding habits and achieve continence. Sonia also has anxious behaviors. She bites her nails and chews on her hair or shirt. She is afraid of small spaces such as those between the bed and the wall and needs to have stuffed animals cover them. Other instances that trigger her anxious behaviors include loud noises, having a substitute teacher, being separated from her mother, and going to certain bathrooms or new places. She also has severe tantrums, which involve throwing and breaking objects, kicking, and hitting her head against doors. A cognitive behavioral therapy program was recommended to target anxiety symptoms, in addition to timed toileting after meals and polyethylene glycol. At a clinic visit several months later, symptoms of anxiety, encopresis, and enuresis persisted. Cognitive behavior therapy was continued and sertraline 25 mg was prescribed for anxiety. In addition, she was referred to a pediatrician who specializes in relaxation techniques and hypnotherapy. Sonia showed modest improvement with these interventions. There were fewer episodes of angry outbursts and a decrease in soiling and wetting, but at times, she continued to have intermittent periods of wetting and soiling and fear of going to the bathroom by herself persisted. (This Challenging Case extends observations reviewed in a previous Challenging Case: J Dev Behav Pediatr 2010;531:513-515; DOI: 10.1097/DBP.0b013e3181e5a464.).

DOI: 10.1097/DBP.0000000000000504
PMID: 28937449 [Indexed for MEDLINE]

[2445]


Hypnotherapy to Reduce Hot Flashes: Examination of Response Expectancies as a Mediator of Outcomes.

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The mechanism of action responsible for hypnotherapy's effect in reducing hot flashes is not yet known. The purpose of this study was to examine the role of response expectancies as a potential mediator. Hypnotizability was also tested as an effect moderator. Data were collected from a sample of 172 postmenopausal women, who had been randomized to receive either a 5-week hypnosis intervention or structured attention counseling. Measures of response expectancies were analyzed to determine if the relationship between group assignment and hot flashes frequency was mediated by expectancies for treatment efficacy. A series of simple mediation and conditional process analyses did not support mediation of the relationship between treatment condition and hot flash frequency through response expectancy. The effect of hypnotherapy in reducing hot flashes does not appear to be due to placebo effects as determined by response expectancies. Implications for clinical practice and future research are discussed.

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BACKGROUND: Medical management of acute pain among hospital inpatients may be enhanced by mind-body interventions.

OBJECTIVE: We hypothesized that a single, scripted session of mindfulness training focused on acceptance of pain or hypnotic suggestion focused on changing pain sensations through imagery would significantly reduce acute pain intensity and unpleasantness compared to a psychoeducation pain coping control. We also hypothesized that mindfulness and suggestion would produce significant improvements in secondary outcomes including relaxation, pleasant body sensations, anxiety, and desire for opioids, compared to the control condition.

METHODS: This three-arm, parallel-group randomized controlled trial conducted at a university-based hospital examined the acute effects of 15-min psychosocial interventions (mindfulness, hypnotic suggestion, psychoeducation) on adult inpatients reporting "intolerable pain" or "inadequate pain control." Participants (N = 244) were assigned to one of three intervention conditions: mindfulness (n = 86), suggestion (n = 73), or psychoeducation (n = 85).

KEY RESULTS: Participants in the mind-body interventions reported significantly lower baseline-adjusted pain intensity post-intervention than those assigned to psychoeducation (p < 0.001, percentage pain reduction: mindfulness = 23%, suggestion = 29%, education = 9%), and lower baseline-adjusted pain unpleasantness (p < 0.001). Intervention conditions differed significantly with regard to relaxation (p < 0.001), pleasurable body sensations (p = 0.001), and desire for opioids (p = 0.015), but all three interventions were associated with...
a significant reduction in anxiety (p < 0.001).

CONCLUSIONS: Brief, single-session mind-body interventions delivered by hospital social workers led to clinically significant improvements in pain and related outcomes, suggesting that such interventions may be useful adjuncts to medical pain management.

TRIAL REGISTRATION: Trial Registry: ClinicalTrials.gov; registration ID number: NCT02590029 URL: https://clinicaltrials.gov/ct2/show/NCT02590029.

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PMID: 28702870 [Indexed for MEDLINE]

[2447]


What's in a word? How instructions, suggestions, and social information change pain and emotion.

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Instructions, suggestions, and other types of social information can have powerful effects on pain and emotion. Prominent examples include observational learning, social influence, placebo, and hypnosis. These different phenomena and their underlying brain mechanisms have been studied in partially separate literatures, which we discuss, compare, and integrate in this review. Converging findings from these literatures suggest that (1) instructions and social information affect brain systems associated with the generation of pain and emotion, and with reinforcement learning, and that (2) these changes are mediated by alterations in prefrontal systems responsible for top-down control and the generation of affective meaning. We argue that changes in expectation and appraisal, a process of assessing personal meaning and implications for wellbeing, are two potential key mediators of the effects of instructions and social information on affective experience. Finally, we propose a tentative model of how prefrontal regions, especially dorsolateral and ventromedial prefrontal cortex may regulate affective processing based on instructions and socially transmitted expectations more broadly.

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[2448]


Brain correlates of hypnosis: A systematic review and meta-analytic exploration.

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Author information:
Imaging of the living human brain elucidates the neural dynamics of hypnosis; however, few reliable brain patterns emerge across studies. Here, we methodically assess neuroimaging assays of hypnosis to uncover common neural configurations using a twofold approach. First, we systematically review research on the neural correlates of hypnotic phenomena; then, we meta-analyze these collective data seeking specific activation and deactivation patterns that typify hypnosis. Anchored around the role of top-down control processes, our comprehensive examination focuses on the involvement of intrinsic brain networks known to support cognitive control and self-referential cognition, including the executive, salience, and default networks. We discuss how these neural dynamics may relate to contemporary theories of hypnosis and show that hypnosis correlates with activation of the lingual gyrus—a brain region involved in higher-order visual processing and mental imagery. Our findings help to better understand the neurobiological substrates comprising the appellation hypnosis.

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Hypnosis and top-down regulation of consciousness.

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Hypnosis is a unique form of top-down regulation in which verbal suggestions are capable of eliciting pronounced changes in a multitude of psychological phenomena. Hypnotic suggestion has been widely used both as a technique for studying basic science questions regarding human consciousness but also as a method for targeting a range of symptoms within a therapeutic context. Here we provide a synthesis of current knowledge regarding the characteristics and neurocognitive mechanisms of hypnosis. We review evidence from cognitive neuroscience, experimental psychopathology, and clinical psychology regarding the utility of hypnosis as an experimental method for modulating consciousness, as a model for studying healthy and pathological cognition, and as a therapeutic vehicle. We also highlight the relations between hypnosis and other psychological phenomena, including the broader domain of suggestion and suggestibility, and conclude by identifying the most salient challenges confronting the nascent cognitive neuroscience of hypnosis and outlining future directions for research on hypnosis and suggestion.
Mechanisms of eyewitness suggestibility: tests of the explanatory role hypothesis.

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In a recent paper, Chrobak and Zaragoza (Journal of Experimental Psychology: General, 142(3), 827-844, 2013) proposed the explanatory role hypothesis, which posits that the likelihood of developing false memories for post-event suggestions is a function of the explanatory function the suggestion serves. In support of this hypothesis, they provided evidence that participant-witnesses were especially likely to develop false memories for their forced fabrications when their fabrications helped to explain outcomes they had witnessed. In three experiments, we test the generality of the explanatory role hypothesis as a mechanism of eyewitness suggestibility by assessing whether this hypothesis can predict suggestibility errors in (a) situations where the post-event suggestions are provided by the experimenter (as opposed to fabricated by the participant), and (b) across a variety of memory measures and measures of recollective experience. In support of the explanatory role hypothesis, participants were more likely to subsequently freely report (E1) and recollect the suggestions as part of the witnessed event (E2, source test) when the post-event suggestion helped to provide a causal explanation for a witnessed outcome than when it did not serve this explanatory role. Participants were also less likely to recollect the suggestions as part of the witnessed event (on measures of subjective experience) when their explanatory strength had been reduced by the presence of an alternative explanation that could explain the same outcome (E3, source test + warning). Collectively, the results provide strong evidence that the search for explanatory coherence influences people's tendency to misremember witnessing events that were only suggested to them.

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The role of autosuggestion in geriatric patients’ quality of life: a study on psycho-neuro-endocrine-immunology pathway.

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BACKGROUND: There has been no study conducted about the effect of autosuggestion on quality of life for geriatric patients. Our aim was to evaluate the efficacy of autosuggestion for geriatric patients’ quality of life and its impact on psycho-neuro-endocrine-immune pathway.

METHODS: Sixty geriatric patients aged ≥60 years in a ward were randomly assigned to either receive autosuggestion or not. Autosuggestion was recorded in a tape to be heard daily for 30 days. Both groups received the standard medical therapy. Primary outcome was quality of life by COOP chart. Secondary outcomes were serum cortisol level, interleukin-2, interleukin-6, interferon-γ, and N-acetylaspartate/creatine ratio in limbic/paralimbic system by magnetic resonance spectroscopy. The study was single blinded due to the nature of the intervention studied.

RESULTS: Out of 60 subjects, 51 finished the study. The autosuggestion group reported better scores than the control one for quality of life, COOP chart 1.95 vs. 2.22 (95% CI, p = 0.02). There were increments of serum cortisol (p = 0.03) and interleukin-6 in the autosuggestion group (p = 0.04). Interleukin-2, interferon-γ, and N-acetylaspartate/creatine ratio in prefrontal cortex showed a tendency to increase in the autosuggestion groups.

CONCLUSION: Autosuggestion is associated with improvement of geriatrics’ quality of life, serum cortisol level, and adaptive immunity. There is a better trend for neuroplasticity in prefrontal cortex in the autosuggestion group.

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This interruption of ordinary control mechanisms allows for the release of thalamic and other lower brain discharges that stimulate a visual information representation system and release the effects of innate cognitive functions and operators. Converging forms of evidence support the hypothesis that the source of psychedelic experiences involves the emergence of these innate cognitive processes of lower brain systems, with visionary experiences resulting from the activation of innate processes based in the mirror neuron system (MNS).

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[2453]
The Evolutionary Psychology of Envy and Jealousy.
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The old dogma has always been that the most complex aspects of human emotions are driven by culture; Germans and English are thought to be straight-laced whereas Italians and Indians are effusive. Yet in the last two decades there has been a growing realization that even though culture plays a major role in the final expression of human nature, there must be a basic scaffolding specified by genes. While this is recognized to be true for simple emotions like anger, fear, and joy, the relevance of evolutionary arguments for more complex nuances of emotion have been inadequately explored. In this paper, we consider envy or jealousy as an example; the feeling evoked when someone is better off than you. Our approach is broadly consistent with traditional evolutionary psychology (EP) approaches, but takes it further by exploring the complexity and functional logic of the emotion - and the precise social triggers that elicit them - by using deliberately farfetched, and contrived "thought experiments" that the subject is asked to participate in. When common sense (e.g., we should be jealous of Bill Gates - not of our slightly richer neighbor) appears to contradict observed behavior (i.e., we are more envious of our neighbor) the paradox can often be resolved by evolutionary considerations which predict the latter. Many - but not all - EP approaches fail because evolution and common sense do not make contradictory predictions. Finally, we briefly raise the possibility that gaining deeper insight into the evolutionary origins of certain undesirable emotions or behaviors can help shake them off, and may therefore have therapeutic utility. Such an approach would complement current therapies (such as cognitive behavior therapies, psychoanalysis, psychopharmacologies, and hypnotherapy), rather than negate them.

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[2454]
Minimizing nocebo effects by conditioning with verbal suggestion: A randomized clinical trial in healthy humans.
Nocebo effects, i.e., adverse treatment effects which are induced by patients' expectations, are known to contribute to the experience of physical symptoms such as pain and itch. A better understanding of how to minimize nocebo responses might eventually contribute to enhanced treatment effects. However, little is known about how to reduce nocebo effects. In the current randomized controlled study, we tested whether nocebo effects can be minimized by positive expectation induction with respect to electrical and histaminic itch stimuli. First, negative expectations about electrical itch stimuli were induced by verbal suggestion and conditioning (part 1: induction of nocebo effect). Second, participants were randomized to either the experimental group or one of the control groups (part 2: reversing nocebo effect). In the experimental group, positive expectations were induced by conditioning with verbal suggestion. In the control groups either the negative expectation induction was continued or an extinction procedure was applied. Afterwards, a histamine application test was conducted. Positive expectation induction resulted in a significantly smaller nocebo effect in comparison with both control groups. Mean change itch NRS scores showed that the nocebo effect was even reversed, indicating a placebo effect. Comparable effects were also found for histamine application. This study is the first to demonstrate that nocebo effects can be minimized and even reversed by conditioning with verbal suggestion. The results of the current study indicate that learning via counterconditioning and verbal suggestion represents a promising strategy for diminishing nocebo responses.

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PMID: 28910291  [Indexed for MEDLINE]
with hypnosis (Hp) and music therapy (Mt).

SETTINGS: Specialized Complementary and Alternative Medicine (CAM) centres for outpatients.

PARTICIPANTS: 308 individuals (average age = 50.53 SD 14.37, 93 males, 215 females) going to the centres for health care, but free from serious diseases and not heavily medicated respecting the inclusion criteria and providing valid forms.

RESEARCH DESIGN: Four armed, non-randomized observational pragmatic trial with pretest-posttest repeated measures, on separate samples of natural groups.

INTERVENTION: According to the centre participants where they used to be treated, they were exposed to a single semi-standardized session of a technique of their choice: Fs, Rf, Hp, Mt. Volunteers had a controlled non-intervention resting (Rt) session.

MAIN OUTCOME MEASURES: Mean STAI-Y assessing anxiety as reflecting the stress level: MANCOVA and ANCOVA performed with Tukey's HSD.

RESULTS: MANCOVA indicates a significant reduction of anxiety (p < .01) in each condition, resting included. ANCOVA performance adjusting on stress level in T0 (41.73) and on the mean sumscore of the trait (44.89), Fs (-13.92), Rf (-15.92), and Hp (-15.88) were equally effective on the stress level decrease. Mt (-10.0) and Rt (-6.38) showed the same level of effectiveness.

CONCLUSIONS: The results suggest fasciatherapy DBM, hypnosis, and reflexology could be used as non-pharmacological and safe interventions in stress management. Though showing a lesser efficiency, music therapy could be useful in different circumstances.

Conflict of interest statement: CONFLICT OF INTEREST NOTIFICATION The investigators have no conflicts of interest to disclose. The authors had full access to all the data in this study, and take complete responsibility for the integrity of the data and the accuracy of the data analysis.

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We examined the creation of spontaneous and suggestion-induced false memories in maltreated and non-maltreated children. Maltreated and non-maltreated children were involved in a Deese-Roediger-McDermott false memory paradigm where they studied and remembered negative and neutral word lists. Suggestion-induced false memories were created using a misinformation procedure during which both maltreated and non-maltreated children viewed a negative video (i.e., bank robbery) and later received suggestive misinformation concerning the event. Our results showed that maltreated children had higher levels of spontaneous negative false memories but lower levels of suggestion-induced false memories as compared to non-maltreated children. Collectively, our study demonstrates that maltreatment both increases and decreases susceptibility to memory illusions depending on the type of false memory being induced. Statement of contribution What is already known on this subject? Trauma affects memory. It is unclear how trauma affects false memory. What does this study add? This study focuses on two types of false memories.

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Placebo-like analgesia via response imagery.


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BACKGROUND: Placebo effects on pain are reliably observed in the literature. A core mechanism of these effects is response expectancies. Response expectancies can be formed by instructions, prior experiences and observation of others. Whether mental imagery of a response can also induce placebo-like expectancy effects on pain has not yet been studied systematically.

METHODS: In Study 1, 80 healthy participants were randomly allocated to (i) response imagery or (ii) control imagery. In Study 2, 135 healthy participants were randomly allocated to (i) response imagery with a verbal suggestion regarding its effectiveness, (ii) response imagery only, or (iii) no intervention. In both studies, expected and experienced pain during cold pressor tests were measured pre- and post-intervention, along with psychological and physiological measures.

RESULTS: Participants rated pain as less intense after response imagery than after control imagery in Study 1 (p = 0.044, ηp2 = 0.054) and as less intense after response imagery (with or without verbal suggestion) than after no imagery in Study 2 (p < 0.001, ηp2 = 0.154). Adding a verbal suggestion did not affect pain (p = 0.068, ηp2 = 0.038). The effects of response imagery on experienced pain were mediated by expected pain.

CONCLUSIONS: Thus, in line with research on placebo effects, the current findings indicate that response imagery can induce analgesia, via its effects on response expectancies.

SIGNIFICANCE: The reported studies extend research on placebo effects by demonstrating that mental imagery of reduced pain can induce placebo-like expectancy effects on pain.

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Mind-body therapies are commonly recommended to treat vasomotor symptoms, such as hot flushes and night sweats (HFNS). The purpose of this systematic review was to evaluate the available evidence to date for the efficacy of different mind-body therapies to alleviate HFNS in healthy menopausal women and breast cancer survivors. Randomized controlled trials (RCTs) were identified using seven electronic search engines, direct searches of specific journals and backwards searches through reference lists of related publications. Outcome measures included HFNS frequency and/or severity or self-reported problem rating at post-treatment. The methodological quality of all studies was systematically assessed using predefined criteria. Twenty-six RCTs met the inclusion criteria. Interventions included yoga (n = 5), hypnosis (n = 3), mindfulness (n = 2), relaxation (n = 7), paced breathing (n = 4), reflexology (n = 1) and cognitive behavioural therapy (CBT) (n = 4). Findings were consistent for the effectiveness of CBT and relaxation therapies for alleviating troublesome vasomotor symptoms. For the remaining interventions, although some trials indicated beneficial effects (within groups) at post-treatment and/or follow up, between group findings were mixed and overall, methodological differences across studies failed to provide convincing supporting evidence. Collectively, findings suggest that interventions that include breathing and relaxation techniques, as well as CBT, can be beneficial for alleviating vasomotor symptoms. Additional large, methodologically rigorous trials are needed to establish the efficacy of interventions on vasomotor symptoms, examine long-term outcomes and understand how they work.

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[2459]


Complex Endovascular Abdominal Aneurysm Repair with Fenestrated Endograft Insertion under Hypnosis and Local Anesthesia.

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[2460]
GABAergic ventrolateral pre-optic nucleus neurons are involved in the mediation of the anesthetic hypnosis induced by propofol.


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Intravenous anesthetics have been used clinically to induce unconsciousness for seventeen decades, however the mechanism of anesthetic-induced unconsciousness remains to be fully elucidated. It has previously been demonstrated that anesthetics exert sedative effects by acting on endogenous sleep-arousal circuits. However, few studies focus on the ventrolateral pre-optic (VLPO) to locus coeruleus (LC) sleep-arousal pathway. The present study aimed to investigate if VLPO is involved in unconsciousness induced by propofol. The present study additionally investigated if the inhibitory effect of propofol on LC neurons was mediated by activating VLPO neurons. Microinjection, target lesion and extracellular single-unit recordings were used to study the role of the VLPO-LC pathway in propofol anesthesia. The results demonstrated that GABAA agonist (THIP) or GABAA antagonist (gabazine) microinjections into VLPO altered the time of loss of righting reflex and the time of recovery of righting reflex. Furthermore, propofol suppressed the spontaneous firing activity of LC noradrenergic neurons. There was no significant difference observed in firing activity between VLPO sham lesion and VLPO lesion rats. The findings indicate that VLPO neurons are important in propofol-induced unconsciousness, however are unlikely to contribute to the inhibitory effect of propofol on LC spontaneous firing activity.

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[2461]
The magic of caressing the mind by touching the body. Take care of depression, face up to cancer. A new frontier of psycho-oncology.

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BACKGROUND: The new frontier of research in all areas that deal with health and wellness (medicine, psychotherapy, personal care in general) sees the increase of projects in which the individual is center-placed, as a whole, in a holistic view. The mind and the body are inseparable, as in a circularity and recursivity unique for each individual (Spurio, M.G., 2015). The results of the most innovative research would seem to suggest, therefore, that a state of psychological distress or depression, is often related to physiological problems, from physical discomfort in general up to illnesses such as cancer.

SUBJECTS AND METHODS: The research project "B & M (Body and Mind), Take care of depression, face up to cancer" moves from these assumptions. The project started in 2015 and continued in 2016, with the aim to focus the attention on the problem of depression related to physical disease states, in particular oncological disorders. In the first version of the project, (January - June 2015), according to the type of treated disease, specific body stimulation such as shiatsu has
been associated with psychological techniques, guided fantasies and regressive hypnosis techniques. These mental techniques have been used in order to focus the thought on specific inner images appropriate to the situation of the treated patient and to generate consequently connected positive emotions. In this way it was possible to achieve a synergistic activation and stimulation attached to the body and mind, resulting in regularization of sleep patterns, lowering the hormonal imbalances and heightening the immune system, with the specific objective of increasing the level of excellence of perceived well-being. On the basis of the above results, which were definitely promising, further investigation with more specific applications has started: a research has been conducted on 50 patients with oncological diseases associated with depressive disorder. In this second phase of the research (January-June 2016) 50 patients have been selected with oncological diagnoses associated with depressive mood disorders.

RESULTS: The results of the second version of the project have been very interesting, in particular with regard to the level of general well-being, which have shown an improvement of approximately 67%. We have registered also an improvement of the mood state, even though the patients were already under medical treatment and with a depressive state already in place.

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Hypnotic analgesia reduces brain responses to pain seen in others.


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Erratum in

Brain responses to pain experienced by oneself or seen in other people show consistent overlap in the pain processing network, particularly anterior insula, supporting the view that pain empathy partly relies on neural processes engaged by self-nociception. However, it remains unresolved whether changes in one’s own pain sensation may affect empathic responding to others’ pain. Here we show that inducing analgesia through hypnosis leads to decreased responses to both self and vicarious experience of pain. Activations in the right anterior insula and amygdala were markedly reduced when participants received painful thermal stimuli following hypnotic analgesia on their own hand, but also when they viewed pictures of others’ hand in pain. Functional connectivity analysis indicated that this hypnotic modulation of pain responses was associated with differential recruitment of right prefrontal regions implicated in selective attention and inhibitory control. Our results provide novel support to the view that self-nociception is involved during empathy for pain, and demonstrate the possibility to use hypnotic procedures to modulate higher-level emotional and social processes.

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The "hypnotic state" and eye movements: Less there than meets the eye?

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Responsiveness to hypnotic procedures has been related to unusual eye behaviors for centuries. Kallio and collaborators claimed recently that they had found a reliable index for "the hypnotic state" through eye-tracking methods. Whether or not hypnotic responding involves a special state of consciousness has been part of a contentious debate in the field, so the potential validity of their claim would constitute a landmark. However, their conclusion was based on 1 highly hypnotizable individual compared with 14 controls who were not measured on hypnotizability. We sought to replicate their results with a sample screened for High (n = 16) or Low (n = 13) hypnotizability. We used a factorial 2 (high vs. low hypnotizability) x 2 (hypnosis vs. resting conditions) counterbalanced order design with these eye-tracking tasks: Fixation, Saccade, Optokinetic nystagmus (OKN), Smooth pursuit, and Antisaccade (the first three tasks has been used in Kallio et al.’s experiment). Highs reported being more deeply in hypnosis than Lows but only in the hypnotic condition, as expected. There were no significant main or interaction effects for the Fixation, OKN, or Smooth pursuit tasks. For the Saccade task both Highs and Lows had smaller saccades during hypnosis, and in the Antisaccade task both groups had slower Antisaccades during hypnosis. Although a couple of results suggest that a hypnotic condition may produce reduced eye motility, the lack of significant interactions (e.g., showing only Highs expressing a particular eye behavior during hypnosis) does not support the claim that eye behaviors (at least as measured with the techniques used) are an indicator of a "hypnotic state." Our results do not preclude the possibility that in a more spontaneous or different setting the experience of being hypnotized might relate to specific eye behaviors.
PURPOSE OF REVIEW: Many people living with cancer use complementary therapies, and some of the most popular are mind-body therapies (MBTs), including relaxation and imagery, hypnosis, yoga, meditation, tai chi and qigong, and art therapies. The efficacy of these modalities was reviewed by assessing recent findings in the context of cancer care.

RECENT FINDINGS: These therapies show efficacy in treating common cancer-related side effects, including nausea and vomiting, pain, fatigue, anxiety, depressive symptoms and improving overall quality of life. Some also have effects on biomarkers such as immune function and stress hormones. Overall studies lack large sample sizes and active comparison groups. Common issues around clearly defining treatments including standardizing treatment components, dose, intensity, duration and training of providers make generalization across studies difficult. MBTs in cancer care show great promise and evidence of efficacy for treating many common symptoms. Future studies should investigate more diverse cancer populations using standardized treatment protocols and directly compare various MBTs to one another.

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Hypnosis and Axillary Compartment Block for Breast Cancer Surgery: A Case Report.
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Hypnosis has been proven to be a powerful tool in the management of anxiety and pain. It allows for an increase of pain threshold, which can reach the level of surgical analgesia. Recently injection of local anesthetics around the serratus muscle has been presented as an alternative to paravertebral block for cancer breast surgery. We report the successful use of hypnosis in combination with an axillary compartment block for lumpectomy and axillary lymph node dissection.

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Brain Activity and Functional Connectivity Associated with Hypnosis.
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Hypnosis has proven clinical utility, yet changes in brain activity underlying the hypnotic state have not yet been fully identified. Previous research suggests that hypnosis is associated with decreased default mode network (DMN) activity.
and that high hypnotizability is associated with greater functional connectivity between the executive control network (ECN) and the salience network (SN). We used functional magnetic resonance imaging to investigate activity and functional connectivity among these three networks in hypnosis. We selected 57 of 545 healthy subjects with very high or low hypnotizability using two hypnotizability scales. All subjects underwent four conditions in the scanner: rest, memory retrieval, and two different hypnosis experiences guided by standard pre-recorded instructions in counterbalanced order. Seeds for the ECN, SN, and DMN were left and right dorsolateral prefrontal cortex, dorsal anterior cingulate cortex (dACC), and posterior cingulate cortex (PCC), respectively. During hypnosis there was reduced activity in the dACC, increased functional connectivity between the dorsolateral prefrontal cortex (DLPFC; ECN) and the insula in the SN, and reduced connectivity between the ECN (DLPFC) and the DMN (PCC). These changes in neural activity underlie the focused attention, enhanced somatic and emotional control, and lack of self-consciousness that characterizes hypnosis.

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Non-Rapid Eye Movement Sleep and Overlap Parasomnias.

Irfan M, Schenck CH, Howell MJ.

PURPOSE OF REVIEW: This article reviews the spectrum of non-rapid eye movement (non-REM) sleep parasomnias, including sleepwalking, confusional arousals, and sleep terrors, which represent the range of phenotypic disorders of arousal from non-REM sleep that occurs in children and adults.

RECENT FINDINGS: The International Classification of Sleep Disorders, Third Edition (ICSD-3) classifies parasomnias according to the sleep stage they emerge from: REM, non-REM, or other. Demographics, clinical features, and diagnosis of non-REM parasomnias are reviewed in this article, and an up-to-date synopsis of guidelines for management strategies to assist in the treatment of these sleep disorders is provided.

SUMMARY: The non-REM parasomnias are most common in children and adolescents but may persist into adulthood. They can be distinguishable from REM parasomnias and nocturnal epilepsies, and, importantly, may lead to injury. Additionally, other parasomnias in this spectrum include sleep-related eating disorder and sexsomnia. Overlap parasomnia disorder includes one or more manifestations of a non-REM parasomnia seen in combination with REM sleep behavior disorder, representing an apparent erosion of the normally distinct stages of non-REM and REM sleep. A similar yet much more extreme dissociation of states underlies agrypnia excitata and status dissociatus, which represent rare, severe dissociations between non-REM, REM, and wake states resulting clinically in oniric behaviors and severe derangement of normal polysomnographic wake and sleep stage characteristics. Management of non-REM and overlap parasomnias and state dissociation disorders include ensuring bedroom safety and prescription of clonazepam or hypnosis, in select cases, although in children and adolescents with noninjurious behaviors, non-REM parasomnias are often age-limited developmental disorders, which may ultimately remit by adulthood, and, in these cases, counseling and education alone may suffice. Timely and accurate recognition of the non-REM and overlap parasomnias is crucial to limiting potential patient injury.

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Improving anxiety regulation in patients with breast cancer at the beginning of the survivorship period: a randomized clinical trial comparing the benefits of single-component and multiple-component group interventions.


OBJECTIVE: To compare in a multicenter randomized controlled trial the benefits in terms of anxiety regulation of a 15-session single-component group intervention (SGI) based on support with those of a 15-session multiple-component structured manualized group intervention (MGI) combining support with cognitive-behavioral and hypnosis components.

METHODS: Patients with nonmetastatic breast cancer were randomly assigned at the beginning of the survivorship period to the SGI (n = 83) or MGI (n = 87). Anxiety regulation was assessed, before and after group interventions, through an anxiety regulation task designed to assess their ability to regulate anxiety psychologically (anxiety levels) and physiologically (heart rates). Questionnaires were used to assess psychological distress, everyday anxiety regulation, and fear of recurrence. Group allocation was computer generated and concealed till baseline completion.

RESULTS: Compared with patients in the SGI group (n = 77), patients attending the MGI group (n = 82) showed significantly reduced anxiety after a self-relaxation exercise (P = .006) and after exposure to anxiety triggers (P = .013) and reduced heart rates at different time points throughout the task (P = .001 to P = .047). The MGI participants also reported better everyday anxiety regulation (P = .005), greater use of fear of recurrence-related coping strategies (P = .022), and greater reduction in fear of recurrence-related psychological distress (P = .017) compared with the SGI group.

CONCLUSIONS: This study shows that an MGI combining support with cognitive-behavioral techniques and hypnosis is more effective than an SGI based only on support in improving anxiety regulation in patients with breast cancer.
BACKGROUND: Vaso-occlusive pain crises (VOCs) are the "hallmark" of sickle-cell disease (SCD) and can lead to sympathetic nervous system dysfunction. Increased sympathetic nervous system activation during VOCs and/or pain can result in vasoconstriction, which may increase the risk for subsequent VOCs and pain. Hypnosis is a neuromodulatory intervention that may attenuate vascular and pain responsiveness. Due to the lack of laboratory-controlled pain studies in patients with SCD and healthy controls, the specific effects of hypnosis on acute pain-associated vascular responses are unknown. The current study assessed the effects of hypnosis on peripheral blood flow, pain threshold, tolerance, and intensity in adults with and without SCD.

SUBJECTS AND METHODS: Fourteen patients with SCD and 14 healthy controls were included. Participants underwent three laboratory pain tasks before and during a 30-minute hypnosis session. Peripheral blood flow, pain threshold, tolerance, and intensity before and during hypnosis were examined.

RESULTS: A single 30-minute hypnosis session decreased pain intensity by a moderate amount in patients with SCD. Pain threshold and tolerance increased following hypnosis in the control group, but not in patients with SCD. Patients with SCD exhibited lower baseline peripheral blood flow and a greater increase in blood flow following hypnosis than controls.

CONCLUSION: Given that peripheral vasoconstriction plays a role in the development of VOC, current findings provide support for further laboratory and clinical investigations of the effects of cognitive-behavioral neuromodulatory interventions on pain responses and peripheral vascular flow in patients with SCD. Current results suggest that hypnosis may increase peripheral vasodilation during both the anticipation and experience of pain in patients with SCD. These findings indicate a need for further examination of the effects of hypnosis on pain and vascular responses utilizing a randomized controlled trial design. Further evidence may help determine unique effects of hypnosis and potential benefits of integrating cognitive-behavioral neuromodulatory interventions into SCD treatment.

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PMID: 28769584

Conflict of interest statement: Disclosure The abstract of this paper was presented at the 2016 American Society of Hematology meeting as a poster with interim findings. The authors report no conflicts of interest in this work.

[2470]


The Power of mind: Blocking visual perception by hypnosis.

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The present study investigated the effects of suggestion on the processing of visual stimuli. Participants counted rare visual stimuli presented on a screen, once during a hypnosis condition where they were suggested that their vision of the screen is blocked by a virtual wooden board in front of their eyes and once during a control condition without suggestion. In the hypnosis condition, counting performance was about 20% worse than in the control condition. At the same time, the P3b amplitude of the event-related brain potential was about 37% reduced. Smaller P3b amplitudes were significantly associated with deficient counting performance, and this effect was largest in participants who reported the blockade as real. In contrast, earlier brain responses (N1, P2) that reflect basic processing of the visual stimuli were not affected by the suggested blockade. We conclude that the suggestion of the blockade affects later stages of visual perception, leaving early processes intact. This illustrates the impact of suggestions and the power of mind.


Russo G, Remonato A, Remonato R, Zanier E.

Context • Pregnancy causes physiological alterations to the visual system, particularly in relation to retinal vascularization, with a consequent increase of intraocular pressure, and to the lacrimal fluid, with a consequent ocular dryness, which both can lead to a reduction in visual acuity. Numerous case reports refer to the employment of hypnotic treatment in cases of myopia, but the literature does not report any case of decreased visual acuity postpartum that was treated with hypnosis. Objective • For women with visual disorders that had appeared during pregnancy or were preexisting, the study intended to evaluate the benefits of treatment of the diaphragm by hypnotherapy and osteopathy to modify intracorporeal pressure and restore the women's visual function. Design • The research team performed a case study. Setting • The setting was a private osteopathic clinic. Participant • The participant was a 35-y-old woman lacking visual acuity postpartum. Intervention • The study took place during a period of 1 d. The participant first took part in a hypnotherapy session, the first intervention, and then participated in an osteopathic session, the second intervention. Outcome Measures • For the first evaluation of visual function at baseline, 3 tests were performed: (1) a visual acuity test; (2) a cover test for near and distance vision; and (3) a test for near point convergence. The visual function evaluation (all 3 tests) occurred after the 2 types of treatment (T1, T2). Finally, a visual function evaluation (all 3 tests) occurred at a follow-up session 1 mo after the end of treatment (T3). Results • The intervention produced a significant improvement in visual acuity, due to the multidisciplinary approach of treatment with hypnotherapy and osteopathy, and achieved a result that was maintained in the medium term. Conclusions • Hypnosis and osteopathy produced a significant improvement in visual acuity and the result was maintained in the medium term. Further studies are needed to verify the efficacy of the 2 treatments.

PMID: 28987037 [Indexed for MEDLINE]
insomnia, and grief will be described. These involve facing disease-related stressors while dissociating the experience from somatic arousal. Given the serious complications of medications widely used to treat pain, anxiety, and insomnia, this article provides methods and an evidence base for wider use of techniques involving hypnosis in cancer care. Altering patients' perception of pain, disease-related stress, and anxiety can help change the reality of their life with cancer.

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[2473]

Cancer Palliation: Layered Hypnotic Approaches Mending Symptoms, Minding Hope, and Meaning.

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Advanced cancer often produces significant symptoms such as pain, anxiety, insomnia, nausea, and cachexia; many symptoms require medication adjustments in dose and route of administration, and most patients have significant symptom burdens near the end of life. Treatment strategies that integrate mind-body approaches, such as hypnosis, to improve symptoms are increasingly being studied and utilized. The current article addresses the role for adjunctive hypnotic approaches to relieve suffering from pain and other symptoms, while fostering hope, even in the midst of advancing illness, similar to Snyder's (2002) metaphorical painting of "a personal rainbow of the mind" (p. 269). We describe specific clinical indications, technical modifications, and imagistic language used in formulating hypnotic suggestions in the face of illness progression. Furthermore, we specifically describe formulation of layered hypnotic suggestions with intent to intentionally weave suggestions to modify symptoms and link to suggestions to enhance hope and alter time perception. This approach offers the opportunity to transform an experience often defined by its losses to one in which hidden opportunities for growth and change emerge within this transitional life experience.

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[2474]

Staying the Course: Using Hypnosis to Help Cancer Patients Navigate Their Illness.

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Although sometimes maligned and often misunderstood, clinical hypnosis can be utilized as a powerful adjunct for the treatment of mind-body conditions, including cancer. Unlike customary medical regimens that treat diseases of the body and psychotherapies that address disorders of the psyche, hypnosis is a uniquely customizable multi-tool that can augment the treatment of both physical and emotional disorders as well as their complex interactions. This article presents a longitudinal, phase-oriented, clinical model that uses hypnosis in a series of sequential interventions that incorporate targeted suggestions to address the unfolding phases of the cancer continuum. Five such phases of the
cancer patient's trajectory, along with their associated medical and psychological challenges, are conceptualized. Each phase is illustrated by case examples from the author's clinical practice and by a discussion of relevant hypnotic approaches. On the somatic level, the intrinsic capacities of hypnotic phenomena, paired with suggestions, can be harnessed to effect perceptual and functional changes to offer symptom relief, re-establishment of systemic homeostasis, amelioration of cellular chemistry, and the acceleration of tissue healing. In the psychological realm, hypnotic strategies can be used to provide a much needed continuity of emotional support, a sense of mastery and self-agency, emotional regulation, and behavioral change.

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Hypnosis Attitudes: Treatment Effects and Associations With Symptoms in Individuals With Cancer.

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Attitudes about hypnosis are associated with hypnotic responsiveness. However, little is known about how hypnosis attitudes change with treatment and if those changes are associated with better outcomes. This study examined whether an intervention based on the Valencia Model of Waking Hypnosis combined with Cognitive-Behavioral Therapy changed attitudes about hypnosis in a sample of patients with a history of cancer. The results indicated that the intervention improved attitudes toward hypnosis, relative to a control intervention, and the improvements remained stable at 3-month follow-up. Analyses also showed that changes in some attitudes were associated with treatment-related improvements. The findings are consistent with the idea that attitudes about hypnosis play a role in hypnosis treatment outcome, supporting the importance of addressing such beliefs at the onset of and throughout treatment.

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Self-Hypnosis Classes to Enhance the Quality of Life of Breast Cancer Patients.

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The Healing Skills Project, consisting of five, four-session self-hypnosis classes, was a pilot-study to evaluate the impact of self-hypnosis on the quality of life for breast cancer patients. The impact of self-hypnosis in women with breast cancer was measured using a self-report instrument, the Functional Assessment of Cancer Therapy-Breast, pre- and post-intervention (Brady, et al., 1997; Maratia, Cedillo, & Rejas, 2016). After employing the self-hypnosis interventions, statistically significant changes were noted on 16 of the 36 items, despite the small sample size (N = 23). In summary, participants reported significantly less trouble meeting the needs of their family; less side effects; felt less ill, sad, and nervous; had less worry about dying and their condition getting worse; less shortness of breath; less swelling or tenderness in their arms; and less worry about the effects of stress on their illness. Participants
also reported being significantly more able to enjoy life and sleep well; enjoy
the usual things they do for fun; more content with their quality of life;
feeling more attractive and more like a woman. Additionally, on a brief
evaluation of the intervention form 86% of the participants indicated that the
self-hypnosis classes were very useful and 100% indicated that it contributed to
a noticeably improved quality of life. The pilot study offers support for the
value of teaching self-hypnosis to breast cancer patients. This article includes
an outline of the protocol for the four-session self-hypnosis classes.

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[2477]

Apr 27.

Sleep does not cause false memories on a story-based test of suggestibility.

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Sleep contributes to the consolidation of memories. This process may involve
extracting the gist of learned material at the expense of details. It has thus
been proposed that sleep might lead to false memory formation. Previous research
examined the effect of sleep on false memory using the Deese-Roediger-McDermott
(DRM) paradigm. Mixed results were found, including increases and decreases in
false memory after sleep relative to wake. It has been questioned whether DRM
false memories occur by the same processes as real-world false memories. Here,
the effect of sleep on false memory was investigated using the Gudjonsson
Suggestibility Scale. Veridical memory deteriorated after a 12-h period of wake,
but not after a 12-h period including a night's sleep. No difference in false
memory was found between conditions. Although the literature supports
sleep-dependent memory consolidation, the results here call into question
extending this to a gist-based false memory effect.

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[2478]


Hypnosis for Symptom Control in Cancer Patients at the End-of-Life: A Systematic
Review.

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Hypnosis has been shown to alleviate symptoms and side effects of cancer and its
treatment. However, less is known about the use of hypnosis at the end of life
in individuals with cancer. Our goal was to systematically review the literature on
the use of hypnosis to manage the most common symptoms of end-of-life cancer
patients: fatigue, sleep disturbances, pain, appetite loss, and dyspnea. EMBASE,
MEDLINE, COCHRANE, PsychINFO, and SCOPUS databases were searched from inception through November 7, 2016. No studies met the inclusion criteria. It appears that hypnosis has never been rigorously tested as a means to ameliorate the most common symptoms in individuals with cancer at the end of their lives. This finding is troubling, as it strongly implies that a population most in need has been largely neglected. However, a clear future research direction is revealed that may have significant clinical impact.

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Future-Focused Therapeutic Strategies for Integrative Health.

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For many years, the therapy field was dominated by a focus on the past. In this context, many clinicians were trained to use hypnosis as a tool to explore the past, and there is a rich literature documenting the use of hypnosis as a tool to induce age regression and the uncovering of traumatic memories. This article presents a therapeutic paradigm that focuses on the future. Hypnosis is used to induce creativity, flexibility, and openness to the future. In the context of health care, hypnosis is used to explore the best possible treatment outcome, which may be pharmacological, surgical, or a combination of both as well as other nonsurgical interventions. This article elaborates on the effective use of a therapeutic hypnosis strategy and technique focused on the future.

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The Frustrated and Helpless Healer: Pathways Approaches to Posttraumatic Stress Disorders.

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Posttraumatic stress disorder is a psychophysiological disorder, characterized by the following: chronic sympathetic nervous activation; persisting perceptual/sensory vigilance for threats; recurrent distressing memories of the event, including intrusive memories, flashbacks lived as if in the present moment, and nightmares; and a persisting negative emotional state including fear and shame. The psychophysiological basis for this disorder calls for psychophysically based interventions. This article presents the case narrative of a 29-year-old national guardsman, exposed to combat trauma and later to civilian trauma in public safety work. His treatment followed the Pathways model, comprised of multimodal interventions, beginning with self-directed behavioral changes, then the acquisition of skills (including self-hypnosis), and finally professional treatment including clinical hypnosis and EMDR.

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A Pragmatic Guide to the Setting up of Integrated Hypnotherapy Services in Primary Care and Clinical Settings.

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Despite the continued debate and lack of a clear consensus about the true nature of the hypnotic phenomenon, hypnosis is increasingly being utilized successfully in many medical, health, and psychological spheres as a research method, motivational tool, and therapeutic modality. Significantly, however, although hypnotherapy is widely advertised, advocated, and employed in the private medical arena for the management and treatment of many physical and emotional disorders, too little appears to be being done to integrate hypnosis into primary care and national health medical services. This article discusses some of the reasons for the apparent reluctance of medical and scientific health professionals to consider incorporating hypnosis into their medical practice, including the practical problems inherent in using hypnosis in a medical context and some possible solutions.

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A Multifaceted Hypnosis Smoking-Cessation Program: Enhancing Motivation and Goal Attainment.

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Smoking cessation remains a major health priority. Despite public campaigns against smoking and widespread availability of smoking-cessation treatments, many people continue to smoke. The authors argue that the "problem of motivation," that is, suboptimal or fluctuating motivation to resist smoking urges and to comply with the demands of treatment, commonly undermines treatment seeking and adherence, appreciably reducing the success rates of smoking-cessation programs. The authors describe the history of the Winning Edge smoking-cessation program and discuss ways to enhance motivation before, during, and after formal treatment. They illustrate how hypnotic suggestions, administered in the context of their program, can promote cognitive, behavioral, and emotional commitment to treatment and enhance motivation to live a smoke-free life.

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Children use partial resource sharing as a cue to friendship.

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Resource sharing is an important aspect of human society, and how resources are distributed can provide people with crucial information about social structure. Indeed, a recent partiality account of resource distribution suggested that people may use unequal partial resource distributions to make inferences about a distributor’s social affiliations. To empirically test this suggestion derived from the theoretical argument of the partiality account, we presented 4- to 9-year-old children with distributors who gave out resources unequally using either a partial procedure (intentionally choosing which recipient would get more) or an impartial procedure (rolling a die to determine which recipient would get more) and asked children to make judgments about whom the distributor was better friends with. At each age tested, children expected a distributor who gave partially to be better friends with the favored recipient (Studies 1-3). Interestingly, younger children (4- to 6-year-olds) inferred friendship between the distributor and the favored recipient even in cases where the distributor used an impartial procedure, whereas older children (7- to 9-year-olds) did not infer friendship based on impartial distributions (Study 1). These studies demonstrate that children use third-party resource distributions to make important predictions about the social world and add to our knowledge about the developmental trajectory of understanding the importance of partiality in addition to inequity when making social inferences.

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the combination of hypnosis and venlafaxine did not reduce hot flashes more than either treatment alone. More research is needed to clarify whether combining hypnosis with a different antidepressant would provide synergistic benefits.

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PMID: 28266949  [Indexed for MEDLINE]

[2485]


Effects of non-pharmacological supportive care for hot flushes in breast cancer: a meta-analysis.

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PURPOSE: To assess the efficacy of non-pharmacological therapies for hot flushes (HFs) in women with breast cancer (BC).

METHODS: Nine databases (MEDLINE, Cochrane Central Register of Controlled Trials, EMBASE, PsycINFO, CINAHL, China National Knowledge Infrastructure (CKNI), Chinese Scientific Journal Database (VIP), China Biology Medicine (CBM), and Wan Fang Database) were searched from their inceptions to October 2016. We also hand-searched reference lists of reviews and included articles, reviewed conference proceedings, and contacted experts. Finally, randomized controlled trials (RCTs) were aggregated to evaluate the therapeutic effect of acupuncture for HFs in women with BC.

RESULTS: Sixteen trials were included in the meta-analysis. Significant combined effects of non-pharmacological therapies were observed in reducing frequency and severity of HFs after treatment (d = -0.57, P < 0.001). These effects were sustained, albeit reduced in part, during follow-up (d = -0.36, P < 0.001), with the exception of frequency (P = 0.41). Meta-analysis according to therapy types showed that for hypnosis, HFs scores instead of scores of HFs-related daily interference scale (HFRDIS) were significantly lowered at the post-treatment time point (d = -13.19, P < 0.001); for acupuncture, a small but significant effect on HFRDIS was found at the post-treatment time point (d = -3.34, P < 0.001). The effect was sustained during follow-up; however, no effect was evident for HFs frequency; for cognitive behavioral therapy (CBT), at the post-treatment time point, but not during follow-up, a small but significant effect was documented for HFs score (d = -0.88, P < 0.01). No serious adverse effect was reported in the included studies.

CONCLUSIONS: Various types of non-pharmacological therapies were associated with significant effects on HFs in women with BC.

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[2486]


A Mind-Body Approach to Pediatric Pain Management.


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Pain is a significant public health problem that affects all populations and has significant financial, physical and psychological impact. Opioid medications, once the mainstay of pain therapy across the spectrum, can be associated with significant morbidity and mortality. Centers for Disease and Control (CDC) guidelines recommend that non-opioid pain medications are preferred for chronic pain outside of certain indications (cancer, palliative and end of life care). Mindfulness, hypnosis, acupuncture and yoga are four examples of mind-body techniques that are often used in the adult population for pain and symptom management. In addition to providing significant pain relief, several studies have reported reduced use of opioid medications when mind-body therapies are implemented. Mind-body medicine is another approach that can be used in children with both acute and chronic pain to improve pain management and quality of life.

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PMID: 28632194

[2487]
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Update of

BACKGROUND: Managing children is a challenge that many dentists face. Many non-pharmacological techniques have been developed to manage anxiety and behavioural problems in children, such as: 'tell, show & do', positive reinforcement, modelling and hypnosis. The use of hypnosis is generally an overlooked area, hence the need for this review.
OBJECTIVES: This systematic review attempted to answer the question: What is the effectiveness of hypnosis (with or without sedation) for behaviour management of children who are receiving dental care in order to allow successful completion of treatment? Null hypothesis: Hypnosis has no effect on the outcome of dental treatment of children.
SEARCH METHODS: We searched the Cochrane Oral Health Group's Trials Register, CENTRAL, MEDLINE (OVID), EMBASE (OVID), and PsycINFO. Electronic and manual searches were performed using controlled vocabulary and free text terms with no language restrictions. Date of last search: 11th June 2010.
SELECTION CRITERIA: All children and adolescents aged up to 16 years of age. Children having any dental treatment, such as: simple restorative treatment with or without local anaesthetic, simple extractions or management of dental trauma.
DATA COLLECTION AND ANALYSIS: Information regarding methods, participants, interventions, outcome measures and results were independently extracted, in duplicate, by two review authors. Authors of trials were contacted for details of randomisation and withdrawals and a quality assessment was carried out. The methodological quality of randomised controlled trials (RCTs) was assessed using the criteria described in the Cochrane Handbook for Systematic Reviews of Interventions 5.0.2.
MAIN RESULTS: Only three RCTs (with 69 participants) fulfilled the inclusion criteria. Statistical analysis and meta-analysis were not possible due to insufficient number of studies.
AUTHORS' CONCLUSIONS: Although there are a considerable number of anecdotal accounts indicating the benefits of using hypnosis in paediatric dentistry, on the basis of the three studies meeting the inclusion criteria for this review there is not yet enough evidence to suggest its beneficial effects.

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PMCID: PMC6481482
PMID: 28632910 [Indexed for MEDLINE]

[2488]
Crime and hypnosis in fin-de-siècle Germany: the Czynski case.
Wolffram H.

Lurid tales of the criminal use of hypnosis captured both popular and scholarly attention across Europe during the closing decades of the nineteenth century, culminating not only in the invention of fictional characters such as du Maurier's Svengali but also in heated debates between physicians over the possibilities of hypnotic crime and the application of hypnosis for forensic purposes. The scholarly literature and expert advice that emerged on this topic at the turn of the century highlighted the transnational nature of research into hypnosis and the struggle of physicians in a large number of countries to prise hypnotism from the hands of showmen and amateurs once and for all. Making use of the 1894 Czynski trial, in which a Baroness was putatively hypnotically seduced by a magnetic healer, this paper will examine the scientific, popular and forensic tensions that existed around hypnotism in the German context. Focusing, in particular, on the expert testimony about hypnosis and hypnotic crime during this case, the paper will show that, while such trials offered opportunities to criminalize and pathologize lay hypnosis, they did not always provide the ideal forum for settling scientific questions or disputes.

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PMID: 30125060 [Indexed for MEDLINE]

[2489]
A dangerous method? The German discourse on hypnotic suggestion therapy around 1900.
Maehle AH.

In the late nineteenth century, German-speaking physicians and psychiatrists intensely debated the benefits and risks of treatment by hypnotic suggestion. While practitioners of the method sought to provide convincing evidence for its therapeutic efficacy in many medical conditions, especially nervous disorders, critics pointed to dangerous side effects, including the triggering of hysterical attacks or deterioration of nervous symptoms. Other critics claimed that patients merely simulated hypnotic phenomena in order to appease their therapist. A widespread concern was the potential for abuses of hypnosis, either by giving criminal suggestions or in the form of sexual assaults on hypnotized patients. Official inquiries by the Prussian Minister for Religious, Educational and Medical Affairs in 1902 and 1906 indicated that relatively few doctors practised hypnotherapy, whereas the method was increasingly used by lay healers. Although the Ministry found no evidence for serious harm caused by hypnotic treatments, whether performed by doctors or by lay healers, many German doctors seem to have regarded hypnotic suggestion therapy as a problematic method and abstained from using it.

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PMCID: PMC5554304

From transnational to regional magnetic fevers: The making of a law on hypnotism in late nineteenth-century Belgium.

Wils K.

In May 1892, Belgium adopted a law on the exercise of hypnotism. The signing of the law constituted a temporary endpoint to six years of debate on the dangers and promises of hypnotism, a process of negotiation between medical doctors, members of parliament, legal professionals and lay practitioners. The terms of the debate were not very different from what happened elsewhere in Europe, where, since the mid 1880s, hypnotism had become an object of public concern. The Belgian law was nevertheless unique in its combined effort to regulate the use of hypnosis in public and private, for purposes of entertainment, research and therapy. My analysis shows how the making of the law was a process of negotiation in which local, national and transnational networks and allegiances each played a part. While the transnational atmosphere of moral panic had created a seedbed for the law, its eventual outlook owed much to the powerful lobby work of an essentially local network of lay magnetizers, and to the renown of Joseph Delbœuf, professor at the University of Liège, whose work in the field of hypnotism stimulated several liberal doctors and members of Parliament from the Liège region to defend a more lenient law.

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PMID: 30125059 [Indexed for MEDLINE]


Between Charcot and Bernheim: The debate on hypnotism in fin-de-siècle Italy.

Brancaccio MT.

In the late 1870s, a small group of Italian psychiatrists became interested in hypnotism in the wake of the studies conducted by the French neurologist Jean-Martin Charcot. Eager to engage in hypnotic research, these physicians referred to the scientific authority of French and German scientists in order to overcome the scepticism of the Italian medical community and establish hypnotism as a research subject based on Charcot's neuropathological model. In the following years, French studies on hypnotism continued to exert a strong influence in Italy. In the mid 1880s, studies on hypnotic suggestion by the Salpêtrière and Nancy Schools of hypnotism gave further impetus to research and therapeutic experimentation and inspired the emergence of an interpretative framework that combined theories by both hypnotic schools. By the end of the decade, however, uncertainties had arisen around both hypnotic theory and the therapeutic use of hypnotism. These uncertainties, which were linked to the crisis of the neuropathological paradigm that had to a large extent framed the understanding of hypnotism in Italy and the theoretical disagreements among the psychiatrists engaged in hypnotic research, ultimately led to a decline in interest in hypnotism in Italy.

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PMID: 30125058 [Indexed for MEDLINE]
Hypnosis lessons by stage magnetizers: Medical and lay hypnotists in Spain.

Graus A.

During the late nineteenth century, Spanish physicians had few chances to observe how hypnosis worked within a clinical context. However, they had abundant opportunities to watch lay hypnotizers in action during private demonstrations or on stage. Drawing on the exemplary cases of the magnetizers Alberto Santini Sgaluppi (a.k.a. Alberto Das) and Onofroff, in this paper I discuss the positive influence of stage magnetizers on medical hypnosis in Spain. I argue that, owing to the absence of medical training in hypnosis, the stage magnetizers’ demonstrations became practical hypnosis lessons for many physicians willing to learn from them instead of condemning them. I conclude that Spain might be no exception in this regard, and that further research should be undertaken into practices in other countries.

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[A portion of truth]: Demarcating the boundaries of scientific hypnotism in late nineteenth-century France.

Hajek KM.

In fin-de-siècle France, hypnotism enjoyed an unprecedented level of medico-scientific legitimacy. Researchers studying hypnotism had nonetheless to manage relations between their new ‘science’ and its widely denigrated precursor, magnétisme animal, because too great a resemblance between the two could damage the reputation of ‘scientific’ hypnotism. They did so by engaging in the rhetorical activity of boundary-work. This paper analyses such demarcation strategies in major texts from the Salpêtrière and Nancy Schools – the rival groupings that dominated enquiry into hypnotism in the 1880s. Researchers from both Schools depicted magnétisme as ‘unscientific’ by emphasizing the magnetizers’ tendency to interpret phenomena in wondrous or supernatural terms. At the same time, they acknowledged and recuperated the ‘portions of truth’ hidden within the phantasmagoria of magnétisme; these ‘portions’ function as positive facts in the texts on hypnotism, immutable markers of an underlying natural order that accounts for similarities between phenomena of magnétisme and hypnotism. If this strategy allows for both continuities and discontinuities between the two fields, it also constrains the scope for theoretical speculation about hypnotism, as signalled, finally, by a reading of one fictional study of the question, Anatole France’s ‘Monsieur Pigeonneau’.

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Hypnosis in patients with perceived stress - a systematic review.

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BACKGROUND: Although hypnosis and hypnotherapy have become more popular in recent years, the evidence for hypnosis to influence perceived stress is unclear. In this systematic review we searched and evaluated randomized clinical studies investigating the effect of hypnosis on perceived stress reduction and coping.

METHODS: The Cochrane Central Register of Controlled Trials, the Cochrane Database of Systematic Reviews, the Database of Abstracts of Review of Effects, EMBASE, Medline, PsycINFO, PSYNDEX and PubMed were systematically screened from their inception until December 2015 for randomized controlled trials (RCTs) reporting about hypnosis or hypnotherapy for stress reduction in healthy participants. Risk of Bias was assessed according the Cochrane Collaboration recommendations.

RESULTS: Nine RCTs with a total of 365 participants met the inclusion criteria and were included in this review. Most included participants were medical students, predominantly female (n = 211). Mean age of participants ranged in most studies between 20 and 25 years, in three studies the mean ages were between 30 and 42 years. Perceived stress was measured by a wide range of psychological questionnaires including Face Valid Stress Test, Stress Thermometer, and immunological data was collected. All nine included studies used explorative designs and showed a high risk of bias. Six out of nine studies reported significant positive effects of hypnosis for stress reduction in the main outcome parameter compared to control groups (3 active controls, 3 no therapy controls). Immunological outcomes were assessed in six studies, the results were inconclusive.

CONCLUSIONS: Due to exploratory designs and high risk of bias, the effectiveness of hypnosis or hypnotherapy in stress reduction remains still unclear. More high quality clinical research is urgently needed.

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[2495]

The Pathogenesis, Assessment and Treatment of Speech Fluency Disorders.

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BACKGROUND: Approximately 1% of children and adolescents, 0.2% of women, and 0.8% of men suffer from stuttering, and lesser numbers from cluttering. Persistent speech fluency disorders often cause lifelong problems in communication and social participation.

METHODS: In an interdisciplinary, evidence and consensus based clinical practice guideline, the current understanding of the nature, identification, diagnosis, and treatment of stuttering and cluttering was summarized. A systematic review of the literature was carried out to assess the efficacy and effectiveness of treatments for stuttering. Evidence is lacking on the etiology, pathogenesis, evaluation, and treatment of cluttering.

RESULTS: In view of the fact that common (developmental, idiopathic) stuttering is associated with structural and functional changes of the brain, the guideline recommends that it should be called "originary neurogenic non-syndromic stuttering." Heritability estimates for this disorder range from 70% to over 80%. For preschool children, the Lidcombe therapy has the best evidence of efficacy (Cohen's d = 0.72-1.00). There is also strong evidence for an indirect treatment approach. For children aged 6 to 12, there is no solid evidence for the efficacy
of any treatment. For adolescents and adults, there is good evidence with high effect sizes (Cohen’s $d = 0.75$-$1.63$) for speech restructuring methods such as fluency shaping; weak evidence with intermediate effect sizes for stuttering modification (Cohen’s $d = 0.56$-$0.85$); and weak evidence for combined speech restructuring and stuttering modification. The evidence does not support the efficacy of pharmacotherapy, rhythmic speaking, or breathing regulation as the sole or main form of treatment, or that of hypnosis or eclectic, unspecified stuttering therapies.

CONCLUSION: Stuttering is often treated in Germany with therapies for which there is inadequate evidence, and the initiation of treatment is often unnecessarily delayed. The guideline presents treatment methods whose efficacy is supported by the current evidence.

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Comparative analysis of biological effect of corannulene and graphene on developmental and sleep/wake profile of zebrafish larvae.

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Little is known about the biological effect of non-planar polycyclic aromatic hydrocarbons (PAH) such as corannulene on organisms. In this study, we compared the effect of corannulene (non-planar PAH) and graphene (planar PAH) on embryonic development and sleep/wake behaviors of larval zebrafish. First, the toxicity of graded doses of corannulene (1, 10, and 50μg/mL) was tested in developing zebrafish embryos. Corannulene showed minimal developmental toxicity only induced an epiboly delay. Further, a significant decrease in locomotion/increase in sleep was observed in larvae treated with the highest dose (50μg/mL) of corannulene while no significant locomotion alterations were induced by graphene. Finally, the effect of corannulene or graphene on the hypocretin (hcrt) system and sleep/wake regulators such as hcrt, hcrt G-protein coupled receptor (hcrt), and arylalkylamine N-acetyltransferase-2 (aanat2) was evaluated. Corannulene increased sleep and reduced locomotor activity and the expression of hcrt and hcrt mRNA while graphene did not obviously disturb the sleep behavior and gene expression patterns. These results suggest that the corannulene has the potential to cause hypnosis-like behavior in larvae and provides a fundamental comparative understanding of the effects of corannulene and graphene on biology systems. STATEMENT OF SIGNIFICANCE: Little is known about the biological effect of non-planar polycyclic aromatic hydrocarbons (PAH) such as corannulene on organisms. Here, we compare the effect of corannulene (non-planar PAH) and graphene (planar PAH) on embryonic development and sleep/wake behaviors of larval zebrafish. And we aim to investigate the effect of curvature on biological system. First, toxicity of corannulene over the range of doses (1μg/mL, 10μg/mL and 50μg/mL) was tested in developing zebrafish embryos. Corannulene has minimal
developmental toxicity, only incurred epiboly delay. Subsequently, a significant decrease in locomotion/increase in sleep at the highest dose (50μg/mL) was detected in corannulene treated larvae while no significant locomotion alterations was induced by graphene. Finally, the impact of corannulene or graphene on hypocretin system and sleep/wake regulator such as hcrt, hcrtr and aanat2 was evaluated. Corannulene increased sleep, reduced locomotor activity and the expression of hcrt and hcrtr mRNA while graphene did not obviously disturb the sleep behaviors and gene expression patterns. This result may indicate the potential effect of corannulene to cause hypnosis-like behavior in larvae and provide the fundamental understanding for the biological effect of curvature on biology system.

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OBJECTIVES: To describe the public's understanding of hypnosis and openness to hypnotherapy.

METHODS: A comprehensive search of English language peer reviewed journal articles from 1st January 1996-11th March 2016 was performed over 9 databases (Medline, PubMed, PsycARTICLES, CINAHL, Embase (excerpta medica), PsychInfo, Cochrane, Science citation index-expanded, Conference citation index) and a title-only search of Google scholar. 39 keyword combinations were employed: hypnosis, hypnotherapy, hypnotic, perception, beliefs, knowledge, view, opinion and understanding, in singular and plural where appropriate. A search of the bibliographies of eligible articles was undertaken. Inclusion criteria - Articles containing original data regarding the general public's attitudes towards hypnotherapy or hypnosis. Exclusion criteria - Non-therapy hypnosis (forensic, entertainment) materials and those concerned with groups likely to possess prior or professional knowledge of hypnosis, (hypnotists, clinicians and psychologists). Analysis was conducted in line with the questions.

RESULTS: 31 articles were identified, covering diverse populations. Most people believe that: hypnosis is an altered state which requires collaboration to enter; once hypnotized perception changes; hypnotherapy is beneficial for psychological issues and is supportive of medical interventions; hypnosis can also enhance abilities especially memory. People are open to hypnotherapy subject to validation from the psychological or medical establishment. Similarity of opinion is more apparent than difference.

CONCLUSION: Most people are positive towards hypnotherapy, and would consider its use under the right circumstances.

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Muscle size and strength: debunking the "completely separate phenomena" suggestion.


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Comment on
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Physical therapy under hypnosis for the treatment of patients with type 1 complex regional pain syndrome of the hand and wrist: Retrospective study of 20 cases.

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Type 1 complex regional painful syndrome (CRPS-1) has a complex physiopathology. The aim of this study was to evaluate the effectiveness of physical therapy under hypnotherapy to treat this condition. Twenty patients with CRPS-1 at the wrist and hand were evaluated retrospectively: 13 women and 7 men with an average age of 56 years (34-75). Thirteen patients were in the inflammatory phase and 7 in the dystrophic phase. The main endpoints were pain (VAS, analgesic use), stiffness (wrist and finger range of motion), and strength (pinch and grasp). Secondary endpoints were functional scores (QuickDASH, PWRE), patient satisfaction, return to work, and side effects. Results were satisfactory in all cases after 5.4 sessions on average. VAS decreased by 4 points, PWRE-pain by 4.1 points, and analgesic use was limited to paracetamol upon request. Finger and wrist range of motion increased and the QuickDASH decreased by 34 points, PWRE-function by 3.8 points, pinch strength increased 4 points, and grasp strength by 10 points. Return to work was possible in 80% of the cases. All patients were satisfied or very satisfied with the treatment. Physical therapy under hypnosis appears to be an effective treatment for CRPS-1 at the wrist and hand no matter the etiology.

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The Effect of Hypnosis on Anxiety in Patients With Cancer: A Meta-Analysis.

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BACKGROUND: Anxiety is a common form of psychological distress in patients with cancer. One recognized nonpharmacological intervention to reduce anxiety for various populations is hypnotherapy or hypnosis. However, its effect in reducing anxiety in cancer patients has not been systematically evaluated.

AIM: This meta-analysis was designed to synthesize the immediate and sustained effects of hypnosis on anxiety of cancer patients and to identify moderators for these hypnosis effects.

METHODS: Qualified studies including randomized controlled trials (RCT) and pre-post design studies were identified by searching seven electronic databases: Scopus, Medline Ovidsp, PubMed, PsycInfo-Ovid, Academic Search Premier, CINAHL Plus with FT-EBSCO, and SDOL. Effect size (Hedges' g) was computed for each study. Random-effect modeling was used to combine effect sizes across studies. All statistical analyses were conducted with Comprehensive Meta-Analysis, version 2 (Biostat, Inc., Englewood, NJ, USA).

RESULTS: Our meta-analysis of 20 studies found that hypnosis had a significant immediate effect on anxiety in cancer patients (Hedges' g: 0.70-1.41, p < .01) and the effect was sustained (Hedges' g: 0.61-2.77, p < .01). The adjusted mean effect size (determined by Duvan and Tweedie's trim-and-fill method) was 0.46. RCTs had a significantly higher effect size than non-RCT studies. Higher mean effect sizes were also found with pediatric study samples, hematological malignancy, studies on procedure-related stressors, and with mixed-gender samples. Hypnosis delivered by a therapist was significantly more effective than self-hypnosis.

LINKING EVIDENCE TO ACTION: Hypnosis can reduce anxiety of cancer patients, especially for pediatric cancer patients who experience procedure-related stress. We recommend therapist-delivered hypnosis should be preferred until more effective self-hypnosis strategies are developed.

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Cigarette craving is a key contributor of nicotine addiction. Hypnotic aversion suggestions have been used to help smoking cessation and reduce smoking relapse rates but its neural basis is poorly understood. This study investigated the underlying neural basis of hypnosis treatment for nicotine addiction with resting state Electroencephalograph (EEG) coherence as the measure. The sample consisted of 42 male smokers. Cigarette craving was measured by the Tobacco Craving Questionnaire. The 8-minute resting state EEG was recorded in baseline state and after hypnotic induction in the hypnotic state. Then a smoking disgust suggestion was performed. A significant increase in EEG coherence in delta and theta frequency, and significant decrease in alpha and beta frequency, between the baseline and the hypnotic state was found, which may reflect alterations in consciousness after hypnotic induction. More importantly, the delta coherence between the right frontal region and the left posterior region predicted cigarette craving reduction after hypnotic aversion suggestions. This suggests that the functional connectivity between these regions plays an important role in reducing cigarette cravings via hypnotic aversion suggestions. Thus, these brain regions may serve as an important target to treat nicotine addiction, such as stimulating these brain regions via repetitive transcranial magnetic stimulation.

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[2502]

Strain-specific programming of prenatal ethanol exposure across generations.

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Behavioral consequences of prenatal alcohol exposure (PAE) can be transmitted from in utero-exposed F1 generation to their F2 offspring. This type of transmission is modulated by genetic and epigenetic mechanisms. This study investigated the intergenerational consequences of prenatal exposure to a low ethanol dose (1 g/kg) during gestational days 17-20, on ethanol-induced hypnosis in adolescent male F1 and F2 generations, in two strains of rats. Adolescent Long-Evans and Sprague-Dawley male rats were tested for sensitivity to ethanol-induced hypnosis at a 3.5-g/kg or 4.5-g/kg ethanol dose using the loss of righting reflex (LORR) paradigm. We hypothesized that PAE would attenuate sensitivity to ethanol-induced hypnosis in the ethanol-exposed animals in these two strains and in both generations. Interestingly, we only found this effect in
Sprague-Dawley rats. Lastly, we investigated PAE related changes in expression of GABAA receptor α1, α4, and δ subunits in the cerebral cortex of the PAE sensitive Sprague-Dawley strain. We hypothesized a reduction in the cerebral cortex GABAA receptor subunits' expression in the F1 and F2 PAE groups compared to control animals. GABAA receptor α1, α4, and δ subunits protein expressions were quantified in the cerebral cortex of F1 and F2 male adolescents by western blotting. PAE did not alter cerebral cortical GABAA receptor subunit expressions in the F1 generation, but it decreased GABAA receptor α4 and δ subunits' expressions in the F2 generation, and had a tendency to decrease α1 subunit expression. We also found correlations between some of the subunits in both generations. These strain-dependent vulnerabilities to ethanol sensitivity, and intergenerational PAE-mediated changes in sensitivity to alcohol indicate that genetic and epigenetic factors interact to determine the outcomes of PAE animals and their offspring.

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One year in review 2017: fibromyalgia.

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Fibromyalgia (FM) is a complex syndrome characterised by chronic pain, fatigue and functional symptoms. Widespread pain is often its most typical feature, whereas other manifestations may be associated to various extents. Its aetiopathogenesis is still a matter of debate, but various pharmacological and non-pharmacological therapies are currently available for its treatment. We review the literature concerning the most recent findings relating to the aetiopathogenesis, assessment and treatment of FM published between January 2016 and January 2017.

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Eliminating age differences in children's and adults' suggestibility and memory conformity effects.

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We examined whether typical developmental trends in suggestion-induced false memories (i.e., age-related decrease) could be changed. Using theoretical principles from the spontaneous false memory field, we adapted 2 often-used false memory procedures: misinformation (Experiment 1) and memory conformity (Experiment 2). In Experiment 1, 7- to 9-year-old children (n = 33) and adults (n = 39) received stories containing associatively related details. They then listened to misinformation in the form of short narratives preserving the meaning of the story. Children and adults were equally susceptible to the misinformation effect. In Experiment 2, younger (7- to 8-year-olds, n = 30) and older (11- to 12-year-olds, n = 30) children and adults (n = 30) viewed pictures containing associatively related details. They viewed these pictures in pairs. Although the pictures differed, participants believed they had viewed the same pictures. Participants had to report what they could recollect during collaborative and individual recall tests. Children and adults were equally susceptible to memory conformity effects. When correcting for response bias, adults’ false memory scores were even higher than children’s. Our results show that age trends in suggestion-induced false memories are not developmentally invariant. (PsycINFO Database Record (c) 2017 APA, all rights reserved).

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[2505]

Integrative Therapeutic Approaches for the Management and Control of Nausea in Children Undergoing Cancer Treatment: A Systematic Review of Literature.

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Chemotherapy-induced nausea and vomiting (CINV) continues to be a common symptom experienced by children undergoing cancer treatment despite the use of contemporary antiemetics. Integrative therapeutic approaches in addition to standard pharmacologic antiemetic regimes offer potential to control CINV. The purpose of this review was to identify current evidence on integrative therapeutic approaches for the control of CINV in children with cancer. Online search engines (PubMed, CINAHL, PsychINFO) were queried using MESH terms. Titles, abstracts, and then full-text articles were reviewed for relevance to the review. The search resulted in 53 studies. Twenty-one studies met our review criteria. Integrative therapies identified included acupuncture/acupressure, aromatherapy, herbal supplements, hypnosis, and other cognitive behavioral interventions. Our review identified little information on the effectiveness and safety of most integrative therapeutic approaches for the control and management of CINV in children with cancer. However, evidence from adult cancer studies and some pediatric studies identify promising interventions for further testing.

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PMID: 28193133 [Indexed for MEDLINE]

[2506]

Home-Based Hypnotherapy Self-exercises vs Individual Hypnotherapy With a Therapist for Treatment of Pediatric Irritable Bowel Syndrome, Functional Abdominal Pain, or Functional Abdominal Pain Syndrome: A Randomized Clinical Trial.
Importance: Individual gut-directed hypnotherapy (HT) is effective in pediatric irritable bowel syndrome (IBS) and functional abdominal pain or functional abdominal pain syndrome (FAP(S)). It is, however, unavailable to many children. Objective: To compare the effectiveness of HT by means of home-based self-exercises using a CD with that of individual HT (iHT) performed by qualified therapists.

Design, Setting, and Participants: This noninferiority randomized clinical trial with a follow-up of 1 year after the end of treatment was conducted from July 15, 2011, through June 24, 2013, at 9 secondary and tertiary care centers throughout the Netherlands. A total of 303 children were eligible to participate. Of those, 260 children (aged 8-18 years) with IBS or FAP(S) were included in this study. Children were randomized (1:1 ratio) to home-based HT with a CD (CD group) or iHT performed by qualified therapists (iHT group). No children withdrew from the study because of adverse effects.

Interventions: The CD group was instructed to perform exercises 5 times per week or more for 3 months. The iHT group consisted of 6 sessions during 3 months.

Main Outcomes and Measures: Primary outcomes were treatment success directly after treatment and after 1-year follow-up. Treatment success was defined as a 50% or greater reduction in pain frequency and intensity scores. The noninferiority limit was set at 50% treatment success in the CD group, with a maximum of 25% difference in treatment success with the iHT group after 1-year follow-up. Modified intention-to-treat analyses were performed.

Results: A total of 132 children were assigned to the CD group and 128 to the iHT group; 250 children were analyzed (126 in the CD group and 124 in the iHT group) (mean [SD] age, 13.4 [2.9] years in the CD group and 13.3 [2.8] years in the iHT group; 94 female [74.6%] in the CD group and 85 [68.5%] in the iHT group). Directly after treatment, 46 children (36.8%) in the CD group and 62 (50.1%) in the iHT group were successfully treated. After 1-year follow-up, the 62.1% treatment success in the CD group was noninferior to the 71.0% in the iHT group (difference, -8.9%; 90% CI, -18.9% to 0.7%; P = .002).

Conclusions and Relevance: Long-term effectiveness of home-based HT with a CD is noninferior to iHT performed by therapists in pediatric IBS or FAP(S). Treatment with hypnosis using a CD provides an attractive treatment option for these children.

Trial Registration: trialregister.nl Identifier: NTR2725.

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[2507]


Effects of hypnosis during pregnancy: A psychophysiological study on maternal stress.


Professional Hypnosis Databank - page 744 of 889 - by Alberto Torelli, hypnologist
Because it induces a state of reduced awareness and deep relaxation, hypnosis is thought to be efficient at relieving stress and anxiety. This study examined whether hypnosis may alter the pattern and time evolution of maternal and fetal stress. Here we report a 23-yrs-old primigravida woman at 31-weeks' gestation who underwent daily sessions of hypnosis during one week. An A (baseline)-B (intervention) - A' (return to baseline) design was used. Each study phase lasted one week. The State Anxiety Inventory (SAI) was completed daily. Uterine contractions as well as maternal and fetal heart rate were recorded over 24-h periods in each of the study phase. Uterine contractions and maternal systolic blood pressure showed clear reductions during the hypnosis phase. In addition, a statistically significant declining trend in anxiety scores was observed during the hypnosis phase, and anxiety re-increased in the return-to-baseline phase (p<0.05). Coefficient of variation of maternal heart rate was found to be considerably lower during the hypnosis phase. Our results suggest that a short-lived hypnosis intervention (combined with standard care) holds sufficient promise for antenatal stress relief to justify testing its efficacy in larger groups of pregnant women.
RESULTS: The study included 48 patients in the hypnosis group and 49 patients in the control group. No difference in propofol consumption to obtain anesthesia induction was observed between the groups (total dose: 138.6 [67.5] and 130 [47.9] mg, P = .47; adjusted dose: 2.15 [1.09] and 1.95 [0.66] mg/kg, P = .28, for the hypnosis and control groups, respectively). Hetero-evaluation of arm movement during propofol injection (no reaction: 98% and 74%; P = .004, in the hypnosis and control groups, respectively) and face reaction at venous access placement (no reaction 59% and 30%; P = .017, in the hypnosis and control groups, respectively) were lower in the hypnosis group. No adverse event was reported.

CONCLUSIONS: No difference in propofol consumption was observed in this study designed to evaluate the effect of a hypnotic conversational session on anesthesia induction using an automated tool for propofol administration.

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Discounting input from older adults: the role of age salience on partner age effects in the social contagion of memory.

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Three experiments examined the impact of partner age on the magnitude of socially suggested false memories. Young participants recalled household scenes in collaboration with an implied young or older adult partner who intentionally recalled false items. In Experiment 1, participants were presented with only the age of their partner (low age-salience context); in Experiment 2, participants were presented with the age of their partner along with a photograph and biographical information about their partner (high age-salience context); in Experiment 3, age salience was varied within the same experiment. Across experiments, participants in both the low age-salience and high age-salience contexts incorporated their partners' misleading suggestions into their own subsequent recall and recognition reports, thus demonstrating social contagion with implied partners. Importantly, the effect of partner age differed across conditions. Participants in the high age-salience context were less likely to incorporate misleading suggestions from older adult partners than from young adult partners, but participants in the low age-salience context were equally likely to incorporate suggestions from young and older adult partners. Participants discount the memory of older adult partners only when age is highly salient.

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The role of hypnotherapy in evidence-based clinical practice.

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The purpose of this review was to discuss the place of hypnotherapy in a modern medical world dominated by so-called evidence-based clinical practice. Hypnosis is an easily learned technique that is a valuable adjuvant to many medical, dental and psychological interventions.

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Multimodal pediatric pain management (part 2).
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Dr Stefan Friedrichsdorf speaks to Commissioning Editor Jade Parker: Stefan Friedrichsdorf, MD, is medical director of the Department of Pain Medicine, Palliative Care and Integrative Medicine at Children's Hospitals and Clinics of Minnesota in Minneapolis/St Paul, MN, USA, home to one of the largest and most comprehensive programs of its kind in the country. The pain and palliative care program is devoted to control acute, chronic/complex and procedural pain for inpatients and outpatients in close collaboration with all pediatric subspecialties at Children's Minnesota. The team also provides holistic, interdisciplinary care for children and teens with life limiting or terminal diseases and their families. Integrative medicine provides and teaches integrative, nonpharmacological therapies (such as massage, acupuncture/acupressure, biofeedback, aromatherapy and self-hypnosis) to provide care that promotes optimal health and supports the highest level of functioning in all individual children's activities. In this second part of the interview they discuss multimodal (opioid-sparing) analgesia for hospitalized children in pain and how analgesics and adjuvant medications, interventions, rehabilitation, psychological and integrative therapies act synergistically for more effective pediatric pain control with fewer side effects than a single analgesic or modality.

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The Power of Suggestion: Posthypnotically Induced Changes in the Temporal Binding of Intentional Action Outcomes.

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The sense of agency is the experience of initiating and controlling one's voluntary actions and their outcomes. Intentional binding (i.e., when voluntary actions and their outcomes are perceived to occur closer together in time than
involuntary actions and their outcomes) is increased in intentional action but requires no explicit reflection on agency. The reported experience of involuntariness is central to hypnotic responding, during which strategic action is experienced as involuntary. We report reduced intentional binding in a hypnotically induced experience of involuntariness, providing an objective correlate of reports of involuntariness. We argue that this reduced binding results from the diminished influence of motor intentions in the generation of the sense of agency when beliefs about whether an action is intended are altered. Thus, intentional binding depends on awareness of intentions. This finding shows that changes in metacognition of intentions affect perception.

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[2513]

Brain mechanisms for loss of awareness of thought and movement.

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Loss or reduction of awareness is common in neuropsychiatric disorders and culturally influenced dissociative phenomena but the underlying brain mechanisms are poorly understood. fMRI was combined with suggestions for automatic writing in 18 healthy highly hypnotically suggestible individuals in a within-subjects design to determine whether clinical alterations in awareness of thought and movement can be experimentally modelled and studied independently of illness. Subjective ratings of control, ownership, and awareness of thought and movement, and fMRI data were collected following suggestions for thought insertion and alien control of writing movement, with and without loss of awareness. Subjective ratings confirmed that suggestions were effective. At the neural level, our main findings indicated that loss of awareness for both thought and movement during automatic writing was associated with reduced activation in a predominantly left-sided posterior cortical network including BA 7 (superior parietal lobule and precuneus), and posterior cingulate cortex, involved in self-related processing and awareness of the body in space. Reduced activity in posterior parietal cortices may underlie specific clinical and cultural alterations in awareness of thought and movement. Clinically, these findings may assist development of imaging assessments for loss of awareness of psychological origin, and interventions such as neurofeedback.

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[2514]

[Hypnoanalgesia and clinical nursing reasoning].

[Article in French]

Soudan C(1).
Hypnoanalgesia is practised in accordance with care ethics and as a complement to other medical and/or psychological therapies. It is aimed at people with acute, chronic or treatment-related pain. Its practice is founded on clinical nursing reasoning, which targets the health problem and the therapeutic objectives guiding the hypnosis session. A clinical assessment finalises the interactional process.

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[The non-pharmacological management of chronic pain].

[Article in French]

Berlemont C(1).

Pain management is not limited to the putting in place of pharmacological, surgical, physiotherapy or psychological strategies. Non-pharmacological therapies can also be proposed, notably in relation to chronic pain. Appreciated by patients and developed by caregivers, they require appropriate regulatory guidelines and specific training in order for them to be implemented safely.

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"Living with chronic pain means fighting to remain positive".

[Article in French]

Chauvin M(1).

Chronic pain has a significant impact on a patient's personal, professional and social life. Effective short- or medium-term resources exist, but patients nevertheless face a daily struggle to resist, to gain a little autonomy, to get out of bed, to suffer less. Support from family and friends, as well as trusting relationships forged with health professionals, are an essential resource. Testimony.

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OBJECTIVES: To analyze a clip from the program “Acupuncture, osteopathy, hypnosis: do complementary medicines have superpowers?” about acupuncture as an anesthetic for surgical procedures in China. To propose a rational explanation for the phenomena observed. To describe the processes leading a public service broadcasting channel to offer this type of content at prime time and the potential consequences in terms of public health.

METHOD: Analysis using critical thinking attitudes and skills, along with a bibliographical search of Medline, Google Scholar and Cochrane Library databases.

RESULTS: The information delivered in the television clip is ambiguous. It does not allow the viewer to form an informed opinion on the relevance of acupuncture as an anesthetic for surgical procedures. It is reasonable to assume that the clip shows surgery performed with undisclosed epidural anesthesia coupled with mild intravenous anesthesia, sometimes performed in other countries. What needs to be highlighted here is the overestimation of acupuncture added to the protocol. The media tend to exaggerate the risks and expected effects of the treatments they report on, which can lead patients to turn to unproven therapies.

CONCLUSION: Broadcasting such a clip at prime time underlines the urgent need for the public and all health professionals to be trained in sorting and critically analyzing health information.

Can hypnosis displace the threshold for visual consciousness?


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To test the specific effects of hypnosis on the attentional components of visual awareness, we developed a posthypnotic suggestion for peripheral visual inattention inspired on the “tunnel vision” symptom of the Balint Syndrome. We constructed a dual-target visibility and discrimination paradigm, in which single-digit numerical targets were placed both on the hypnotically affected peripheral space and on the remaining undisturbed central area. Results were 3-fold: (i) when compared to participants of Low hypnotic susceptibility (Lows), highly susceptible participants (Highs) presented decreased subjective visibility; (ii) Highs did not show dual-task interference from peripheral targets (an effect of unconscious processing) during hypnotic suggestion to not attend them, but Lows did; (iii) nevertheless, when asked to execute a discrimination task over these same targets, Highs performed with the same accuracy as Lows. These results suggest that the hypnotic manipulation of visuospatial attention did produce an experiential change in Highs, but not one...
that could be mapped onto interference at a single (conscious or unconscious) level of processing. Rather, we posit that Highs simultaneously displayed (i) a fluctuation in awareness of peripheral targets coherent with the suggestion and (ii) a control strategy that involved removing hypnotically unattended targets from the task set whenever task instructions would allow for it. In light of these findings, we argue that hypnosis cannot be used as a tool to restrict the processing of otherwise supraliminal stimulation to subliminal levels.

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PMID: 30488004

[2519]


[Training in distraction and hypnosis for pain relief in paediatrics].

[Article in French]

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The use of psychophysical techniques such as distraction and hypnosis for pain relief is becoming more common in order to reduce the pain and anxiety associated with care procedures in paediatrics. A training programme in supporting painful care procedures was implemented in a paediatrics unit. Running since 2013, it has already trained more than 150 caregivers. It lies at the heart of a philosophy of care.

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[2520]


The structure of resilience in irritable bowel syndrome and its improvement through hypnotherapy: Cross-sectional and prospective longitudinal data.

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BACKGROUND: Resilience refers to a class of variables that are highly relevant to wellbeing and coping with stress, trauma, and chronic adversity. Despite its significance for health, resilience suffers from poor conceptual integration. Irritable bowel syndrome (IBS) is a functional disorder with altered

Professional Hypnosis Databank - page 751 of 889 - by Alberto Torelli, hypnotologist
psychological stress reactivity and a brain-gut-microbiota axis, which causes high levels of chronic strain. Gut-directed Hypnotherapy (GHT) is a standardized treatment for IBS aimed at improving resilience. An improvement of resilience as a result of GHT has been hypothesized but requires further investigation. The aims of the study were to validate the construct and develop an integrational measure of various resilience domains by dimensional reduction, and to investigate changes in resilience in IBS patients after GHT.

METHOD: A total of N = 74 gastroenterology outpatients with IBS (Rome III criteria) were examined in 7 resilience domains, quality of life, psychological distress and symptom severity. Of these, n = 53 participated in 7 to 10 GHT group sessions (Manchester protocol). Post-treatment examinations were performed on average 10 months after last GHT session.

RESULTS: Resilience factors proved to be unidimensional in the total sample. Greater resilience (composite score of resilience domains) and quality of life, and lower symptom severity and psychological distress were found after treatment (n = 16). Similar differences were present in cross-sectional comparisons of n = 37 treated vs. n = 37 untreated patients.

CONCLUSION: Resilience factors share a common psychological dimension and are functionally connected. The absence of maladaptive behaviours contributes to resilience. Improvements in resilience after hypnotherapy with parallel increases in quality of life and reduced psychological distress and symptom severity were observed. Independent replications with larger sample sizes and randomized controlled trials are needed.

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Conflict of interest statement: The authors have declared that no competing interests exist.

[2521]


Hypnosis intervention for the management of pain perception during cataract surgery.

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Erratum in

Objective: To investigate the effectiveness of hypnosis in pain management during cataract surgery.

Methods: Male or female patients with bilateral age-related cataract who wished to have both eyes subjected to phacoemulsification surgery were preliminarily admitted. Immediately after the first-eye surgery, each patient was evaluated for pain using the visual analog scale (VAS), and patients with a VAS score >1 were enrolled. By using block randomization, the enrolled patients were allocated to either the treatment group, which received a hypnosis intervention before the scheduled second-eye surgery, or the control group, which did not undergo hypnosis. The levels of anxiety, pain, and cooperation were evaluated independently by the patients and the surgeon.

Results: During the intraoperative pain assessment, 5%, 34%, 38%, and 23% of patients in the control group reported experiencing no pain, mild pain, moderate pain, and severe pain, respectively. In contrast, in the hypnosis group, 18%, 56%, 15%, and 11% of patients reported experiencing no pain, mild pain, moderate pain, and severe pain, respectively, which showed significant differences between the groups (P<0.005). The evaluation of anxiety level showed that the mean score in the control group and hypnosis group was 11.77±0.32 and 6.64±0.21,
respectively, revealing a highly significant difference between the two groups (P<0.005). The assessment of patient cooperation showed that only 5% and 18% of patients in the control group and 18% and 36% of patients in the hypnosis group showed excellent and good cooperation, respectively, while 47% of patients in the control group and only 24% of patients in the hypnosis group exhibited poor cooperation, revealing significant differences between the groups (P<0.005).

Conclusion: Hypnosis may be considered as an auxiliary measure in cataract surgery, especially for patients who experienced obvious pain during the first-eye surgery.

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PMID: 30288086

Conflict of interest statement: Disclosure The authors report no conflicts of interest in this work.

[2522]


Investigation of the Effect of Hypnotic Anesthesia on Nerve Conduction Velocity (NCV).


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Background: Hypnosis is a psychological method used for treatment of different types of disorders and illnesses. This technique is also used in surgical interventions. Many studies proved the efficacy of hypnosis in medical treatment. However, the mechanism of hypnosis is unclear for scientists. To find out if the peripheral nervous system has a role in hypnotic anesthesia, we aimed to investigate the effect of hypnotic anesthesia on nerve conduction velocity (NCV).

Methods: In this study, healthy volunteers with high hypnotizability entered the study. First, The NCV test was performed in both hands of participants and then they all underwent hypnosis. Hypnotic anesthesia was induced in the right hand of all subjects followed by painful stimuli in their hand by vascular clamping. Then, the NCV test was repeated in both hands again. Data were analyzed by SPSS version16.

Results: The group study consisted of 13 (65%) women and 7 (35%) men with their age ranging between 14 to 52 years. According to the results, the mean values of sensory latency, and NCV changed from 3.225 ms and 54.355 m/s before hypnotic anesthesia to 3.32 ms and 55.3 m/s after hypnotic anesthesia in right hand, respectively. Results showed that there was a significant difference between data before and after hypnotic induction (P < 0.001). The covariance test also indicated a significant difference between the data obtained from both hands (P < 0.001).

Conclusions: In contrast to our hypothesis, the NCV test showed an increase after the hypnotic anesthesia. However, increase in NCV did not lead to experience pain after the painful stimuli. It seems that central nervous system should be involved in this process.

DOI: 10.5812/aapm.67859
There are very few studies in existence today that look at the value of hypnosis in palliative care. The aim of our study was to measure the impact of hypnosis on managing symptoms in palliative care. This quantitative retrospective monocentric observational study evaluated pain and patient satisfaction using monitoring and evaluation sheets, which included a rating scale before and after hypnosis sessions in a palliative care unit. For two years, thirty-seven patients participated in hypnosis sessions mostly for pain (41%) and anxiety (27%). 51% reported a decrease in symptoms, with 35% even reporting that the intensity of their symptoms vanished. Most of the patients were satisfied with the approach and at the end of the study some of them were able to recreate its effects by using self-hypnosis. Despite the small sample, the results confirm those found in the few palliative studies that do exist, particularly relating to the improvement of symptoms such as pain, anxiety, nausea, and respiratory disorders.

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PMID: 30066511 [Indexed for MEDLINE]

Investigation on the Neural Mechanism of Hypnosis-Based Respiratory Control Using Functional MRI.

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Respiratory control is essential for treatment effect of radiotherapy due to the high dose, especially for thoracic-abdomen tumor, such as lung and liver tumors. As a noninvasive and comfortable way of respiratory control, hypnosis has been proven effective as a psychological technology in clinical therapy. In this study, the neural control mechanism of hypnosis for respiration was investigated by using functional magnetic resonance imaging (fMRI). Altered spontaneous brain activity as well as neural correlation of respiratory motion was detected for eight healthy subjects in normal state (NS) and hypnosis state (HS) guided by a hypnotist. Reduced respiratory amplitude was observed in HS (mean ± SD: 14.23 ± 3.40 mm in NS, 12.79 ± 2.49 mm in HS, p=0.0350), with mean amplitude deduction of 9.2%. Interstate difference of neural activity showed activations in the visual cortex and cerebellum, while deactivations in the prefrontal cortex and precuneus/posterior cingulate cortex (PCu/PCC) in HS. Within these regions, negative correlations of neural activity and respiratory motion were observed in visual cortex in HS. Moreover, in HS, voxel-wise neural correlations of respiratory amplitude demonstrated positive correlations in cerebellum anterior.
lobe and insula, while negative correlations were shown in the prefrontal cortex and sensorimotor area. These findings reveal the involvement of cognitive, executive control, and sensorimotor processing in the control mechanisms of hypnosis for respiration, and shed new light on hypnosis performance in interaction of psychology, physiology, and cognitive neuroscience.

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[2525]


The effects of a gamified approach avoidance training and verbal suggestions on food outcomes.


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There is initial support for the effectiveness of approach-avoidance trainings in altering food-related health behaviors. Furthermore, outcome expectancies induced by verbal suggestions might optimize the effectiveness of these interventions, as shown in placebo research. The present study investigated the effectiveness of a gamified approach-avoidance training on food-related outcomes and whether verbal suggestions could strengthen those effects. A total of 120 participants were randomly assigned to 1 of 4 conditions: serious gaming only, verbal suggestions only, serious gaming combined with verbal suggestions, or a gaming control condition. Virtual food preference and food choice were assessed with a food choice task, with pairs differing in healthiness or in healthiness and attractiveness. Implicit food preference was assessed with an Implicit Association Test and food intake with a bogus taste test. Participants in both serious gaming conditions made healthier food choices for pairs differing in healthiness and attractiveness and had healthier implicit food preferences compared to gaming control. No effects were found on food intake. These findings provide the first preliminary support for the effects of a gamified approach-avoidance training on virtual food choice and implicit food preference. Future studies should further elucidate these effects, also in other health domains such as physical activity.

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[2526]


Interest and Attitudes about Hypnosis in a Large Community Sample.
Despite the available empirical evidence supporting the efficacy of hypnosis for alleviating symptoms and side effects across a variety of clinical contexts, hypnosis has failed to disseminate widely. One way to try to better understand the lack of hypnosis dissemination is to apply a marketing theory approach, focusing on attitudes and beliefs about a product (hypnosis) held by consumers. Better understanding of such factors can lead to strategies to promote the product among consumers, and in this case, encourage dissemination. The goal of the study was to investigate relationships between interest in hypnosis use and: 1) attitudes about hypnosis; 2) beliefs about the effectiveness of hypnosis (i.e., hypnosis credibility, and hypnosis effectiveness expectancies); 3) past experience with hypnosis; and 4) the perceived hedonic value and utility of hypnosis. The study also explored participants' preferences for hypnosis delivery method (i.e., live or recorded), as well as preferences for hypnosis labeling (i.e., how hypnosis is defined). Participants (N = 509) were recruited through Amazon Mechanical Turk and completed an anonymous online survey. The results revealed that participants' attitudes about hypnosis, their expectancies for the effectiveness of hypnosis, and the perceived hedonic value of hypnosis accounted for unique variance in participants' interest in hypnosis, ps < .05. Together, these variables accounted for 73% of the variance in participants' interest in hypnosis use. Based on these findings, we recommend that these key variables should be considered when planning for greater dissemination and uptake of empirically supported hypnosis interventions.

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PMCID: PMC6052866
PMID: 30035144

[2527]
[Using touch to combat care-induced pain in young children].
[Article in French]

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From birth, touch meets a fundamental need for the child. During a care procedure, the child is subjected to 'technical touch' which can generate negative emotions, such as anxiety which increases the pain. The children's nurse can prevent this pain through pharmacological or non-pharmacological means. Just like distraction through play or hypnosis, touch, a powerful communication tool, constitutes a resource for the prevention and fight against care-induced pain. 'Toucher-massage®' is a particularly precious tool in the nurse-patient relationship.

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[2528]
Evaluation of the analgesia nociception index for monitoring intraoperative analgesia in children.

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Comment in

BACKGROUND: Intraoperative analgesia is still administered without guidance. Anaesthetists decide upon dosing on the basis of mean population opioid pharmacological studies and in response to variations in haemodynamic status. However, those techniques have been shown to be imprecise. We assessed the diagnostic value of monitoring the analgesia nociception index (ANI) to detect surgical stimulation in children.

METHODS: This was an observational study of 2- to 12-yr-old patients 5 min before and after surgical incision. Hypnosis was maintained with sevoflurane and guided by bispectral index. Intraoperative analgesia was administered as a remifentanil infusion titrated to variations in haemodynamic parameters, and ANI monitor values were recorded. ANI parameters assessed included instantaneous ANI (ANIi), mean ANI (ANIm), and the relative change of ANIi to ANIm (DeltaANI=ANIi-ANIm/ANIm). Statistical analyses were performed using receiver-operating-characteristic analysis with determination of the area under the receiver operating characteristic (AUROC) curve and the grey zone.

RESULTS: Overall, 49 subjects were included in this study. The AUROC was 0.755 (0.738-0.772), 0.771 (0.755-0.787), and 0.756 (0.738-0.774) for ANIi, ANIm, and DeltaANI, respectively. The threshold of ANI parameters indicating the presence of noxious surgical stimuli was ≤53%, ≤56%, and ≤-13.3% for ANIi, ANIm, and DeltaANI, respectively. The percentage of subjects in the inconclusive zone was 41%, 51%, and 33% for ANIi, ANIm, and DeltaANI, respectively.

CONCLUSIONS: ANI has diagnostic value for detecting surgical stimuli in children.

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[2529]


Effectiveness of autogenic training on headache: A systematic review.

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PURPOSE: To investigate the impact of length of autogenic training (AT) use, alone and with the addition of adjunct treatments, on intensity and duration of primary headache in adults age 19 and older.

METHODS: We searched articles published in English and Korean from 1926 to 2016. A search of seven domestic and foreign databases was conducted from September 25, 2016 to December 30, 2016 using the search terms "autogenic training," "autogen," "relaxation," and "headache." The search was documented according to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA). The search yielded a total of 262 papers; a multi-step screening and selection process ultimately yielded six articles of randomized controlled trials (RCTs) for the systematic review. Cochrane's Risk of Bias Tool was used to evaluate the quality of the selected papers.

RESULTS: Five of the six studies demonstrated statistically significant reduction in headache by AT-only or biofeedback-assisted AT. The reviewed studies varied in characteristics of subjects, length of autogenic training and practice, use of adjunct therapies, and use of headache measures.

CONCLUSIONS: The small number of studies retrieved in this review, with their variations in AT interventions used, in AT training/practice time, and headache measures used, did not facilitate rigorous evaluation of the effectiveness of specific AT approaches nor of the optimum length of AT practice for reduction of headache. More research is needed on the effectiveness of AT-only for headache, the most effective duration of autogenic training and practice, and the type(s) of headache for which it is most effective.

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[2530]


[The effectiveness of autogenic training in the psycho-corrective treatment of the patients presenting with chronic somatic diseases].

[Article in Russian; Abstract available in Russian from the publisher]

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BACKGROUND: The autogenic training (AT) is one of the most widely used methods for psychotherapy of patients suffering from chronic somatic diseases (CSD). A number of studies have demonstrated the improvement of the psychological status in the patients under the influence of autogenic training. However, up to the present time, both the mechanisms underlying the therapeutic effectiveness and the predictors of the AT effectiveness have remained to be poorly studied which hampers the development of differentiated indications for the application of this technique.

AIM: The objective of the present study was to estimate the effectiveness of AT
and to identify the predictors of the outcomes of the treatment of patients presenting with chronic somatic diseases.

MATERIAL AND METHODS: The study included 325 patients with CSD who were examined with the use of the shortened multifactorial personality inventory (SMPI), the Spielberger State-Trait Anxiety Inventory (STAI), and the Beck depression inventory (BDI) scales. The patients were randomized into two groups. Group 1 (main) was comprised of 163 patients who underwent AT-based psychotherapy, group 2 (control) consisted of 162 patients who did not receive the psychotherapy. In order to identify the predictors of AT effectiveness, the patients of the main group were subdivided into two subgroups at the end of the study period: (a) including 128 patients whose psychologic status was normalized under psychotherapy and (b) containing 35 patients showing the improvement of their health status. The comparative analysis of the baseline characteristics of the patients belonging to each group was performed.

RESULTS: The study has demonstrated that by the end of the observation period the patients of the main group showed a significantly more pronounced (compared with controls) decrease of scales 1, 2, and 7 indicators, an increase of the SMPI scale 9 indicators, and a decrease of STAI and BDI indicators. The positive impact of autogenic training on the psychological status of the patients was mostly attributable to the reduction of anxiety, tension, fixation on negative sensations, and sensitivity to the stress factors as well as to the increased activity and the improved mood. The study of AT predictors revealed that the increase of scales 4 and 6 of SMPI and BDI indicators fairly well predicts the lack of the effectiveness of the method under consideration.

CONCLUSIONS: The beneficial influence of the autogenic training on the psychological status of the patients presenting with chronic somatic diseases is mainly mediated through the decrease of anxiety, tension, fixation on negative feelings, sensitivity to stressful influences, increased activity, and improved mood of the patients. A study of AT effectiveness predictors revealed that an increased level of rigidity reduces the effectiveness of this method because of the tendency of the patients toward making excessive efforts to achieve the state of relaxation. The predictors of the high effectiveness of AT the development of which requires regular training proved to be a moderate decrease of the psychological adaptation level together with such characteristics as the ability of the patients to control their behavior, purposefulness, and perseverance in achieving the goal.

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What do Cochrane systematic reviews say about new practices on integrative medicine?

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BACKGROUND: This study identified and summarized all Cochrane systematic reviews (SRs) on the effects of ten integrative practices that were recently added to the Brazilian public healthcare system (SUS).

DESIGN AND SETTING: Review of systematic reviews, conducted in the Discipline of Evidence-Based Medicine, Escola Paulista de Medicina (EPM), Universidade Federal de São Paulo (Unifesp).

METHODS: Review of Cochrane SRs on the following interventions were identified, summarized and critically assessed: apitherapy, aromatherapy, bioenergetics, family constellation, flower therapy, chromotherapy, geotherapy, hypnotherapy, hand imposition or ozone therapy.

RESULTS: We included a total of 16 SRs: 4 on apitherapy, 4 on aromatherapy, 6 on hypnotherapy and 2 on ozone therapy. No Cochrane SR was found regarding bioenergetics, family constellation, chromotherapy, clay therapy, flower therapy or hand imposition. The only high-quality evidence was in relation to the potential benefit of apitherapy, specifically regarding some benefits from honey dressings for partial healing of burn wounds, for reduction of coughing among children with acute coughs and for preventing allergic reactions to insect stings.

CONCLUSION: Except for some specific uses of apitherapy (honey for burn wounds and for acute coughs and bee venom for allergic reactions to insect stings), the use of ten integrative practices that have recently been incorporated into SUS does not seem to be supported by evidence from Cochrane SRs.

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[2532]


Psychedelics and hypnosis: Commonalities and therapeutic implications.

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BACKGROUND: Recent research on psychedelics and hypnosis demonstrates the value of both methods in the treatment of a range of psychopathologies with overlapping applications and neurophenomenological features. The potential of harnessing the power of suggestion to influence the phenomenological response to psychedelics toward more therapeutic action has remained unexplored in recent research and thereby warrants empirical attention.

AIMS: Here we aim to elucidate the phenomenological and neurophysiological similarities and dissimilarities between psychedelic states and hypnosis in order to revisit how contemporary knowledge may inform their conjunct usage in psychotherapy.
METHODS: We review recent advances in phenomenological and neurophysiological research on psychedelics and hypnosis, and we summarize early investigations on the coupling of psychedelics and hypnosis in scientific and therapeutic contexts. Results/outcomes: We highlight commonalities and differences between psychedelics and hypnosis that point to the potential efficacy of combining the two in psychotherapy. We propose multiple research paths for coupling these two phenomena at different stages in the preparation, acute phase and follow-up of psychedelic-assisted psychotherapy in order to prepare, guide and integrate the psychedelic experience with the aim of enhancing therapeutic outcomes. CONCLUSIONS/INTERPRETATION: Harnessing the power of suggestion to modulate response to psychedelics could enhance their therapeutic efficacy by helping to increase the likelihood of positive responses, including mystical-type experiences.

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[2533]


Efficacy of a hypnosis-based intervention to improve well-being during cancer: a comparison between prostate and breast cancer patients.


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BACKGROUND: Prostate and breast cancer can have a lot of negative consequences such as fatigue, sleep difficulties and emotional distress, which decrease quality of life. Group interventions showed benefits to emotional distress and fatigue, but most of these studies focus on breast cancer patients. However, it is important to test if an effective intervention for breast cancer patients could also have benefits for prostate cancer patients.

METHODS: Our controlled study aimed to compare the efficacy of a self-hypnosis/self-care group intervention to improve emotional distress, sleep difficulties, fatigue and quality of life of breast and prostate cancer patients. 25 men with prostate cancer and 68 women with breast cancer participated and were evaluated before (T0) and after (T1) the intervention.

RESULTS: After the intervention, the breast cancer group showed positive effects for anxiety, depression, fatigue, sleep difficulties, and global health status, whereas there was no effect in the prostate cancer group. We showed that women suffered from higher difficulties prior to the intervention and that their oncological treatments were different in comparison to men.

CONCLUSION: The differences in the efficacy of the intervention could be explained by the baseline differences. As men in our sample reported few distress, fatigue or sleep problems, it is likely that they did not improve on these dimensions.

TRIAL REGISTRATION: ClinicalTrials.gov ( NCT02569294 and NCT03423927 ). Retrospectively registered in October 2015 and February 2018 respectively.

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PMID: 29929493 [Indexed for MEDLINE]
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In the framework of the management of patients receiving hyperbaric oxygen therapy, hypnoanalgesia is a complementary pain management tool, notably during the changing of dressings. Trained in this management of care-related pain, the teams of the hyperbaric medicine centre in Lyon share their experience.

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OBJECTIVE: The human mind-body possesses a remarkable innate ability to heal. Grounded in the evolutionarily conserved systems of the brain and body, nature appears to function as the fundamental source of wellness along the two vectors of attention and relaxation. Yet, our species is moving away from nature at a time when humanity is just beginning to rediscover its benefits.

CONCLUSIONS: Exposure to natural environments may provide a "window" of healing that can be extended through a continuum of intervention through the use of guided meditation and ultimately hypnotic suggestion. The result may be an improved ability to promote greater executive functioning and more robust immune regulation. The time has come for a more holistic medicine guided by the hand of nature.

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Hypnotic clever hands: Agency and automatic responding.

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The Clever Hands task (Wegner, Fuller, & Sparrow, 2003) is a behavioral illusion in which participants make responses to a trivia quiz for which they have no sense of agency. Sixty high hypnotizable participants completed two versions of the Clever Hands task. Quiz One was a replication of the original study. Quiz Two was a hypnotic adaptation using three suggestions that were based on clinical disruptions to the sense of agency. The suggestions were for: random responding, thought insertion, and alien control. These suggestions led to differences in accuracy (action production) and estimates of accuracy (action projection).

Specifically, whereas the random responding suggestion had little effect, the two clinically based suggestions had opposite impacts on action production: the thought insertion suggestion led to an increase in the rate of correct responses (although participants still believed they were responding randomly); while the alien control suggestion led to a reduction in the rate of correct answers and a pattern of results that more closely approximated randomness. Contrary to theoretical accounts that claim that hypnosis affects executive monitoring rather than executive control, this result indicates that specific hypnotic suggestions can also influence the implicit processes involved in action production.


Hypnosis for burn wound care pain and anxiety: A systematic review and meta-analysis.

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BACKGROUND: Evidence from clinical trials suggests psychological interventions should be considered as an adjunct to medications.

OBJECTIVE: The purpose of this systematic review and meta-analysis was to evaluate the effectiveness of clinical hypnosis on pain, anxiety and medication needs during wound care in adults suffering from a burn injury.

DATA SOURCES: Medline, PsycINFO, CINAHL, Embase, ISI, SCOPUS, Cochrane, and Proquest databases were searched for randomized controlled trials comparing hypnosis to other interventions during dressing change in adult patients.

DATA SYNTHESIS: Two independent reviewers extracted relevant articles and assessed their methodological quality. Only six studies met the inclusion criteria and were described in detail. Available data was pooled with Revman 5.3.

RESULTS: For the primary outcome, we found a statistically significant difference in pain intensity ratings favoring hypnosis (MD=-8.90, 95% CI -16.28, -1.52). For the secondary outcomes, there was a statistically significant difference in anxiety ratings favoring hypnosis (MD=-21.78, 95% CI -35.64, -7.93) and no difference in medication usage (MD=-0.07, 95% CI -0.32, 0.17).

CONCLUSION: These results suggest that hypnosis reduces pain intensity and anxiety ratings in adults undergoing burn wound care. However, because of the limitations discussed, clinical recommendations are still premature.
A pilot-study of hypnotherapy as complementary treatment for pain in chronic pancreatitis.


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Background:
Chronic pain is the hallmark symptom of chronic pancreatitis (CP). Its treatment is complicated, and often the patients have side-effects notwithstanding that pain is not ameliorated in many cases. Hypnotherapy has been shown to improve symptoms of irritable bowel syndrome including abdominal pain and, as such, may serve as a remedy to relieve pain. The aim of this open-label pilot-study was to test the effect of hypnotherapy for pain in patients with CP.

Methods:
Four patients with CP and chronic abdominal pain were included and followed for four consecutive weeks. The primary efficacy parameter was pain relief. After 1 week of baseline patients received a 1-h session of hypnotherapy. This was repeated at day 15 and day 23 and supplemented by self-administered hypnotherapy. Results:
Three of four participants completed the trial and experienced short lasting pain reduction during the trial. The reported pain relief was in the range of 20%-39% compared to baseline. Hypnotherapy improved self-reported sleep, vitality, and social life. Conclusions:
The results suggest that hypnotherapy may reduce pain related to CP. Furthermore, no adverse effects were reported and the majority of participants completed the trial. Further prospective controlled trials are warranted to examine the potential of hypnotherapy.

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Stress and psoriasis.

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The links between psoriasis and stress are complex. This article proposes a review of the literature on the relationship between stress and psoriasis. In 31-88% of cases, patients report stress as being a trigger for their psoriasis. There was also a reported higher incidence of psoriasis in subjects who had a stressful event the previous year, suggesting that stress may have a role in triggering the disease in predisposed individuals. Stress is also a consequence of psoriasis outbreaks. Understanding the role of stress makes it appropriate to target stress when proposing treatment to patients with psoriasis. Several
controlled studies have demonstrated that relaxation, hypnosis, biofeedback, and behavioral and cognitive stress management therapies have been effective in people with psoriasis.

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[2540]

Anxiety-Related Bleeding and Thrombosis.

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Anxiety, a normal response to stressful situations, is characterized by increased levels of factor VIII, fibrinogen, and von Willebrand factor, and by enhanced platelet aggregability. One would expect acute anxiety to be a prothrombotic state, but since acute mental stress induces tissue plasminogen activator (tPA) release from endothelial and chromaffin cells, fibrinolysis counteracts procoagulant stimuli. It could be said that procoagulant changes accompanying the fight-or-flight response reduce the risk of bleeding in case of potential injuries, while activation of fibrinolysis counteracts activation of hemostasis to prevent intravascular thrombus formation before injuries occur. Acutely anxious patients are prone to bleeding or thrombosis when the balance between hypercoagulation and hyperfibrinolysis is disturbed. Acute anxiety not only increases the risk of bleeding in hemophilia or von Willebrand disease, but many reports have shown that anxiolytic interventions such as hypnosis are effective in controlling bleeding in hemostatic disorders. The pathogenesis of cardiovascular and thrombotic diseases in highly anxious patients is multifactorial. An important element is α-adrenergic vasoconstriction, which increases viscosity due to leakage of intravascular fluid into the interstitium, and also causes hypertension, favoring plaque rupture. Paradoxical as it may seem, over secretion of tPA may increase cardiovascular risk. This is because tPA degrades the extracellular matrix, causing vascular stiffness that increases cardiac workload, and thus oxygen requirements. Anxious patients with conditions associated with increased plasminogen activator inhibitor-1 levels, such as depression or postprandial hyperinsulinemia, are at high risk of thrombosis. Postprandial hyperinsulinemia may result from consumption of high-carbohydrate foods, considered anxiolytic, combined with a sedentary life, which is common among anxious individuals. Preliminary evidence suggests that high anxiety combined with either depression or a lifestyle that results in hyperinsulinemia has an important role in the pathogenesis of thrombotic events currently classified as unprovoked.

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Conflict of interest statement: None.

[2541]

The effect of progressive muscle relaxation on the management of fatigue and quality of sleep in patients with chronic obstructive pulmonary disease: A

Professional Hypnosis Databank - page 765 of 889 - by Alberto Torelli, hypnologist
OBJECTIVE: To assess the effect of progressive muscle relaxation (PMR) on fatigue and sleep quality of patients with chronic obstructive pulmonary disease (COPD) stages 3 and 4.

MATERIALS AND METHODS: The pretest posttest clinical trial recruited 91 patients COPD grades 3 and 4. Following random assignment of subjects, the treatment group (n = 45) performed PMR for eight weeks and the control group (n = 46) received routine cares. At baseline and after the intervention, fatigue and sleep quality was assessed. Data obtained were analyzed in SPSS.

RESULTS: It was determined that PMR decreased patients' fatigue level and improved some sleep quality subscales including subjective sleep quality, sleep latency, sleep duration and habitual sleep efficiency, but no improvement was found in global sleep quality and other sleep subscales.

CONCLUSION: An eight-week home-based PMR program can be effective in reducing fatigue and improving certain subscales of sleep quality in patients with COPD stages 3,4. (IRCT2016080124080N3).

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Effect of hypnotic suggestion on knee extensor neuromuscular properties in resting and fatigued states.

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PURPOSE: The aim of this study was to investigate whether hypnotic suggestions can alter knee extensor neuromuscular function at rest and during exercise.

METHODS: Thirteen healthy volunteers (8 men and 5 women, 27 ± 3 years old) took part in this counterbalanced, crossover study including two experimental (hypnosis and control) sessions. Knee extensor neuromuscular function was tested before and after hypnosis suggestion by using a combination of voluntary...
contraction, transcutaneous femoral nerve electrical stimulation and transcranial magnetic stimulation (TMS). A fatiguing exercise (sustained submaximal contraction at 20% maximal voluntary contraction (MVC) force) was also performed to evaluate the potential influence of hypnosis on the extent and origin of neuromuscular adjustments.

RESULTS: Hypnosis did not (p>0.05) alter MVC force or knee extensor neural properties. Corticospinal excitability, assessed with the amplitude of knee extensor motor evoked potentials, was also unchanged (p>0.05), as was the level of intracortical inhibition assessed with paired pulse TMS (short-interval intracortical inhibition, SICI). Time to task failure (~300 s) was not different (p>0.05) between the two sessions: accordingly, hypnosis did not influence neuromuscular adjustments measured during exercise and at task failure (p>0.05).

CONCLUSION: Hypnotic suggestions did not alter neuromuscular properties of the knee extensor muscles under resting condition or during/after exercise, suggesting that hypnosis-induced improvement in exercise performance and enhanced corticospinal excitability might be limited to highly susceptible participants.

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[2543]

[Self-hypnosis training for in-hospital chronic pain patients : A retroleective observational study].

[Article in German]

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BACKGROUND: Hypnosis is probably one of the oldest therapies known to man. In the last decades modern hypnosis has mainly been used by psychotherapists; however, hypnosis is becoming increasingly more important as a therapeutic method in medicine. Hypnosis can be used for a variety of medical indications. In the literature there is much evidence for the effectiveness of hypnosis. The aim of the present investigation was to demonstrate the effectiveness of hypnosis in inpatient treatment of chronic pain patients and to present a self-hypnosis program, which can be easily integrated into pain therapy.

METHODS: From October 2012 to April 2013 all inpatient chronic pain patients were included (group 1: non-hypnosis group, group 2: hypnosis group). Concerning group 2 a standardized protocol for hypnotherapy was integrated in addition to the standardized pain management program. The main goal of hypnotherapy was to integrate a self-hypnosis training so that further implementation in a domestic setting could be guaranteed. By means of standardized test procedures, e. g. Patient Health Questionnaire (PHQ-9), Pain Disability Index (PDI), Generalized Anxiety Disorder (GAD-7) and Numerical Rating Scales (NRS) for pain and general well-being, data were evaluated before and after the pain therapy.

RESULTS: The prestandardized and poststandardized test procedures of 30 chronic pain patients were evaluated (17 patients without hypnosis, 13 patients with hypnosis). The main diagnosis according to ICD-10 was "chronic pain disorder" (F45.41) with a MPSS stage III in all patients. The PDI was significantly improved in the hypnosis group (p = 0.019). The other items all showed a trend towards improvement in the hypnosis group (exception GAD-7) but without statistical significance (p > 0.05).
DISCUSSION: In a small patient collective, the present investigation was able to show that the integration of modern hypnotherapy into the treatment of chronic pain patients in an inpatient setting can be another useful therapeutic aspect. In particular, the instructions for learning independently seem to be useful due to the limited in-patient time. More research needs to be carried out to support our initial findings.

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[2544]


Use, applicability and reliability of depth of hypnosis monitors in children - a survey among members of the European Society for Paediatric Anaesthesiology.

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BACKGROUND: To assess the thoughts of practicing anaesthesiologists about the use of depth of hypnosis monitors in children.

METHODS: Members of the European Society for Paediatric Anaesthesiology were invited to participate in an online survey about their thoughts regarding the use, applicability and reliability of hypnosis monitoring in children.

RESULTS: The survey achieved a response rate of 30% (N = 168). A total of 138 completed surveys were included for further analysis. Sixty-eight respondents used hypnosis monitoring in children (Users) and 70 did not (Non-users). Sixty-five percent of the Users reported prevention of intra-operative awareness as their main reason to apply hypnosis monitoring. Among the Non-users, the most frequently given reason (43%) not to use hypnosis monitoring in children was the perceived lack or reliability of the devices in children. Hypnosis monitoring is used with a higher frequency during propofol anaesthesia than during inhalation anaesthesia. Hypnosis monitoring is furthermore used more frequently in children > 4 years than in younger children. An ideal hypnosis monitor should be reliable for all age groups and any (combination of) anaesthetic drug. We found no agreement in the interpretation of monitor index values and subsequent anaesthetic interventions following from it.

CONCLUSIONS: Prevention of intraoperative awareness appears to be the most important reason to use hypnosis monitoring in children. The perceived lack of reliability of hypnosis monitoring in children is the most important reasons not to use it. No consensus currently exists on how to adjust anaesthesia according to hypnosis monitor index values in children.

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[2545]


Hypnosis Enhances the Effects of Pain Education in Patients With Chronic Nonspecific Low Back Pain: A Randomized Controlled Trial.

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The potential benefits of combining pain education (PE) with clinical hypnosis (CH) has not yet been investigated in individuals with chronic pain. A total of 100 patients with chronic nonspecific low back pain were randomized to receive either: 1) PE alone, or 2) PE with CH. Outcomes were collected by a blinded assessor at 2 weeks and 3 months after randomization. The primary outcomes were average pain intensity, worst pain intensity (both assessed with 11-point numeric rating scales), and disability (24-item Roland Morris Disability Questionnaire) at 2 weeks. At 2 weeks, participants who received PE with CH reported lower worst pain intensity (mean difference = 1.35 points, 95% confidence interval [CI] = .32-2.37) and disability (mean difference = 2.34 points, 95% CI = .06-4.61), but not average pain intensity (mean difference = .67 point, 95% CI = -.27 to 1.62), relative to participants who received PE alone. PE with CH participants also reported more global perceived benefits at 2 weeks (mean difference = -1.98 points, 95% CI = -3.21 to -.75). At 3 months, participants who received PE with CH reported lower worst pain intensity (mean difference = 1.32 points, 95% CI = -.29-2.34) and catastrophizing (mean difference = 5.30 points, 95% CI = 1.20-9.41). No adverse effects in either treatment condition were reported. To our knowledge, this is the first trial showing that additional use of hypnosis with PE results in improved outcomes over PE alone in patients with chronic nonspecific low back pain. PERSPECTIVE: This study provides evidence supporting the efficacy of another treatment option for teaching patients to self-manage chronic low back pain that has a relatively low cost and that can be offered in groups.

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[2546]

Lifestyle Therapy for the Management of Atrial Fibrillation.


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Atrial fibrillation (AF) is a common arrhythmia associated with increased risk of morbidity and mortality. There is evidence that lifestyle interventions may serve as complementary treatments to reduce AF burden. The objective of this review was to summarize the efficacy of lifestyle interventions for the management of AF.
Studies which included patients with systolic heart failure (ejection fraction ≤40%), and those limited to an examination of vigorous physical activity were excluded from our search. Studies were identified through a search of the following databases: MEDLINE, EMBASE, CINAHL, and PubMed, run from inception through August 2016. All studies were graded for quality using the Oxford Centre for Evidence-based Medicine recommendations. Meta-analyses of the studies were not performed due to the heterogeneity of the studies. From a total of 1,811 publications, 10 articles were identified and included. Selected publications included 1 study on yoga, 2 studies on acupuncture, 3 studies that examined weight loss programs, and 4 studies that evaluated the impact of moderate physical activity. Yoga was associated with less symptomatic AF episodes and improved quality of life. Acupuncture was associated with reduced AF occurrence in patients with persistent and paroxysmal AF. Weight loss was associated with a significant reduction in AF burden and symptoms. Moderate exercise resulted in greater arrhythmia free survival and a mean reduction in AF burden. In conclusion, evidence exists to suggest that yoga, weight loss, and moderate exercise are associated with reductions in AF burden and symptoms. Evidence is greatest for weight loss and moderate exercise.

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[2547]


Is hypnotherapy an acceptable treatment option for children with habit cough?

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Habit cough is a chronic, persistent dry cough which occurs in children only when awake. It is considered functional (non-organic) and can have a significant impact on the quality of life of the child and their family. One possible treatment option for habit cough is hypnotherapy. At our centre we offered hypnotherapy sessions to patients diagnosed with habit cough, and conducted telephone interviews with patients' parents to determine the acceptability of this therapy. Nine patients' parents were interviewed, and despite being unsure of what to expect with hypnotherapy, all nine found it an acceptable treatment option. Parents reported that hypnotherapy appeared to result in cough reduction or cessation in 6 out of 9 cases.

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[2548]

[Improving communication by adopting a positive relational attitude].
[Article in French]

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In their daily practice caregivers are in constant communication with patients and families. However, as they deliver the care, are teams always mindful of the issues at stake with regard to the comments they make and the attitudes they adopt? Is the professional language always adapted to the situation? This article attempts to offer solutions by explaining the principles of hypnotic communication which facilitates relationships, including with the teams.

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[2549]
ENHANCING IMPLICIT LEARNING WITH POSTHYPNOTIC SUGGESTION: An ERP Study.
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Can posthypnotic suggestion (PHS) enhance cognitive abilities? The authors tested behaviorally and with event-related potentials (ERP) if sequential learning (SL), the ability to learn statistical regularities, can be enhanced with PHS. Thirty adults were assessed with the Stanford Hypnotic Susceptibility Scale (Form C) and an auditory SL task. Before this task, half the sample received a PHS to enhance SL, and the other half received the same suggestion under normal waking state. Response times and ERPs indicated a strong effect of PHS. Compared to the control group, PHS inverted, attenuated, or left unaffected the response time SL effect in low, medium, and high hypnotizability participants, respectively. These results suggest that PHS cannot be used to enhance SL.

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[2550]
The Effect of Hypnosis on Adherence to Antituberculosis Drugs Using the Health Belief Model.
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An RCT on the efficacy of hypnosis in improving adherence to antituberculosis treatment using the Health Belief Model (HBM). Sixty study subjects were sampled at random from tuberculosis patients who visited the Center for Pulmonary Community Health in Solo, Indonesia. Hypnotherapy with posthypnotic suggestions was delivered once a week over 6 months. The data on pretested 7 HBM constructs were analyzed using t test and path analysis. Hypnotherapy had a positive effect
on perceived susceptibility, seriousness, threat, benefit, and self-efficacy. It indirectly had a positive effect on adherence. Hypnotherapy had a negative effect on perceived barrier. This study supports the hypothesis that hypnotherapy effectively improves adherence to tuberculosis treatment, by enhancing health-related perception and beliefs in the HBM.

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[2551]


THE EFFECT OF A HYPNOTIC-BASED ANIMATED VIDEO ON STRESS AND PAIN REDUCTION IN PEDIATRIC SURGERY.

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Presurgical stress and its negative influences on postsurgical recovery and pain are well documented in the medical literature. Hence, the reduction of stress is advisable. The present study aimed to reduce stress using a hypnotic-based animated video. Thirty children aged 3 to 16 years hospitalized for ambulatory surgery for undescended testes or umbilical/inguinal hernia were recruited for the study. They watched the video 1 time prior to surgery in the presence of their parents and reported their anxiety and pain pre- and postvideo watching on a visual analogue scale. The results show a statistically significant reduction in both anxiety and pain. The article describes the structuring of the animated video and includes links to English, Hebrew, and Arabic versions of it.

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[2552]


EFFECTS OF CONVERSATIONAL HYPNOSIS ON RELATIVE PARASYMPATHETIC TONE AND PATIENT COMFORT DURING AXILLARY BRACHIAL PLEXUS BLOCKS FOR AMBULATORY UPPER LIMB SURGERY: A Quasi-experimental Pilot Study.


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This two-center quasi-experimental pilot study was to determine the effect of conversational hypnosis on patient comfort and parasympathetic tone, which may represent a quantitative measure of hypnotic depth, during regional anesthesia. The patients received conversational hypnosis in one center and oral premedication in the other. The patients' subjective comfort (0-10 rating scale) and objective parasympathetic tone, as assessed by the Analgesia/Nociception Index (ANI), were measured before and after regional anesthesia. The parasympathetic tone and comfort scores evidenced a significantly greater increase in the hypnosis patients than in controls. These findings suggest that
using conversational hypnosis during regional anesthesia may be followed by a subjective increase in patient comfort and an objective increase in parasympathetic tone, monitored by ANI.

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Massage, reflexology and other manual methods for pain management in labour.

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BACKGROUND: Many women would like to avoid pharmacological or invasive methods of pain management in labour, and this may contribute towards the popularity of complementary methods of pain management. This review examined the evidence currently available on manual methods, including massage and reflexology, for pain management in labour. This review is an update of the review first published in 2012.

OBJECTIVES: To assess the effect, safety and acceptability of massage, reflexology and other manual methods to manage pain in labour.

SEARCH METHODS: For this update, we searched Cochrane Pregnancy and Childbirth's Trials Register (30 June 2017), the Cochrane Central Register of Controlled Trials (CENTRAL; 2017, Issue 6), MEDLINE (1966 to 30 June 2017), CINAHL (1980 to 30 June 2017), the Australian New Zealand Clinical Trials Registry (4 August 2017), Chinese Clinical Trial Registry (4 August 2017), ClinicalTrials.gov, (4 August 2017), the National Center for Complementary and Integrative Health (4 August 2017), the WHO International Clinical Trials Registry Platform (ICTRP) (4 August 2017) and reference lists of retrieved trials.

SELECTION CRITERIA: We included randomised controlled trials comparing manual methods with standard care, other non-pharmacological forms of pain management in labour, no treatment or placebo. We searched for trials of the following modalities: massage, warm packs, thermal manual methods, reflexology, chiropractic, osteopathy, musculo-skeletal manipulation, deep tissue massage, neuro-muscular therapy, shiatsu, tuina, trigger point therapy, myotherapy and zero balancing. We excluded trials for pain management relating to hypnosis, aromatherapy, acupuncture and acupressure; these are included in other Cochrane reviews.

DATA COLLECTION AND ANALYSIS: Two review authors independently assessed trial quality, extracted data and checked data for accuracy. We contacted trial authors for additional information. We assessed the quality of the evidence using the GRADE approach.

MAIN RESULTS: We included a total of 14 trials; 10 of these (1055 women) contributed data to meta-analysis. Four trials, involving 274 women, met our inclusion criteria but did not contribute data to the review. Over half the trials had a low risk of bias for random sequence generation and attrition bias. The majority of trials had a high risk of performance bias and detection bias, and an unclear risk of reporting bias. We found no trials examining the effectiveness of reflexology. Massage We found low-quality evidence that massage provided a greater reduction in pain intensity (measured using self-reported pain scales) than usual care during the first stage of labour (standardised mean difference (SMD) -0.81, 95% confidence interval (CI) -1.06 to -0.56, six trials, 362 women). Two trials reported pain intensity during the second and third stages of labour, and there was evidence of a reduction in pain scores in favour of massage (SMD -0.98, 95% CI -2.23 to 0.26, 124 women; and SMD -1.03, 95% CI -2.17 to 0.11, 122 women). There was very low-quality evidence showing no clear benefit of massage over usual care for the length of labour (in minutes) (mean difference (MD) 20.64, 95% CI -58.24 to 99.52, six trials, 514 women), and pharmacological pain relief (average risk ratio (RR) 0.81, 95% CI 0.37 to 1.74, four trials, 105 women). There was very low-quality evidence showing no clear...
benefit of massage for assisted vaginal birth (average RR 0.71, 95% CI 0.44 to 1.13, four trials, 368 women) and caesarean section (RR 0.75, 95% CI 0.51 to 1.09, six trials, 514 women). One trial reported less anxiety during the first stage of labour for women receiving massage (MD -16.27, 95% CI -27.03 to -5.51, 60 women). One trial found an increased sense of control from massage (MD 14.05, 95% CI 3.77 to 24.33, 124 women, low-quality evidence). Two trials examining satisfaction with the childbirth experience reported data on different scales; both found more satisfaction with massage, although the evidence was low quality in one study and very low in the other. Warm packs We found very low-quality evidence for reduced pain (Visual Analogue Scale/VAS) in the first stage of labour (SMD -0.59, 95% CI -1.18 to -0.00, three trials, 191 women), and the second stage of labour (SMD -1.49, 95% CI -2.85 to -0.13, two trials, 128 women). Very low-quality evidence showed reduced length of labour (minutes) in the warm-pack group (MD -66.15, 95% CI -91.83 to -40.47; two trials; 128 women). Thermal manual methods One trial evaluated thermal manual methods versus usual care and found very low-quality evidence of reduced pain intensity during the first phase of labour for women receiving thermal methods (MD -1.44, 95% CI -2.24 to -0.65, one trial, 96 women). There was a reduction in the length of labour (minutes) (MD -78.24, 95% CI -118.75 to -37.73, one trial, 96 women, very low-quality evidence). There was no clear difference for assisted vaginal birth (very low-quality evidence). Results were similar for cold packs versus usual care, and intermittent hot and cold packs versus usual care, for pain intensity, length of labour and assisted vaginal birth. Music One trial that compared manual methods with music found very low-quality evidence of reduced pain intensity during labour in the massage group (RR 0.40, 95% CI 0.18 to 0.89, 101 women). There was no evidence of benefit for reduced use of pharmacological pain relief (RR 0.41, 95% CI 0.16 to 1.08, very low-quality evidence). Of the seven outcomes we assessed using GRADE, only pain intensity was reported in all comparisons. Satisfaction with the childbirth experience, sense of control, and caesarean section were rarely reported in any of the comparisons.

AUTHORS' CONCLUSIONS: Massage, warm pack and thermal manual methods may have a role in reducing pain, reducing length of labour and improving women's sense of control and emotional experience of labour, although the quality of evidence varies from low to very low and few trials reported on the key GRADE outcomes. Few trials reported on safety as an outcome. There is a need for further research to address these outcomes and to examine the effectiveness and efficacy of these manual methods for pain management.

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[2553]


[The nocebo effect: Various aspects and consequences in clinical practice].

[Article in French]

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Hypnosis as adjunct therapy to conscious sedation for venous access device implantation in breast cancer: A pilot study.

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BACKGROUND: Recent reviews support that hypnosis has great potential for reducing pain and anxiety during mini-invasive surgery. Here, we assessed the feasibility of hypnotic induction session as adjunct therapy in conscious sedation for venous access device implantation. Primary outcomes were safety and patient satisfaction.

METHODS: Thirty consecutive women with breast cancer were proposed adjunct of hypnosis before implantation under conscious sedation (midazolam: 0.5 mg ± bolus of Ketamin: 5 mg on demand) indicated for chemotherapy. Self-hypnosis was programmed and guided by one of two trained anesthesiologists. Implantation was performed by one of two experimented surgeons. It consisted of blind subclavian implantation of Braun ST 305 devices using a percutaneous technique adapted from Selinger's procedure. Clinical data were prospectively collected and retrospectively analyzed. A comprehensive custom-made questionnaire recorded patient satisfaction.

RESULTS: In all, 30/30 patients consented to the procedure. The median age was 54 years (range: 35-77 years). The primary procedure was successful in 29/30. One case was converted into internal jugular vein access after a first attempt. Median length time of the implantation procedure in the operative room was 20 min (range: 10-60 min). Median length time in the recovery room preceding home discharge was 65 min (range: 15-185 min). None of the patients suffered complications. The satisfaction rate was ≥90%, 27/30 patients would get hypnosis in case of reimplantation if necessary and 27/30 would recommend this procedure to others.

CONCLUSION: Hypnosis under conscious sedation appears feasible and safe for port implantation under conscious sedation in cancer patients. Further studies would determine the exact value of hypnosis effectiveness.

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Reconsidering the autohypnotic model of the dissociative disorders.

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The dissociative disorders field and the hypnosis field currently reject the autohypnotic model of the dissociative disorders, largely because many correlational studies have shown hypnotizability and dissociation to be minimally related (r = .12). Curiously, it is also widely accepted that dissociative patients are highly hypnotizable. If dissociative patients are highly hypnotizable because only highly hypnotizable individuals can develop a dissociative disorder - as the author proposes - then the methodology of
correlational studies of hypnotizability and dissociation in random clinical and community samples would necessarily be constitutively unable to detect, and statistically unable to reflect, that fact. That is, the autohypnotic, dissociative distancing of that small subset of highly hypnotizable individuals who repeatedly encountered intolerable circumstances is statistically lost among the data of (1) the highly hypnotizable subjects who do not dissociate and (2) subjects (of all levels of hypnotizability) who manifest other kinds of dissociation. The author proposes that, when highly hypnotizable individuals repeatedly engage in autohypnotic distancing from intolerable circumstances, they develop an overlearned, highly-motivated, automatized pattern of dissociative self-protection (i.e., a dissociative disorder). The author urges that theorists of hypnosis and the dissociative disorders explicitly include in their theories (a) the trait of high hypnotizability, (b) the phenomena of autohypnosis, and (c) the manifestations of systematized, autohypnotic pathology. Said differently, the author is suggesting that autohypnosis and autohypnotic pathology are unacknowledged nodes in the nomothetic networks of both hypnosis and dissociation.

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[2556]

Hypnotizability influences the cortical representation of visually and kinaesthetically imagined head position.

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The study investigates the cortical representation of the visual and kinesthetic image of a rotated position of the head in highly (highs) and low hypnotizable individuals (lows) of both gender. Participants were invited to imagine maintaining their head rotated toward one side by seeing their chin aligned with their right shoulder (V, visual imagery), and in a different condition, by feeling tension in their neck muscles (K, kinaesthetic imagery). Vividness of imagery and cognitive effort were reported after each task. Alpha and beta band absolute power was studied. Highs reported higher vividness than lows only for the kinaesthetic modality of imagery. The cortical desynchronization observed during visual and kinaesthetic imagery were different in high females (HM), low females (LF), high males (HM) and low males (LM). In fact, only HF and LM exhibited significant power changes during the kinaesthetic task, whereas visual imagery was associated with cortical desynchronization in all subgroups except HM. The study supports earlier findings of an advantage of highs in kinaesthetic imagery, shows an intriguing interaction of hypnotizability and gender, and indicates topographical difference in the four subgroups of participants suggesting differences in underlying generators.

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[2557]

Caregivers' knowledge and acceptance of complementary and alternative medicine in

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Background: The use of complementary and alternative medicine (CAM) therapies has increased in children, especially in those with chronic health conditions. However, this increase may not translate into acceptance of CAM in the perioperative setting. We surveyed caregivers of patients undergoing surgery to determine their knowledge and acceptance of hypnotherapy, acupuncture, and music therapy as alternatives to standard medication in the perioperative period.

Materials and methods: An anonymous, 12-question survey was administered to caregivers of children undergoing procedures under general anesthesia. Caregivers reported their knowledge about hypnotherapy, music therapy, and acupuncture and interest in one of these methods during the perioperative period. CAM acceptance was defined as interest in one or more CAM methods.

Results: Data from 164 caregivers were analyzed. The majority of caregivers were 20-40 years of age (68%) and mothers of the patient (82%). Caregivers were most familiar with acupuncture (70%), followed by music therapy (60%) and hypnotherapy (38%). Overall CAM acceptance was 51%. The acceptance of specific CAM modalities was highest for music therapy (50%), followed by hypnotherapy (17%) and acupuncture (13%). In multivariable logistic regression, familiarity with music therapy was associated with greater odds of CAM acceptance (odds ratio=3.36; 95% CI: 1.46, 7.74; P=0.004).

Conclusion: Overall CAM acceptance among caregivers of children undergoing surgery was 51%, with music therapy being the most accepted CAM method. Familiarity with music therapy was the only factor that was independently associated with accepting CAM in the perioperative period. The low acceptance for acupuncture and hypnosis in the perioperative situation may be related to insufficient parental knowledge and information.

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The Scientific Illusion of Victor Burq (1822-1884).

Walusinski O.

Victor Burq (1822-1884) is closely associated with a therapy named "burquism" by Jean-Martin Charcot, which was used in treating hysteria, especially hysterical anesthesia and paralysis, by applying metals, mainly copper, to affected zones. In 1876, Charcot, Luys, and Dumontpallier, commissioned by the Société de Biologie, issued 2 opinions validating the results obtained by Burq during the 25 years he dedicated to his research. From that point forward, the careers of these 3 famous physicians were lastingly reoriented toward the practice of hypnosis. This neo-mesmeric resurgence at the end of the nineteenth century can be considered the cause of an epistemological change that gave rise to "psychological medicine." During the repeated cholera epidemics in the mid-nineteenth century, Burq recommended preventive and corrective ingestion of copper, after observing that smelter workers were unaffected by the disease. The
mechanisms of copper's anti-bacterial action have since been elucidated and legitimize Burq's anti-cholera campaign. Burq also advocated the ingestion of copper sulphate to treat diabetes. Current-day findings on intestinal microbiota and how these organisms influence blood sugar regulation support Burq's claims, considered far-fetched for many years.

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[2559]


Investigating the Effects of the Progressive Muscle Relaxation-Guided Imagery Combination on Patients with Cancer Receiving Chemotherapy Treatment: A Systematic Review of Randomized Controlled Trials.

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BACKGROUND: Previous systematic reviews indicate that progressive muscle relaxation (PMR) and guided imagery (GI) are both effective interventions to decrease the psychological impact and to alleviate the adverse events in cancer patients undergoing chemotherapy treatment. To date, no review studies have investigated the effectiveness of a combination of PMR and GI.

AIM: To systematically review the current state of knowledge regarding the effects of the PMR-GI combination on cancer patients receiving chemotherapy.

METHODS: A search for relevant records was carried out in four electronic databases (AMED, Cochrane Library, Pubmed and Scopus). After removing the duplicates 342 publications were screened and 71 were considered as potentially relevant. The flow of information of this study was in line with the PRISMA statement. Original articles investigating the application of both PMR and GI through a randomized trial on patients receiving chemotherapy were included. Those using PMR or GI alone and those combining other techniques together with PMR and GI were excluded. The trials' quality was assessed using the Jadad Scale.

RESULTS: Eight papers reporting the results of seven independent trials were finally included. All of them included only breast cancer patients, apart from a single trial using a mixed sample of breast and prostate cancer patients. Seven of the included trials reported beneficial effects on mental state (mood, anxiety, and depression) and on toxicity (nausea and vomiting). Three trials reported an effect on biomarkers (heart rate, blood pressure, cortisol, and immunity). Four trials scored three of five points on the Jadad Scale, two trials scored two points and a single trial scored zero.

CONCLUSIONS: Independent trials indicate that the PMR-GI combination is an effective way to tackle the impact of nausea and vomiting and to improve patients' mental state. However, studies involving other types of primary tumors would be useful because seven of the eight clinical trials only included breast cancer patients. Future research on the identification of potential effects on disease-related parameters (e.g., cytokines and disease-recurrence) and on patient survival is highly needed.

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[2560]
Complementary and Alternative Medicine Usage by Multiple Sclerosis Patients: Results from a Prospective Clinical Study.


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OBJECTIVES: To investigate the factors associated with complementary and alternative medicine (CAM) usage by multiple sclerosis (MS) patients. Design, Setting/Location: Single-center, prospective clinical study at an academic MS center in the northeastern United States.

METHODS: This study included CAM data from 524 MS patients and 304 healthy controls (HC) enrolled in a prospective study of clinical, neuroimaging, and environmental risk factors in MS at an academic MS Center. Clinical, neuroimaging, and disease-modifying treatment data were obtained. In addition, data on usage of CAM modalities, including acupuncture, aromatherapy, Ayurveda, Chinese herbal medicine, chiropractor, electromagnetic therapy, homeopathy, hypnosis, massage, naturopathy, Qi gong, Reiki, therapeutic touch, and bee stings were collected in an in-person interview.

RESULTS: The percentages of HC reporting usage of any CAM (32%) was similar to that in MS patients after diagnosis (30.5%). The usage of any CAM was higher in MS patients after MS diagnosis compared to before MS diagnosis (p < 0.001). The three most frequently used CAM for MS patients after MS diagnosis and HC were chiropractor, massage, and acupuncture. The most frequent reasons for CAM use were MS symptom relief, back problems, and pain. In multivariate analysis, female gender, higher education level, MS disease course, and not currently on disease-modifying therapies (DMT) treatment status were associated with CAM usage.

CONCLUSIONS: Gender, education level, DMT treatment status, and MS disease course are associated with CAM usage in MS patients. Ever-CAM usage patterns in MS patients are similar to those in HC.

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The Rate of Adverse Events Related to Hypnosis During Clinical Trials.

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The rate of adverse events associated with medical and psychological interventions is important to regulators who oversee clinical research. There have been relatively few reports on the frequency of adverse events associated with hypnosis. The current article collected data from a publically available register (ClinicalTrials.gov) on adverse events reported during clinical trials that used hypnosis. The rate of serious adverse events likely attributable to hypnosis was 0%. The rate of other adverse events was 0.47%. This rate was similar to previous reports. However, several trials in the register that used hypnosis did not report adverse event data. For the trials that did report adverse events, there was substantial variability in reporting. Another limitation was the lack of generalizability as all studies included in the...
analysis used hypnosis to treat side-effects related to medical conditions or procedures as opposed to psychiatric conditions. Future clinical trials using hypnosis should use more precise assessment methods to report adverse events, especially when tested in samples with mental health disorders.

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[2562]

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Modern psychoanalysis begins with Sigmund Freud's study of hypnosis and the treatment of the grand hysterics of the fin de siècle. In the process of developing his own paradigm, Freud came to reject the use of hypnosis and turned his attention away from the severe hysterias. These decisions began what has become, notwithstanding noteworthy exceptions, over a century of estrangement and disengagement between the fields of hypnosis and psychoanalysis. The current communication reviews the 75 archived Psychoanalytic Electronic Publishing resources from Freud's scientific work and correspondence in which reference is made to hypnosis. A close examination of Freud's stated rationales for abandoning hypnosis suggests that both the ideas he developed and the rift between hypnosis and psychoanalysis that they created may prove to have been problematic as well as innovative. They and their consequences merit thoughtful review and critical reconsideration.

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[2563]

An Extension Study Using Hypnotic Suggestion as an Adjunct to Intravenous Sedation.
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The effects of hypnosis/therapeutic suggestion in connection with intravenous sedation and surgery have been described in many clinical publications; however, few randomized, controlled, and blind studies have been performed in the outpatient area. The original study published in 2010 aimed to evaluate the use of hypnosis/therapeutic suggestion as an adjunct to intravenous sedation in patients having third molar removal in an outpatient setting. The patients were randomly assigned to a treatment or control group. The treatment group listened to a rapid conversational induction and therapeutic suggestions via headphones throughout the entire surgical procedure along with a standard sedation dose of intravenous anesthetic. The control group received intravenous anesthesia but listened to only music without any hypnotic intervention. The current replication study addressed several of the limitations of the original. Sample size was increased and selection of participants from a different geographic area in Pennsylvania. Intra-operative propofol administration, patient post-operative pain ratings, and post-operative prescription pain reliever consumption were all significantly reduced in the treatment compared to the control group. Implications of these results are discussed.

Integrating Hypnosis with Other Therapies for Treating Specific Phobias: A Case Series.

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There is a high prevalence of anxiety disorders including specific phobias and panic disorder in the United States and Europe. A variety of therapeutic modalities including pharmacotherapy, cognitive behavioral therapy, systematic desensitization, hypnosis, in vivo exposure, and virtual reality exposure therapy have been applied. No one modality has been entirely successful. There has been only a limited attempt to combine psychological therapies in the treatment of specific phobias and panic disorder and what has been done has been primarily with systematic desensitization or cognitive behavioral therapy along with hypnotherapy. I present two cases of multiple specific phobias that were successfully treated with hypnotherapy combined with virtual reality exposure therapy or in vivo exposure therapy. The rationale for this integrative therapy and the neurobiological constructs are considered.

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Two are Better Than One: Dual-Track Interventions in Hypnotherapy.

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The current article provides clinical conceptualizations of six dual-track interventions for dealing with stuck and resistant situations in hypnotherapy. Dual-track interventions are based on the assumption that patients habitually regard their problems as one-dimensional and thus, tend to become rigid in their attitudes toward these problems. Dual-track interventions constitute hypnotherapeutic processes for transforming patients’ negative and rigid perceptions of their problems into more positive and functional mental states that provide a dual-dimensional view, thereby offering patients more options and freeing them to contend with their problems more effectively. We introduce a novel hypnotherapeutic tool from the Illness/Nonillness Model (Navon 2014). This tool, known as the differentiation tool, can transform negative perceptions of psychological and emotional conditions to positive and hopeful perceptions.

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Freud’s Rejection of Hypnosis, Part II: The Perpetuation of a Rift.

Kluft RP(1).
Freud’s rejection of hypnosis gave rise to a rift between clinical hypnosis and psychoanalysis that has endured for over a century. A review of Freud’s rationales (Kluft, 2018a/this issue) demonstrates that while some stemmed from what he considered advances, others appear strongly influenced by his promoting the superiority of his “psycho-analysis” at the expense of hypnosis. Mainstream psychoanalysis continues to endorse the perpetuation of rationales Freud asserted nearly a century ago, and an oral lore of related supportive statements. This oral lore proves difficult to sustain upon closer scrutiny. It bypasses concerns that, if studied in depth, would demonstrate significant shortcomings. Problems encountered in this oral lore include: (1) the importance of information unavailable to Freud; (2) the ongoing impact of certain errors of Freud's thinking; (3) the distorting force of Freud's compelling drive to be a "conquistador" of the mind and create a heroic theory; (4) the implausibility, upon inspection, of certain long-accepted assertions about Freud's motivations; and (5) Freud's discomfort with his own dissociative symptomatology. It is argued that the "oral lore" promulgated in connection with Freud's rejection of hypnosis, like Freud's decision to reject hypnosis itself, is not firmly grounded and deserves careful reassessment.
Hypnotic approach during dental treatment: analysis of descriptive data of a case series.

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Anxiety and worry are important components that affect the patients behaviour during dental sessions and influence the effectiveness of dental treatment. Psychological approach and hypnotic approach (HA) have in recent years assumed increasing prominence as effective treatment regimes. Dentists have used a number of methods in the management of dental phobic disorders through HA. However the efficacy of HA in controlling anxiety and worry is controversial. The aim of the present study is to describe the response of patient to HA during dental treatment. The study of the population consisted of 42 patients, these being 50% random sample of consecutive patients presenting to a private practise over an 8-year period. In 38 patients HA was induced. 4 patients were not susceptible to HA. There were 20 women (52.6%) and 18 men (47.3%) with a mean age of 47.2 years (range 30-69 years). At the end of dental sessions with HA all the patients were asked to answer the following questions: 1) Have you been hypnolized in the past? 2) Were you aware of dental applications of HA? 3) How do you evaluate the use of this technique in the field of dental care? 4) Do you think that you can use this procedure in the future too? The answers were as follows: question 1: 34 patients answered yes, 4 no; question 2: 34 answered yes, 4 no; question 3: the choice was between very useful, useful, Indifferent, to avoid. Twenty-nine patients indicated very useful, and 9 useful; question 4: the choice was between yes and no. All patients answered yes. This study adds further support to a growing body of evidence relating HA to a better compliance to dental treatment. The dental situation in particular lends itself to carefully controlled investigation providing further evidence to support a robust theory.

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[2569]


Belief, delusion, hypnosis, and the right dorsolateral prefrontal cortex: A transcranial magnetic stimulation study.

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According to the Two-Factor theory of delusional belief (see e.g. Coltheart at al., 2011), there exists a cognitive system dedicated to the generation, evaluation, and acceptance or rejection of beliefs. Studies of the neuropsychology of delusion provide evidence that this system is neurally realized in right dorsolateral prefrontal cortex (rDLPFC). Furthermore, we have shown that convincing analogues of many specific delusional beliefs can be created in nonclinical subjects by hypnotic suggestion and we think of hypnosis as having the effect of temporarily interfering with the operation of the belief system, which allows acceptance of the delusional suggestions. If the belief system does depend on rDLPFC, then disrupting the activity of that region of the
brain by the application of repetitive transcranial magnetic stimulation (rTMS) will increase hypnotizability. Dienes and Hutton (2013) have reported such an experiment except that it was left DLPFC to which rTMS was applied. An effect on a subjective measure of hypnotizability was observed, but whether there was an effect on an objective measure could not be determined. We report two experiments. The first was an exact replication of the Dienes and Hutton experiment; here we found no effect of rTMS to IDLPFC on any hypnotic measure. Our second experiment used rTMS applied to right rather than left DLPFC. This right-sided stimulation enhanced hypnotizability (when hypnotic response was measured objectively), as predicted by our hypothesis. These results imply a role for rDLPFC in the cognitive process of belief evaluation, as is proposed in our two-factor theory of delusion. They are also consistent with a conception of the acceptance of a hypnotic suggestion as involving suspension of disbelief.

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Hypnotic Intervention for Unexplained Dizziness in Patients with Advanced Cancer: A Preliminary Retrospective Observation Study.

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Context: Patients with advanced cancer rarely complain of unexplained dizziness after excluding identifiable causes. Some patients become anxious because they attribute the dizziness to the progression of their cancer. We hypothesize that unexplained dizziness is associated with neck muscle hypertonicity, a noncancer-related secondary effect. However, most cases are associated with neck muscle hypertonicity, a noncancer-related secondary effect.

Aims: We evaluated the usefulness of hypnotic intervention that made patients aware of the relation between dizziness and neck muscle hypertonicity through the experience of muscle relaxation and recognition of muscle tension.

Settings and Design: Advanced cancer patients requiring palliative care with unexplained dizziness who received the intervention to induce neck muscle relaxation were retrospectively compared with patients who did not.

Subjects and Methods: The severity of dizziness that was evaluated using a numeric rating scale and the intervention efficacy rate were compared between the hypnotic and nonhypnotic groups as the primary endpoints, 7 days after the start of the intervention. Secondary endpoints included the effect size based on dizziness handicap inventory (DHI) scores before and after the intervention, and changes in patients' awareness of the cause of dizziness.

Results: The hypnotic intervention had a significantly greater efficacy rate (0.67, 95% confidence interval: 0.46-0.88) than the nonhypnotic intervention (0.26, 95% confidence interval: 0.08-0.44). DHI scores, especially on the emotional subscale, showed significant improvement after the intervention, and 71% of the patients were aware that neck muscle hypertonicity was the cause of dizziness.

Conclusions: The rapid improvement in dizziness in the hypnotic group was considered to result from a change in patients' awareness of self-manageable neck muscle hypertonicity as the cause of dizziness.

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Complementary and alternative treatment in functional dyspepsia.

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Introduction and aim: The popularity of complementary and alternative medicine (CAM) in treating functional gastrointestinal disorders (FGIDs) has steadily increased in Western countries. We aimed at analyzing available data on CAM effectiveness in functional dyspepsia (FD) patients.

Methods: A bibliographical search was performed in PubMed using the following keywords: "complementary/alternative medicine," "hypnosis," "acupuncture" and/or "functional dyspepsia."

Results: In community settings, almost 50% of patients with FGIDs used CAM therapies. Herbal remedies consist of multi-component preparations, whose mechanisms of action have not been systematically clarified. Few studies analyzed the effectiveness of acupuncture in Western countries, yielding conflicting results and possibly reflecting a population bias of this treatment. Hypnosis has been extensively used in irritable bowel syndrome, but few data support its role in treating FD.

Conclusions: Although some supporting well-designed studies have been recently performed, additional randomized, controlled trials are needed before stating any recommendation on CAM effectiveness in treating FD.

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Understanding how patients use visualization during ablation of atrial fibrillation in reducing their experience of pain, anxiety, consumption of pain medication and procedure length: Integrating quantitative and qualitative results.

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BACKGROUND: Patients who undergo radiofrequency ablation of atrial fibrillation with a light conscious sedation often feel pain during the procedure which can be difficult to relieve with pharmacological pain treatment alone. In a quasi-experimental study, it was found that visualization together with usual...
pain medication reduced the amount of analgesics used. In addition, patients spontaneously expressed pain significantly fewer times outside the scheduled measurements. No difference was found in the perception of pain intensity or anxiety and procedure length in the study. In a subsequent qualitative study with patients from the intervention group in the quantitative study, patients reported visualization as a positive experience which helped them manage pain and anxiety by supporting their individual strategies and without inconvenience.

AIM: To examine patients' experiences with the effect of visualization during ablation of atrial fibrillation and its association with pain intensity, anxiety, pain medication and procedure length.

METHODS: A mixed-method study with explanatory sequential design including a quasi-experimental study with a control and an intervention group and a qualitative interview study with semi-structured interviews. The results from the two studies in the mixed method study have been integrated by merging and constructing follow-up joint displays.

RESULTS: Three themes were identified from the integration of the results from the quantitative and qualitative studies when analyzing and interpreting the results: "Zero pain is not always the goal"; "Not a real procedure time reduction but a sense of time shrinkage" and "Importance of the nurse's presence, visualization or not".

CONCLUSION: Visualization can help patients to manage procedural pain when going through ablation of atrial fibrillation but the effect of an intervention such as visualization cannot be measured by pain intensity because the effect of visualization helps patients to cope with the pain and not to reduce the experience of pain intensity. It was shown that the patients had a feeling of reduced procedure time, although it was not reduced statistically significantly by using visualization. Finally, patients did not feel high anxiety during the procedure which was in line with very low values of anxiety measured in the quantitative study but at the same time the presence of the staff was of great importance to them in providing a feeling of security. A reduction of analgesics as found in the study is not only a matter of safety, it is also important in the patient's perception.

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[2573]
Management of Menopausal Symptoms for Women Who Are at High Risk of Thrombosis.

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For women at elevated risk of thrombosis, clinicians are challenged to relieve menopausal symptoms without increasing the risk of thrombosis. Oral menopausal hormone therapy increases the risk of venous thromboembolism by 2-fold to 3-fold. Observational studies suggest less thrombotic risk with transdermal therapies and with progesterone over synthetic progestogens (progestins), but the data are limited. Beneficial nonpharmacologic therapies include cognitive behavioral therapy and clinical hypnosis, whereas beneficial nonhormonal pharmacologic therapies include selective serotonin reuptake inhibitors and serotonin-norepinephrine reuptake inhibitors. For treatment of the genitourinary syndrome of menopause, vaginal lubricants and moisturizers, low-dose vaginal estrogen, and intravaginal dehydroepiandrosterone are options.

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Hypnosis in palliative care: from clinical insights to the science of self-regulation.

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Palliative care spans a wide-ranging spectrum: from pain-management to spiritual support. As the demand for end-of-life care increases, so does the demand for innovative, effective, interventions. Mind-body techniques seem especially advantageous in a palliative context. Here we show that hypnosis serves an excellent adjunct therapy in palliative care to boost the efficacy of standard treatments. With the overarching goal of bridging clinical and scientific insights, we outline how five core principles of hypnosis can benefit the diverse needs of palliative care.

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Clinical hypnosis in palliative care.

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Using relaxation techniques to improve sleep during naps.


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Insufficient sleep is a common occurrence in occupational settings (e.g. doctors, drivers, soldiers). The resulting sleep debt can lead to daytime sleepiness, fatigue, mood disorder, and cognitive deficits as well as altered vascular, immune and inflammatory responses. Short daytime naps have been shown to be effective at counteracting negative outcomes related to sleep debt with positive effects on daytime sleepiness and performance after a normal or restricted night of sleep in laboratory settings. However, the environmental settings in the workplace and the emotional state of workers are generally not conducive to beneficial effects. Here, we tested whether relaxation techniques (RT) involving hypnosis might increase total sleep time (TST) and/or deepen sleep. In this study, eleven volunteers (aged 37-52) took six early-afternoon naps (30 min) in their occupational workplace, under two different conditions: control 'Naps' or 'Naps + RT' with a within-subjects design. Our results demonstrate that adding RT to naps changes sleep architecture, with a significant increase in the TST, mostly due to N2 sleep stage (and N3, to a lesser extent). Therefore, the deepening of short naps with RT involving hypnosis might be a successful non-pharmacological way to extend sleep duration and to deepen sleep in occupational settings.

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[2577]

Ability of Hypnosis to Facilitate Movement Through Stages of Change for Smoking Cessation.

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On the basis of the transtheoretical model of change, we hypothesized that hypnosis would facilitate significantly greater movement through the stages of change toward smoking cessation in contrast to psychoeducation. Thirty participants were pretested for hypnotizability using the Elkins Hypnotizability Scale (EHS). Participants' readiness for change was assessed using the University of Rhode Island Change Assessment scale (URICA). The EHS relaxation induction was used to induce hypnosis. Hypnotic suggestions addressed motivation and ambivalence. The URICA was administered following the intervention and at a 10-day follow-up. Two-factor split-plot ANOVAs showed significant changes within groups on the contemplation subscale (p = .002), action subscale (p = .00007), and the number of cigarettes smoked per day (p = .003).

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[2578]

Hypnosis is More Effective than Clinical Interviews.

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To determine whether hypnosis is more effective than conventional interviewing to find traumatic life events in patients with fibromyalgia, we carried out a within-subject experimental design with complete intragroup counterbalancing. Thirty-two women under care in a public primary care center gave 2 identical interviews, with an interval of 3 months, in which the occurrence of traumatic life events was explored, once in a state of wakefulness and once in a state of hypnosis. The state of consciousness was evaluated using 3 measures: bispectral index, skin conductance level, and pain intensity. In the hypnotic state, the patients expressed 9.8 times more traumatic life events than in the waking state, a statistically significant difference with a large effect size.

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BACKGROUND: Patients with severe chronic diseases and advanced cancer receiving palliative care, have a complex range of pain and anxiety that can arise early in the course of illness. We studied two groups of patients with severe chronic diseases who participated in a nonrandomized clinical trial of early integration of clinical hypnosis in palliative care versus standard pharmacological care. The purpose of this investigation was to evaluate whether a long-term intervention of 2 years with clinical hypnosis and self-hypnosis as an adjuvant therapy in chronic pain and anxiety, is more effective than pharmacological therapy alone.

METHODS: The study was performed at the Center of Anesthesiology, Intensive Care and Pain Therapy at the University of Verona, Italy. The study population consisted of 50 patients, 25 in the hypnosis group and 25 in the control group. Fourteen men and 36 women participated in the study. Evaluations with Visual Analog Scale (VAS) for pain and Hamilton Anxiety Rating Scale (HAM-A) for anxiety and the evaluation of the use of opioids and analgesic medicines were conducted at baseline and for a long-term follow-up (after 1 and 2 years).

RESULTS: The two groups were homogeneous in the distribution of sex, age, type and subtypes of diseases and use of opioids and analgesic medicines at baseline. The patients suffered from 3 main types of severe chronic diseases: rheumatic (n=21), neurologic (n=16) and oncologic (n=13). The VAS score at baseline was similar in both the hypnosis group and control group (mean ± standard deviation, SD: 78±16 and 77±14, respectively). The average VAS value for the hypnosis group decreased from 81.9±14.6 at baseline to 45.9±13.8 at 1-year follow-up, to 38.9±12.4 at 2-year follow-up. The average VAS value for the control group decreased from 78.5±14.8 at baseline, to 62.1±15.4 at 1-year follow-up, to 57.1±15.9 at 2-year follow-up. The variance analysis indicated that the decrease in perceived pain was more significant in the hypnosis group patients than in the control group, after 1- and 2-year follow-up (P=0.0001). The average HAM-A Hamilton anxiety score decreased from 32.6 at baseline to 22.9 and 17.1 respectively at 1-year and 2-year follow-up for the hypnosis group, but it remained almost the same in the control group (29.8, 26.1 and 28.5 at baseline, first and second year respectively). ANOVA showed that the difference between the two groups was statistically significant (P<0.0001). Univariate analysis showed a 4-times greater risk of increasing analgesic medicines and opioids in the control group (adj.IRR: 4.36; 95% CI: 1.59-12.0) after 2-year follow-up.

CONCLUSIONS: The patient group receiving hypnosis as an adjuvant therapy showed a statistically significant decrease in pain and anxiety and a significantly lower risk of increasing pharmacological pain treatment in a long term follow-up after 1 and 2 years compared to the control group. Clinical hypnosis can be considered an effective adjuvant therapy for pain and anxiety control in cancer as well as in severe chronic diseases for patients receiving palliative care.

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[2581]

Harm in Hypnosis: Three Understandings From Psychoanalysis That Can Help.

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Over 50 years of empirical data demonstrate unequivocally that psychotherapy can cause harm as well as good. Two therapist factors increasing harm risk are inadequate assessment of patients' vulnerabilities and certain attitudes/affects. Adding hypnosis as a technique within psychotherapy heightens risk for harm because: (a) trance can unexpectedly expose patient vulnerabilities (through loosening reality orientation, lessening structure, generating unfamiliar sensations and perceptions, and intensifying access to interior information such as emotions and imagery); and (b) trance can unexpectedly increase porousness to therapist's attitudes/affects (through heightening mental receptivity to the
internal states of others). A century of clinical data from psychoanalysis offers guidance for protecting against such risks. Concepts of structure, interiority, and countertransference are explicated and translated into practical clinical suggestions for harm prevention.

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[2582]
Reconsidering Hypnosis and Psychoanalysis: Toward Creating a Context for Understanding.
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Sigmund Freud developed what became psychoanalysis in the context of his experiences with hypnosis and the treatment of the grand hysterics of his era, conditions largely classified among the dissociative disorders in contemporary systems of diagnosis. He rapidly constructed understandings of the human mind and human distress that replaced the concept of dissociation and a model of pathology that was passive (associated with reduced psychic cohesion), with the paradigm of an active defensive process he termed repression, and an understanding that psychological discomfort was the outcome of intrapsychic conflict. In short order Freud repudiated hypnosis, initiating the schisms that subsequently separated the study and practice of hypnosis from the study and practice of psychoanalysis. It is timely to reexamine these schisms anew, challenge the basis of the arguments thought to justify them, and explore whether these schisms have deprived psychoanalysis and hypnosis alike of the potentially helpful ideas and approaches each might offer the other. This contribution invites students of hypnosis and psychoanalysis alike to put aside both traditional and stereotypic notions of each other's field of endeavor, revisit the origins, rationales, and outcomes of these schisms that have divided them, and explore their commonalities and their differences from fresh perspectives.

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[2583]
Catching a Wave: The Hypnosis-Sensitive Transference-Based Treatment of Dissociative Identity Disorder (DID).
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In this article, I will describe the way in which I work with enactment-prone dissociative patients in the transference. This approach requires an appreciation of the phenomena of hypnosis and the auto-hypnotic aspects of some forms of dissociation. Essentially, I learn from the patient and my interactions with the patient how hypnotic phenomena and auto-hypnotic defenses manifest themselves in the therapeutic relationship in order both to understand them and ultimately to bring them under conscious control. Because of the fluidity and turbulence of these states, I use the analogy of catching a wave, in which timing and balance are essential, albeit elusive factors in effecting a successful treatment. The importance of having experience with many patients, attending conferences, seeking supervision, and undergoing one's own therapy will be also discussed as
important prerequisites for the clinician endeavoring to utilize this type of approach. This preparation, this quest for such a "balance," is modeled after the so-called tripartite model of training employed in psychoanalytic training institutes. I will offer clinical material to illustrate this approach, which I have described as "psychoactive psychotherapy." In such treatments, the clinician may be taken by surprise and is likely to be thrown "off balance" from time to time. The mutually shared understanding of such moments is essential to regaining clinical balance in the therapeutic setting, and can lead to if not create important turning points in the treatment process.

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[2584]

Hypnosis and Psychoanalysis: Toward Undoing Freud's Primal Category Mistake.
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Hypnosis predates psychoanalysis, when autohypnotic pathologies were identified through the lens of hypnosis, and labeled "hypnoid hysteria" in the language of the day. The broad spectrum of disorders then subsumed under that term is still reflected in ICD-10's subset, "F44-Dissociative (Conversion) Disorders." Freud initially embraced both hypnoid hysteria and hypnosis, but came to abandon hypnosis and, by extension, hypnoid hysteria as well. Since that fateful decision, which I term herein Freud's "Inaugural Category Mistake," references to both hypnosis and hypnoid pathology largely vanished from the psychoanalytic mainstream, thereby neglecting conditions afflicting a significant portion of the mentally ill, and needlessly restricting the therapeutic repertoire of psychoanalysis. This contribution argues that psychoanalysis could best re-embrace hypnosis and hypnoid pathology together, as a related pair, and would benefit from doing so. Two examples of the differences of understanding and interventions such a rapprochement might encourage are offered: (a) how hypnoid pathology alters the transference and countertransference; and (b) how the appropriate use of hypnosis alters the nature of interpretation.

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[2585]

Interventions to Address Sexual Problems in People With Cancer: American Society of Clinical Oncology Clinical Practice Guideline Adaptation of Cancer Care Ontario Guideline.
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Purpose The adaptation of the Cancer Care Ontario (CCO) guideline Interventions to Address Sexual Problems in People With Cancer provides recommendations to manage sexual function adverse effects that occur as a result of cancer diagnosis and/or treatment. Methods ASCO staff reviewed the guideline for developmental rigor and updated the literature search. An ASCO Expert Panel (Table A1) was assembled to review the guideline content and recommendations. Results The ASCO Expert Panel determined that the recommendations from the 2016 CCO guideline are clear, thorough, and based upon the most relevant scientific evidence. ASCO statements and modifications were added to adapt the CCO guideline for a broader audience. Recommendations It is recommended that there be a discussion with the patient, initiated by a member of the health care team, regarding sexual health and dysfunction resulting from cancer or its treatment. Psychosocial and/or psychosexual counseling should be offered to all patients with cancer, aiming to improve sexual response, body image, intimacy and relationship issues, and overall sexual functioning and satisfaction. Medical and treatable contributing factors should be identified and addressed first. In women with symptoms of vaginal and/or vulvar atrophy, lubricants in addition to vaginal moisturizers may be tried as a first option. Low-dose vaginal estrogen, lidocaine, and dehydroepiandrosterone may also be considered in some cases. In men, medication such as phosphodiesterase type 5 inhibitors may be beneficial, and surgery remains an option for those with symptoms or treatment complications refractory to medical management. Both women and men experiencing vasomotor symptoms should be offered interventions for symptomatic improvement, including behavioral options such as cognitive behavioral therapy, slow breathing and hypnosis, and medications such as venlafaxine and gabapentin. Additional information is available at: www.asco.org/survivorship-guidelines and www.asco.org/guidelineswiki.

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Hypnosis as an effective and inexpensive option to control pain in transcatheter ablation of cardiac arrhythmias.

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: Supportive care for pain relief and back discomfort during electrophysiology interventions is usually needed in the electrophysiology lab, especially in long-lasting procedures like atrial fibrillation ablation. Although this is usually achieved with conventional pharmacologic anesthesia, hypnosis has recently aroused interest as a reliable tool to complement and possibly enhance conscious sedation. We collected five case of percutaneous arrhythmia ablation in which, after informed consent, hypnosis was performed by nurse anesthetists in the cath lab. In each case at the end of the intervention, the patients described complete alterations of perception or memory of the pain or of the length of the study. No anesthetic drug was needed. While waiting for more robust data, we suggest hypnosis could be a reliable, inexpensive and well tolerated tool to obtain complete pain control and comfort during arrhythmia ablation.

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BACKGROUND: Hypnotic analgesia is one of the most effective nonpharmacological methods for pain control. Hypnosis and distraction of attention from pain might share similar mechanisms by which brain responses to painful stimulation could be similarly reduced in both states. There is ample evidence for the efficacy of clinical hypnosis as a psychological intervention in the treatment of acute or chronic pain. Results are conflicting, however, with some studies showing an increase, others a reduction, and others still no change in the amplitude of event-related brain potentials during hypnosis as compared to control conditions. Here we compared the effects of clinical hypnosis to simple distraction of attention during recording of laser-evoked potentials (LEPs) in patients with chronic pain.

METHODS: The dominant hand in ten patients with chronic pain was tested with LEPs during: (I) resting state; (II) clinical hypnosis, and (III) distraction of attention. Nociceptive responses elicited by LEPs were graded on a numerical rating scale (NRS), and the change in N2-P2 complex amplitude during the three experimental conditions was analyzed.

RESULTS: N2-P2 amplitudes were significantly decreased during the hypnotic state as compared to the resting state and distraction of attention.

CONCLUSIONS: Hypnosis is a modified state of consciousness that may differ from mental relaxation or distraction of attention from pain. A reduction in N2-P2 amplitude may result from the modulation of diverse brain networks, particularly the frontolimbic pathways, which could modify noxious stimuli input processing during hypnotic analgesia. Our findings indicate that several different brain mechanisms may act together in hypnosis and distraction of attention during pain processing and that clinical hypnosis may provide a useful non-invasive pain relief therapy.

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I hurt so: hypnotic interventions and palliative care for traumatic brain injury.

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This article presents a case study in which self-hypnosis, hypnosis-assisted psychotherapy, and palliative care strategies were provided within a multi-modal integrative treatment program for a 38-year-old woman with traumatic brain injury.
(TBI) secondary to motor vehicle accident. Self-hypnosis was helpful in anxiety reduction and pain management. Hypnosis-assisted psychotherapy was beneficial in de-sensitizing many post-traumatic memories, and in managing post-concussion pain, including neuropathic pain and post-traumatic migraine headaches. A variety of palliative care techniques and spiritual interventions were applied to enhance sleep, moderate cognitive deficits, and enhance quality of life.

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[2589]
Clinical hypnosis, mindfulness and spirituality in palliative care.
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In this article, I do not intend to present the many and well-known treatments for relieving pain and distress symptoms of the physical body, damaged by terminal diseases, such as cancer, AIDS, multiple sclerosis. In this article, I'd rather focus my attention on clinical hypnosis for subjects who, freed from physical pain, thanks to palliative care, are open to receiving comfort and support for their psychological and spiritual suffering. The intent of this article is to express how clinical hypnosis can harmoniously integrate psychological and spiritual aspects so that the terminal patient can make peace with his/her past, with the people who have hurt him/her, and with the people who will suffer because of his/her death. This article will present some hypnotic suggestions inspired by universal wisdom of the Stoics, by positive psychology of Mindfulness, by laws of nature regarding changes, differences and mysteries. The basic assumption of the suggestions presented is that, if disease is an enemy to fight, death is an inevitable part of life: it cannot be avoided, or postponed or exchanged with anybody. It arrives when we have finished living. When death is preceded by an incurable disease, palliative care can offer a mantle of compassion and acceptance of what cannot be avoided. The words palliative comes from the Latin pallium-mantle. This article also presents some suggestions I have utilized several times with my patients. These suggestions have demonstrated their efficacy in alleviating patients' suffering in coping with their disease and in facing death.

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[2590]
Meditational spiritual intercession and recovery from disease in palliative care: a literature review.
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Human body is a biological, open system and maintains itself in the changing environment. Disease state is cured by many medicinal systems for healing. Esoteric healing (through introspective hypnosis, meditation and spiritual intercession) is the system where its believers regard Supreme Being as Omnipotent, Omnipresent and Omniscient. Such persons take ill health as a boon and pray through meditation that He may by His Mercy grant health or if God wishes otherwise, they happily accept it so that they keep moving ahead on their spiritual path. This study is a review of literature, where results clearly point towards better psychological and spiritual healing in patients who believe in esoteric cures. Modern science in terms of cognitive psychology or neurophysiology has begun to emphasize the role of consciousness but, that is confined only to the physical world. It is only with the advent of Param Purush Puran Dhani Soami Ji Maharaj (200 years ago) that in the religion of Saints, the ultimate consciousness or the Super Consciousness of the highest order has been revealed.

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[2591]


The advantages of hypnosis intervention on breast cancer surgery and adjuvant therapy.

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BACKGROUND: In oncology, hypnosis has been used for pain relief in metastatic patients but rarely for induction of anesthesia.

MATERIAL AND METHOD: Between January 2010 and October 2015, 300 patients from our Breast Clinic (Cliniques universitaires Saint-Luc, Université catholique de Louvain) were included in an observational, non-randomized study approved by our local ethics committee (ClinicalTrials.gov - NCT03003611). The hypothesis of our study was that hypnosis intervention could decrease side effects of breast surgery. 150 consecutive patients underwent breast surgery while on general anesthesia (group I), and 150 consecutive patients underwent the same surgical procedures while on hypnosis sedation (group II). After surgery, in each group, 32 patients received chemotherapy, radiotherapy was administered to 123 patients, and 115 patients received endocrine therapy.

RESULTS: Duration of hospitalization was statistically significantly reduced in group II versus group I: 3 versus 4.1 days (p = 0.0000057) for all surgical procedures. The number of post-mastectomy lymph punctures was reduced in group II (1-3, median value n = 1.5) versus group I (2-5, median value n = 3.1) (p = 0.01), as was the quantity of lymph removed (103 ml versus 462.7 ml) (p = 0.0297) in the group of mastectomies. Anxiety scale was also statistically reduced in the postoperative period among the group of patients undergoing surgery while on hypnosis sedation (p = 0.0000000000000002). The incidence of asthenia during chemotherapy was statistically decreased (p = 0.01) in group II. In this group, there was a statistically non-significant trend towards a decrease in the incidence of nausea/vomiting (p = 0.1), and the frequency of radiodermatitis (p = 0.002) and post-radiotherapy asthenia (p = 0.000000881) was also reduced. Finally, the incidence of hot flashes (p = 0.00000000000021), joint and muscle pain (p = 0.00000000000021) and asthenia while on endocrine therapy...
(p = 0.0000000022) were statistically significantly decreased in group II.

DISCUSSION: Hypnosis sedation exerts beneficial effects on nearly all modalities of breast cancer treatment.

CONCLUSION: Benefits of hypnosis sedation on breast cancer treatment are very encouraging and further promote the concept of integrative oncology.

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[2592]


Treatment of Storm Fears Using Virtual Reality and Progressive Muscle Relaxation.

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BACKGROUND: The present study examined the efficacy of virtual reality (VR) exposure therapy for treating individuals with storm fears by comparing a one-session VR exposure treatment with a one-session progressive muscle relaxation (PMR) and psychoeducation session.

AIMS: It was predicted that there would be a reduction in storm-related fear post-treatment for individuals in both conditions, but that this reduction would be greater for those in the VR exposure condition. It was predicted that improvements would be maintained at 30-day follow-up only for those in the VR exposure condition.

METHOD: Thirty-six participants each received one of the two treatment conditions. Those in the PMR treatment group received approximately 30 minutes of PMR and approximately 15 minutes of psychoeducation regarding storms. Those in the VR treatment group received approximately 1 hour of VR exposure. Additionally, participants were asked to complete a pre-treatment and post-treatment 5-minute behavioural approach test to assess changes in storm fears. They were also asked to complete a measure assessing storm phobia.

RESULTS: There was a significant interaction between treatment group and self-reported fear at post-treatment, such that fear decreased for both groups, although the reduction was stronger in the VR group. Results also showed that reductions in storm fear were maintained at 30-day follow-up for both groups.

CONCLUSIONS: Although this study used a small non-clinical sample, these results offer preliminary support for the use of VR exposure therapy in the treatment of storm-related fear.

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[2593]


Dopaminergic tone does not influence pain levels during placebo interventions in patients with chronic neuropathic pain.

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Placebo effects have been reported in patients with chronic neuropathic pain. Expected pain levels and positive emotions are involved in the observed pain relief, but the underlying neurobiology is largely unknown. Patients with neuropathic pain are highly motivated for pain relief, and as motivational factors such as expectations of reward, as well as pain processing in itself, are related to the dopaminergic system, it can be speculated that dopamine release contributes to placebo effects in neuropathic pain. Nineteen patients with neuropathic pain after thoracic surgery were tested during a placebo intervention consisting of open and hidden applications of the pain-relieving agent lidocaine (2 mL) and no treatment. The dopamine antagonist haloperidol (2 mg) and the agonist levodopa/carbidopa (100/25 mg) were administered to test the involvement of dopamine. Expected pain levels, desire for pain relief, and ongoing and evoked pain were assessed on mechanical visual analog scales (0-10). Significant placebo effects on ongoing (P ≤ 0.003) and evoked (P ≤ 0.002) pain were observed. Expectancy and desire accounted for up to 41.2% and 71.5% of the variance in ongoing and evoked pain, respectively, after the open application of lidocaine. We found no evidence for an effect of haloperidol and levodopa/carbidopa on neuropathic pain levels (P = 0.071-0.963). Dopamine seemed to influence the levels of expectancy and desire, yet there was no evidence for indirect or interaction effects on the placebo effect. This is the first study to suggest that dopamine does not contribute to placebo effects in chronic neuropathic pain.

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itch expectations, skin condition and affect were assessed. The experimental group expected lower itch than the control group, which was, in turn, related to less experienced itch in this group only, although no significantly different itch levels were reported between groups. The results illustrate a potential role for open-label placebo effects in itch, and suggest that further study of verbal suggestions through an extensive explanation of placebo effects might be promising for clinical practice.

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Integration of hypnosis into pediatric palliative care.

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At least 8 million children would need specialized pediatric palliative care (PPC) services annually worldwide, and of the more than 42,000 children and teenagers dying annually in the United States, at least 15,000 children would require PPC. Unfortunately, even in resource-rich countries the majority of children dying from serious advanced illnesses are suffering from unrelieved, distressing symptoms such as pain, dyspnea, nausea, vomiting, and anxiety. State of the art treatment and prevention of those symptoms requires employing multi-modal therapies, commonly including pharmacology, rehabilitation, procedural intervention, psychology, and integrative modalities. This article describes the current practice of integrating hypnosis into advanced pain and symptom management of children with serious illness. Three case reports of children living with a life-limiting condition exemplify the effective use of this clinical modality to decrease distressing symptoms and suffering. Hypnosis for pediatric patients experiencing a life-limiting disease not only provides an integral part of advanced symptom management, but also supports children dealing with loss and anticipatory loss, sustains and enhances hope and helps children and adolescents live fully, making every moment count, until death.

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Effects of hypnosis on the relative parasympathetic tone assessed by ANI (Analgesia/Nociception Index) in healthy volunteers: a prospective observational study.


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Hypnosis has shown an effect on the regulation of the autonomic nervous system by increasing parasympathetic activity. The Analgesia/Nociception Index (ANI) is derived from heart rate variability and represents the relative parasympathetic tone. We investigated the effects of hypnosis on ANI in healthy volunteers. Participants to the 2016 International Hypnosis congress, Saint Malo, France were recruited in this prospective observational study. After comfortable positioning of the subject in the sitting position (T0), the hypnotic trance was induced (T1) then conducted with suggestions of comfort (T2) before return to normal consciousness (T3). The ANI, heart rate (HR) and respiratory rate (RR) were recorded at the different time-points. Forty subjects were enrolled (31 women, 9 men). The mean ± SD ANI at T2 (84 ± 12) was significantly greater than at T0 (60 ± 10), T1 (62 ± 9) and T3 (59 ± 11). The median [25th-75th percentile] ANI values at T2 were significantly greater in women (90 [83-95]) than in men (74 [68-83]). There were no significant variations of HR during time. The median [25th-75th percentile] RR at T1 (16 [14-18] breaths/min) and T2 (14 [12-16] breaths/min) were significantly smaller than at T0 (18 [16-20] breaths/min) and T3 (18 [16-20] breaths/min). This study shows that hypnosis induces an increase in the relative parasympathetic tone assessed by ANI in healthy volunteers, with greater ANI values observed in women. These results suggest that ANI monitoring may provide an objective tool for the measurement of the intensity of the hypnotic process, although this should be confirmed by further studies.

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Hypnosis for reduction of background pain and pain anxiety in men with burns: A blinded, randomised, placebo-controlled study.

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INTRODUCTION: 'Background pain' and 'pain anxiety' are among the numerous problems of patients with burns. Non-pharmacological and pharmacological interventions have been used to reduce background pain and pain anxiety. This study compared the effectiveness of hypnosis and 'neutral hypnosis' (as a placebo in the control group) in decreasing the background burn pain and pain anxiety of adult male survivors with burns.

METHODS: Sixty men with burns were included in the minimisation method (30 individuals in the intervention group and 30 individuals in the control group). Four hypnotherapy sessions were performed every other day for each participant in the intervention group. Four neutral hypnosis sessions were performed every other day in the control group. Burn pain and pain anxiety of the patients in both groups were measured at the end of the second and fourth sessions. Repeated
ANOVA was used for data analysis.

RESULTS: There was no significant difference between the groups in the reduction in background pain intensity. There was a significant reduction in background pain quality and pain anxiety in the intervention group during the four hypnosis sessions. After two hypnotherapy sessions, a significant reduction was observed in the level of background pain quality and pain anxiety of participants.

CONCLUSION: Hypnosis is effective in reducing background pain quality and pain anxiety of men with burns.

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Midwives' personal use of complementary and alternative medicine (CAM) influences their recommendations to women experiencing a post-date pregnancy.

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Complementary and Alternative Medicine (CAM) have increasingly been used by pregnant women with a steady rise in interest by midwives. Literature describing CAM and self-help options midwives recommend to women experiencing a post-date pregnancy is sparse. This study aimed to investigate if Australian midwives’ personal CAM use impacts on discussions and recommendations of CAM/Self-help strategies.

METHODOLOGY/DESIGN: A survey of a national midwifery association midwifery members (n=3,552) was undertaken at a midwifery conference (October 2015) and via e-bulletins (November 2015-March 2016). The self-administered survey included questions on what self-help and CAM strategies midwives discuss and recommend to women experiencing a post-date pregnancy, midwives' confidence levels on discussing or recommending CAM, midwives' personal use of CAM.

FINDINGS: A total of 571 registered midwives completed the survey (16%). Demographics (age, years as a midwife, state of residence) reflected Australian midwives and the midwifery association membership. Most respondents discuss (91.2%) and recommend (88.6%) self-help/CAM strategies to women with a post-date pregnancy. The top five CAM recommended were Acupuncture (65.7%), Acupressure (58.1%), Raspberry Leaf (52.5%), Massage (38.9%) and Hypnosis/Calmbirth/Hypnobirthing (35.7%). Midwives were more likely to discuss strategies if they personally used CAM (p<.001), were younger (p<.001) or had worked less years as midwives (p=.004). Midwives were more likely to recommend strategies if they used CAM in their own pregnancies (p=.001).

CONCLUSION: Midwives' personal use of CAM influenced their discussions and recommendations of CAM/self-help strategies to women experiencing a post-date pregnancy. This study has implications for inclusion of CAM in midwifery education curricula.

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Therapeutic suggestions with critically ill in palliative care.

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Suggestions can be used without formal hypnosis, especially with critically ill patients, due to their spontaneous trance state. In this paper we outline data on the effectiveness of therapeutic suggestions. We interpret the possible mechanism of therapeutic suggestions in the context of stress cognition. Basic principles of formulating suggestions are discussed and some recommended versions of non-pharmacological pain control are provided. Case vignettes are given of how suggestions are used with critically ill ICU patients.

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Shedding light on the fundamental mechanism underlying hypnotic analgesia.

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Owing to the increasing importance of clinical hypnosis in pain therapy and palliative care, there is a growing interest in uncovering the mechanism underlying hypnotic analgesia. The neurophysiological findings suggest that the hypnotic state is associated with an altered operating mode of the brain that is clearly different from the normal operating mode. While in the normal operating mode a dolorogenic stimulus induces a highly synchronized large-scale activity pattern that leads to the experience of pain, the altered operating mode inhibits the synchronization of spatially divided brain regions. As a consequence, the conscious experience of pain cannot arise. In order to gain a deeper understanding of the mechanism, a novel theoretical framework is made use of. It accepts consciousness as a fundamental property of the universe and is based on the hypothesis that the whole range of phenomenal qualities is built into the frequency spectrum of a ubiquitous background field. The body of evidence supports the view that in the normal operating mode our brains act as filters that extract the plethora of phenomenal nuances selectively from this field. In the altered operating mode, which establishes under hypnotic conditions, the extraction of phenomenal qualities is partially prevented. From this perspective, hypnotic analgesia is due to an impairment of the fundamental mechanism underlying conscious perception.

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On the way of liberation from suffering and pain: role of hypnosis in palliative care.

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The huge problems related to chronic, ultimately fatal diseases involve disability, pain, suffering and the perception of one's doom; this calls for reappraising the conventional concepts of health and disease, life and death, encompassing spirituality and the mystery of death beyond any limited perspective. The management of suffering and pain to enhance resilience plays a central role in palliative care (PC) and is the core of the patient-centered approach, focused on the "to care" instead of the "to cure" of the illness-centered medicine. In this article, the perspectives supporting these instances are analyzed, focusing on hypnosis, to be considered as a powerful technique able to improve patient's control over mind and body (including relaxation, fairness, analgesia, improved stability of physical parameters and wellbeing).

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Progressive Muscle Relaxation Combined with Chinese Medicine Five-Element Music on Depression for Cancer Patients: A Randomized Controlled Trial.

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OBJECTIVES: To evaluate the effects of progressive muscle relaxation training (PMRT) combined with five elements music therapy of Chinese medicine (CM) for improving anxiety and depression of cancer patients.

METHODS: From June 2015 to March 2016, 60 cancer patients were included into the study. The patients were randomly assigned to a control group and a treatment group by envelope randomization, receiving PMRT and PMRT plus CM five elements music therapy, respectively, for 8 weeks. Hospital Anxiety and Depression Scale
(HADS), Benefit Finding Scales (BFS), Functional Assessment of Chronic Illness Therapy-Spiritual (FACIT-Sp), and Intervention Expectations Questionnaire (IEQU) were adopted to assess the depression of the two groups before and after the treatment.

RESULTS: Four cases dropped out during the study, and 29 cases in the treatment group and 27 in the control group were included in the final analysis. Prior to the treatments, the baselines of the 4 questionnaires in the two groups showed no difference. After the 8-week treatment, the treatment group presented better levels of HADS, BFS and FACIT-Sp scores compared with the control group (P<0.05). Among the single items of HADS, 4 items involving vexation, feeling fidgeted, pleasure and prospecting the future in the treatment group were improved compared with the control group (P<0.05).

CONCLUSIONS: As a simple and reliable and effective intervention, PMRT combined with five elements music therapy mitigated anxiety and depression of cancer patients. Cancer patients have been found to respond well to psychological intervention in areas regarding stabilisation of emotions, disease awareness, and therapeutic compliance. This brings about a great difference in improving their quality of life and psychological state, offers an effective approach to better self-management in cancer treatment.

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Assessment of a short hypnosis in a paediatric operating room in reducing postoperative pain and anxiety: A randomised study.


AIMS AND OBJECTIVES: To assess the impact of a short hypnotic session on postoperative anxiety and pain in major orthopaedic surgery.

BACKGROUND: Despite specific information given before a scheduled paediatric surgery, perioperative anxiety can become important.

METHODS: The study is an open single-centre randomised clinical study comparing a "control" group versus a "hypnosis" group receiving a short hypnosis pre-induction session as additional experimental analgesic procedure. The primary endpoint was the postoperative anxiety, blindly assessed using a visual analogue scale.

RESULTS: The study involved 120 children (age 10-18 years). The results showed no difference between control group versus hypnosis group. Twenty-four hours after surgery (Day+1), the patient's anxiety score was not different between control and hypnosis groups (median [Q1-Q3]: 1 [0; 3] vs. 0 [0; 3], respectively, p = .17). Each group experienced a significant decrease in anxiety level between the day before surgery (Day-1) and the day after surgery (Day+1) (median ([Q1-Q3]) difference of the anxiety score: 2 [4; 0] and 2 [4; 0], respectively, p < .0001 in each group). The postoperative pain scores were low and not different between groups (median [Q1-Q3]: 2 [0; 3] in control group vs. 3 [1; 3] in hypnosis group, p = .57).

CONCLUSION: This randomised study on a short hypnosis session performed in the operating room prior to a major surgery showed no difference in postoperative anxiety and pain levels. The decrease in anxiety and pain levels may be due to...
the addition of nurse pre-operative interviews and optimisation in communication in the operating room.

RELEVANCE TO CLINICAL PRACTICE: As postoperative anxiety level was low in both control and hypnosis groups, nurse pre-operative interviews and nurse training in hypnosis may contribute to the optimisation of global management and decrease the postoperative anxiety level.

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[2604]


[The impact of conversational hypnosis on the pre- and postoperative anxiety of patients in gynecological surgery versus ordinary practice: A comparative study].

[Article in French]

Sourzac J, Berger V, Conri V.

Hysterectomies are often linked to benign pathologies, but they are nevertheless the cause of anxiety and lead to significant physiological and psychological changes for these women. The uterus, as a symbol of femininity for women, has a unique meaning in relation to its reproductive function and its role in sexuality. Given this fact, does conversational hypnosis-used when a patient arrives at the hospital-have an impact on the pre- and postoperative anxiety of patients hospitalized for gynecological surgery in the form of a hysterectomy? To answer this question, a pilot study of comparative monocentric feasibility was performed with two parallel groups of 10 patients in 2014. The first group was received using ordinary practices, while the second group was received using techniques of conversational hypnosis. The main objective of this study was to estimate the effect of the use of conversational hypnosis upon reception compared to the use of the ordinary care protocol on perioperative anxiety upon reception, measured on the Visual Analog Scale (VAS) of anxiety for patients undergoing a hysterectomy associated with a benign pathology. The results show that patients who received the techniques of conversational hypnosis upon reception to the hospital had clearly lower pre- and postoperative anxiety. The results of this pilot feasibility study made it possible to perform follow-up research to confirm these first results in the context of a call for projects by SIRIC BRIO (Call for projects 2016: Site de Recherche Intégrée en Cancérologie - Bordeaux Recherche Intégrée en Oncologie). This research is currently underway to examine the impact of a formal preoperative hypnosis session on the perioperative anxiety of patients hospitalized for hysterectomy related to pelvic gynecologic cancer.

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[2605]


The effect of progressive muscle relaxation on cancer patients' self-efficacy.

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BACKGROUND AND PURPOSE: Self-efficacy is considered as one of the influential parameters affecting the health of patients. This study aimed to investigate the effect of relaxation techniques on self-efficacy of patients suffering from cancer.
MATERIALS AND METHODS: This study was a clinical trial in which 80 patients suffering from cancer were randomly assigned to two groups of experimental and control. Data collection instruments consisted of demographic information and Strategies Used by People to Promote Health questionnaires. In the experimental group, the patients performed relaxation techniques once a day for 30 min over two months. In the control group, the patients received the routine care.
RESULTS: A statistically significant difference was observed between the mean self-efficacy indices in the experimental group (p = 0.001). There was no significant difference in the control group (p = 0.3).
CONCLUSION: Muscle relaxation can enhance self-efficacy of cancer patients. Therefore, it can be used as an alternative method for patients who are willing to use this technique.

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The effectiveness of progressive muscle relaxation and interactive guided imagery as a pain-reducing intervention in advanced cancer patients: A multicentre randomised controlled non-pharmacological trial.
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BACKGROUND AND PURPOSE: Interactive guided imagery (IGI) and progressive muscle relaxation (PMR) are complementary therapies with a recognised positive effect on cancer pain relief. This multicentre randomised controlled trial was designed to assess the adjuvant effect of PMR-IGI in alleviating pain in a sample of hospice patients with terminal cancer.
MATERIALS AND METHODS: A total of 104 patients were randomised to two groups. Group A patients (n = 53) were administered the Revised Edmonton Symptom Assessment Scale (ESAS-r) and the numerical rating scale (NRS) for pain immediately prior to (T1) and 2 h following an individual PMR-IGI session (T3). Group B patients (n = 51) received usual care and were assessed using the same tools. Acute pain episodes and rescue analgesics over the following 24 h were recorded.
RESULTS: The Pain Intensity Difference (NRS at T3-NRS at T1) was 1.83 in group A and 0.55 in group B and was significant in both groups (p < 0.0001). The mean Total Symptom Distress Score declined by 8.83 in group A and by 1.84 in group B. The average difference in the emotional symptoms ESAS-r subscore (anxiety and depression) was 2.93 in group A (p < 0.0001) and 0.07 in group B (p > 0.05). CONCLUSION: The results of this trial suggest that PMR-IGI may be considered as an effective adjuvant in alleviating pain-related distress in terminal cancer patients. Further studies should be performed to assess the effectiveness of
Effects of a Hypnosis Session Before General Anesthesia on Postoperative Outcomes in Patients Who Underwent Minor Breast Cancer Surgery: The HYPNOSEIN Randomized Clinical Trial.


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Importance: Hypnosis is now widespread in medical practice and is emerging as an alternative technique for pain management and anxiety. However, its effects on postoperative outcomes remain unclear.

Objective: To evaluate the efficacy of a preoperative hypnosis session for reducing postoperative breast pain in patients who underwent minor breast cancer surgery.

Design, Setting, and Participants: The HYPNOSEIN prospective randomized clinical trial was conducted from October 7, 2014, to April 5, 2016. In this multicenter study in France, 150 women scheduled for minor breast cancer surgery were randomized between control and hypnosis arms, and 148 (71 control and 77 hypnosis) were included in the intent-to-treat analysis.

Intervention: On the day of surgery, eligible patients were randomly assigned (1:1) to the control arm or the hypnosis arm. Patients (but not the care teams) were blinded to the arm to which they were assigned. A 15-minute hypnosis session before general anesthesia in the operating room was performed in the hypnosis arm.

Main Outcomes and Measures: The primary end point was breast pain reduction (by 2 on a visual analog scale), assessed immediately before discharge from the postanesthesia care unit (PACU). Secondary end points were nausea/vomiting, fatigue, comfort/well-being, anxiety, and PACU length of stay, assessed at different times until postoperative day 30.

Results: The median patient age was 57 years (range, 33-79 years) in the control arm and 53 years (range, 20-84 years) in the hypnosis arm. Baseline characteristics were similar in the 2 arms. The median duration of the hypnosis session was 6 minutes (range, 2-15 minutes). The use of intraoperative opioids and hypnotics was lower in the hypnosis arm. The mean (SD) breast pain score (range, 0-10) was 1.75 (1.59) in the control arm vs 2.63 (1.62) in the hypnosis arm (P = .004). At PACU discharge and with longer follow-up, no statistically significant difference in breast pain was reported. Fatigue was significantly lower in the hypnosis arm on the evening of surgery (mean [SD] score, 3.81 [2.15] in the control arm vs 2.99 [2.56] in the hypnosis arm; P = .03). The median PACU length of stay was 60 minutes (range, 20-290 minutes) in the control arm vs 46 minutes (range, 5-100 minutes) in the hypnosis arm (P = .002). Exploratory
analyses according to patient perception of whether she received hypnosis showed significantly lower fatigue scores in the perceived hypnosis subgroup on the evening of surgery (mean [SD], 4.13 [2.26] for no perceived hypnosis vs 2.97 [2.42] for perceived hypnosis; P = .01). Anxiety was also significantly lower on the evening of surgery in the perceived hypnosis subgroup (mean [SD], 0.75 [1.64] for perceived hypnosis vs 1.67 [2.29] for no perceived hypnosis; P = .03).

Conclusions and Relevance: The results of this study do not support a benefit of hypnosis on postoperative breast pain in women undergoing minor breast cancer surgery. However, other outcomes seem to be improved, which needs to be confirmed by further studies.

Trial Registration: EudraCT Identifier: 2014-A00681-46 and ClinicalTrials.gov Identifier: NCT03253159.

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[2608]

[Making the patient an actor in the insertion of a nasogastric tube through hypnoanalgesia].

[Article in French]
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The use of a nasogastric tube can prevent certain complications in patients treated for malignant hematopathy. But this treatment is often experienced as a traumatic act by patients and sometimes even by caregivers. A Rennes hospital team shares with us the results of a retrospective study on the interest of the autonomous insertion of nasogastric tubes by hypnotic accompaniment.

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[2609]

An Internet-based controlled trial of interpretation bias modification versus progressive muscle relaxation for body dysmorphic disorder.

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OBJECTIVE: The current study extended upon previous research efforts by evaluating the utility and feasibility of an 8-session Internet-based interpretation bias modification (IBM) training protocol targeting evaluation- and appearance-related threat biases characteristic of the disorder compared to a progressive muscle relaxation (PMR) condition for treatment of body dysmorphic disorder (BDD).

METHOD: Fifty participants with BDD were recruited from across the United States and randomly assigned to eight sessions of either IBM or PMR. Assessments of interpretation bias, BDD symptoms, depression, and anxiety were administered at pretreatment, 1-week posttreatment, and 3-month follow-up.
RESULTS: Compared to the PMR group, individuals in the IBM condition reported less negative/threat interpretation biases and greater positive/benign interpretation biases at posttreatment and follow-up. There were no significant differences between groups with regard to BDD symptoms, depression, or anxiety. Clinically significant improvement was common in both conditions (IBM = 64.0%; PMR = 52.0%), though it did not differ between them.

CONCLUSIONS: Contrary to our hypothesis, IBM did not outperform PMR with regard to BDD symptom reduction, though both treatments yielded significant improvements on symptom outcomes. Findings suggest that IBM and/or PMR may be promising treatment strategies for BDD, perhaps adjunctively. Overall, these findings provide helpful future directions for IBM research and provide an additional lens through which to examine its potential effectiveness for BDD. (PsycINFO Database Record (c) 2019 APA, all rights reserved).

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[2610]
[Hypnosis and intensive care nursing, fusion or fiction?]
[Article in French]
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For some time, hypnosis and physical therapy techniques have had the wind in their sails. Numerous media reports extol their benefits for patients. However, in concrete terms, how do these techniques impact on the everyday life of a team and can hypnosis find its place in nursing care in an intensive care unit? This article provides some answers through the experience of a nurse and the work of a whole team.

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[2611]
The moral power of suggestion: A history of suggestion in Japan, 1900-1930.
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In Japan, as in the west, suggestion theory was the predominant theory of hypnosis, and suggestive therapy was one of the most important, if not the most important, form of psychotherapy in the early 20th century. While the use of suggestion was met with objections on both scientific and moral grounds in the west, it was seen in a more positive light and has had a significant influence on the development of psychotherapy in Japan. With regard to the contexts of suggestion, suggestive power, suggestibility, and the effects of suggestion, this study will examine the distinctive conceptions and practices of suggestion developed by analogy with existing ideas about interpersonal influence, particularly with the concept of kanka (assimilative transformation) in Japan. They provide an interesting comparison to the western ideas of suggestion,
INTRODUCTION AND AIM: Hip and knee replacement surgery is very demanding for patients. Medication consumption is further increased by perioperative anxiety. Besides pain killer and anxiolytic medications, patients' recovery can be enhanced by applying therapeutic suggestions, which are easily applicable during the patient-physician communication.

METHOD: In our prospective, randomized, controlled study we examined the effects of positive suggestions on patients undergoing hip or knee arthroplasty in spinal anaesthesia. Members of the suggestion group received the therapeutic suggestions during a pre-surgery physician visit, and by listening to an audio recording during surgery.

RESULTS: Compared to the control group (n = 50), in the suggestion group (n = 45) the need of medication (pain killer and adjuvant pain medication) during the surgery was lower (p = 0.037), the mean change from baseline in the well-being of the patients was better on the 2nd [1.31 (0.57; 2.04); p<0.001] and 4th [0.97 (0.23; 1.7); p = 0.011] postoperative day and less transfusion had to be administered (OR: 2.37; p = 0.004). However, there was no difference between the two groups in the postoperative need of medications, in the length of hospitalisation and in the frequency of complications. Conclusion: Our results indicate that the administration of therapeutic suggestions in the perioperative period may be beneficial for orthopaedic surgery patients.

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[2613]
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Can hypnosis displace the threshold for visual consciousness?

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To test the specific effects of hypnosis on the attentional components of visual awareness, we developed a posthypnotic suggestion for peripheral visual inattention inspired on the "tunnel vision" symptom of the Balint Syndrome. We constructed a dual-target visibility and discrimination paradigm, in which single-digit numerical targets were placed both on the hypnotically affected peripheral space and on the remaining undisturbed central area. Results were 3-fold: (i) when compared to participants of Low hypnotic susceptibility (Lows), highly susceptible participants (Highs) presented decreased subjective visibility; (ii) Highs did not show dual-task interference from peripheral targets (an effect of unconscious processing) during hypnotic suggestion to not attend them, but Lows did; (iii) nevertheless, when asked to execute a discrimination task over these same targets, Highs performed with the same accuracy as Lows. These results suggest that the hypnotic manipulation of visuospatial attention did produce an experiential change in Highs, but not one that could be mapped onto interference at a single (conscious or unconscious) level of processing. Rather, we posit that Highs simultaneously displayed (i) a fluctuation in awareness of peripheral targets coherent with the suggestion and (ii) a control strategy that involved removing hypnotically unattended targets from the task set whenever task instructions would allow for it. In light of these findings, we argue that hypnosis cannot be used as a tool to restrict the processing of otherwise supraliminal stimulation to subliminal levels.

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[2614]

Hypnotherapy for insomnia: A randomized controlled trial comparing generic and disease-specific suggestions.
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STUDY OBJECTIVES: Hypnotherapy is commonly used for treating insomnia, but a definite conclusion regarding its safety and effectiveness is unavailable due to a lack of adverse event monitoring and comparison between generic and disease-specific hypnotic suggestions in previous studies.

DESIGN: Randomized controlled, participant-blind, parallel-group with subject recruitment after trial registry.

INTERVENTIONS: Sixty participants were randomized to receive 4-week once-weekly 1-hour hypnotherapy with disease-specific suggestions (using counter-hyperarousal hypnotic exercise and screen visualization technique targeted at insomnia-related anxieties) or generic suggestions (using thought distraction technique and suggestions for self-confidence and self-care enhancement).

MAIN OUTCOME MEASURES: Primary outcome was sleep efficiency (SE) derived from 1-week sleep diary at weeks 4, 6 and 9. Secondary outcomes included other sleep-diary parameters, Insomnia Severity Index, Hospital Anxiety and Depression Scale, and Sheehan Disability Index. Treatment expectancy, adverse events (AEs), and subjective experiences were obtained after hypnotherapy sessions 2 and 4.

RESULTS: Mixed linear modeling showed that time effect was significant for most variables. Within-group effect size of sleep-diary-derived SE from baseline to follow-up ranged from 0.70 to 0.90 for disease-specific suggestions (mean difference: 8.5-10.4%); for generic suggestions, it was 0.65-0.69 (mean difference: 6.8-8.3%); however, no significant between-group difference was found. Discontinuation rate was 10%, report of unpleasantness varied from 5.5 to 7.4%, while the incidence of AEs ranged from 37.0 to 51.8%, depending on session content.

CONCLUSION: Hypnotherapy using disease-specific and generic suggestions produced similar improvements in sleep and daytime functioning. AEs were common but mostly mild. The finding raises doubts about the value of disease-specific suggestions in hypnotherapy for insomnia.

TRIAL REGISTRATION: This clinical trial was registered on 23 May 2014 at the University of Hong Kong Clinical Trials Registry as "Hypnotherapy for insomnia: a randomized placebo-controlled trial" (HKUCTR-1874).

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[2615]


Efficacy of individual and group hypnotherapy in irritable bowel syndrome (IMAGINE): a multicentre randomised controlled trial.

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Comment in
BACKGROUND: Hypnotherapy for irritable bowel syndrome (IBS) has been used primarily in patients with refractory symptoms in specialised departments and delivered on an individual basis. We aimed to test the hypothesis that hypnotherapy would be more effective than educational supportive therapy, and that group hypnotherapy would be non-inferior to individual hypnotherapy for patients with IBS referred from primary and secondary care.

METHODS: We did a multicentre randomised controlled trial (IMAGINE) in 11 hospitals in the Netherlands. Patients with IBS, aged 18-65 years, who were referred from primary or secondary care were randomly allocated (3:3:1) in blocks of six using a computer-based random number table procedure by staff not involved in the treatment to receive six sessions of individual or group hypnotherapy or group educational supportive therapy (control group). The primary outcome was adequate relief of IBS symptoms, with responders defined as patients who reported adequate relief when asked once weekly on three or four occasions in 4 consecutive weeks. We compared hypnotherapy (both groups) with control in the intention-to-treat population (excluding individuals subsequently found to be ineligible for enrolment), and assessed non-inferiority of group hypnotherapy versus individual hypnotherapy in the per-protocol population (with a non-inferiority margin of 15%) at 3 months and 12 months. This trial is registered with ISRCTN, number ISRCTN22888906, and is completed.

FINDINGS: Between May 31, 2011, and April 6, 2016, 494 patients referred for psychological treatment for IBS were assessed for eligibility, of whom 354 were randomly allocated to the three groups: 150 to individual hypnotherapy, 150 to group hypnotherapy, and 54 to educational supportive therapy. After exclusion of individuals subsequently found to be ineligible for enrolment, 142 patients in the individual hypnotherapy group, 146 in the group hypnotherapy group, and 54 in the control group were included in the intention-to-treat population. Of these, 22 (15%) patients in the individual hypnotherapy group, 22 (15%) in the group hypnotherapy group, and 11 (20%) in the control group dropped out before or during therapy. In the intention-to-treat analysis, the adequate response rate was 40·8% (95% CI 31·7-50·5) in the individual hypnotherapy group, 33·2% (24·3-43·5) in the group hypnotherapy group, and 16·7% (7·6-32·6) in the control group at 3 months. At 12 months, 40·8% (31·3-51·1) of patients in the individual hypnotherapy group, 49·5% (38·8-60·0) of patients in the group hypnotherapy group, and 22·6% (11·5-39·5) of patients in the control group reported adequate relief. Hypnotherapy was more effective than control at 3 months (odds ratio 2·9, 95% CI 1·2-7·4, p=0·0240) and 12 months (2·8, 1·2-6·7, p=0·0185). In the per-protocol analysis, 49·9% (39·2-60·6) in the individual hypnotherapy group and 42·7% (32·3-53·8) in the group hypnotherapy group had adequate relief at 3 months, and 55·5% (43·4-67·1) of individual and 51·7% (40·2-63·0) of group hypnotherapy patients reported adequate relief at 12 months. Group hypnotherapy was therefore non-inferior to individual hypnotherapy. Eight unexpected serious adverse reactions (six in the individual hypnotherapy group and two in the group hypnotherapy group) were reported, most of which were cancer or inflammatory bowel disease, and were judged by the medical ethics committee as not being related to the therapy.

INTERPRETATION: Hypnotherapy should be considered as a possible treatment for patients with IBS in primary and secondary care. Furthermore, group therapy could allow many more patients to be treated for the same cost.

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The top-down regulation from the prefrontal cortex to insula via hypnotic aversion suggestions reduces smoking craving.


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Hypnosis has been shown to have treatment effects on nicotine addiction. However, the neural basis of these effects is poorly understood. This preliminary study investigated the neural mechanisms of hypnosis-based treatment on cigarette smoking, specifically, whether the hypnosis involves a top-down or bottom-up mechanism. Two groups of 45 smokers underwent a smoking aversion suggestion and viewed smoking-related pictures and neutral pictures. One group underwent functional magnetic resonance imaging scanning twice (control and hypnotic states), whereas the other group underwent two electroencephalograph sessions. Our study found that self-reported smoking craving decreased in both groups following hypnosis. Smoking cue-elicited activations in the right dorsal lateral prefrontal cortex (rDLPFC) and left insula (lI) and the functional connectivity between the rDLPFC and lI were increased in the hypnotic state compared with the control state. The delta band source waveforms indicated the activation from 390 to 862 ms at the rDLPFC and from 490 to 900 ms at the lI was significantly different between the smoking and neutral conditions in the hypnotic state, suggesting the activation in the rDLPFC preceded that in the lI. These results suggest that the decreased smoking craving via hypnotic aversion suggestions may arise from the top-down regulation of the rDLPFC to the lI. Our findings provide novel neurobiological evidence for understanding the therapeutic effects of hypnosis on nicotine addiction, and the prefrontal-insula circuit may serve as an imaging biomarker to monitor the treatment efficacy noninvasively.

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[HYPNOSIS AND SELF-HYPNOSIS IN THE PRACTICE OF GYNECOLOGY, OBSTETRICS AND FERTILITY].

[Article in Hebrew]

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Intestinal Microbiome in Irritable Bowel Syndrome before and after Gut-Directed Hypnotherapy.

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Irritable bowel syndrome (IBS) is a disorder with brain-gut-microbiome alterations. Gut-directed hypnotherapy (GHT) has been shown to improve quality of life and symptoms in IBS. This therapy targets psychological coping, central nervous processing and brain-gut interaction. Studies have also demonstrated effects of hypnosis on intestinal transit and the mucosal immune system. So far, no study has examined the effect of GHT on the intestinal microbiome. This study aimed at examining microbial composition, IBS symptoms, and psychological distress before and after GHT. METHODS: Fecal samples were collected from 38 IBS patients (Rome-III criteria, mean age 44 years, 27 female, 11 male, 22 diarrhea-dominant, 12 alternating-type and 4 constipation-dominant IBS) before and after 10 weekly group sessions of GHT. Assessments in psychological...
RESULTS: Microbial alpha diversity was stable before and after GHT (chao1 2591 ± 548 vs. 2581 ± 539, p = 0.92). No significant differences were found in relative bacterial abundances but trends of reduced abundance of Lachnospiraceae 32.18 (4.14–39.89) Median (Q1–Q3) vs. 28.11 (22.85; 35.55) and Firmicutes:Bacteroidetes ratio after GHT were observable. Significant reductions in symptom severity (323 (266–371) vs. 264 (191–331), p = 0.001) and psychological distress 17.0 (12.6–21.8) vs. 12.0 (8.3–18.0), p = 0.001, and increased well-being were found after GHT. Adequate relief after therapy was reported by 32 (84%) patients.

CONCLUSION: Reductions in IBS symptoms and psychological burden were observed after gut-directed hypnotherapy, but only small changes were found in intestinal microbiota composition. The findings suggest that hypnosis may act by central nervous impact and other factors largely independent from microbiota composition modulating the brain-gut axis, possibly alterations in vagus nerve functioning and microbiota metabolism.

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Effectiveness of mirror therapy in phantom limb pain: A literature review.

[Article in English, Spanish]

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INTRODUCTION: Phantom limb pain (PLP) is a type of neuropathic pain that affects the territory of an amputated limb or other surgically removed body parts. Between 60% and 90% of amputees suffer from PLP during follow-up. There are a range of therapeutic options for PLP, both pharmacological (gabapentin, amitriptyline, tricyclic antidepressants, etc) and non-pharmacological (transcutaneous electrical nerve stimulation, hypnosis, acupuncture, etc). A widely accepted hypothesis considers PLP to be the consequence of postamputation cortical reorganisation. New treatment approaches, such as mirror therapy (MT), have been developed as a result of Ramachandran's groundbreaking research in the 1990s. This review analyses the current evidence on the efficacy of MT for treating PLP.

DEVELOPMENT: We performed a literature review of publications registered from 2012 to 2017 on the CINAHL, Cochrane, Scopus, and PubMed (including Medline) databases Using the descriptors "phantom limb" and "mirror therapy." We identified 115 publications addressing MT in PLP. Of these, 17 (15%) contributed useful information for pooled analysis.

CONCLUSIONS: MT seems to be effective in relieving PLP, reducing the intensity and duration of daily pain episodes. It is a valid, simple, and inexpensive treatment for PLP. The methodological quality of most publications in this field is very limited, highlighting the need for additional, high-quality studies to develop clinical protocols that could maximise the benefits of MT for patients with PLP.

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Randomized controlled trial of an 8-week intervention combining self-care and hypnosis for post-treatment cancer patients: study protocol.

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BACKGROUND: Cancer has a lot of consequences on patients' quality of life (such as cancer-related fatigue (CRF), sleep difficulties and emotional distress) and on patients' partners and their relationship, such as distress and communication difficulties. These consequences are undertreated, and interventions based on hypnosis often focus on breast cancer patients only. This paper describes the study protocol of a longitudinal randomized controlled trial aiming to assess the efficacy of an 8-week intervention combining hypnosis and self-care to improve cancer patients' CRF, sleep and emotional distress and to indirectly improve their partners' distress.

METHODS: A power analysis required a total sample of 88 patients. To test the efficacy of the intervention, results of the experimental group receiving the intervention will be compared to those of the control group. Data will be collected by questionnaires, relaxation tasks, an attentional bias task, and everyday life assessments measured at four different times: 1.) before inclusion in the study (baseline); 2.) after the intervention; and 3.) at 4- and 12-month follow-up. Partners' symptoms will also be evaluated with questionnaires at the same measurement times.

DISCUSSION: There is a growing interest in alternative approaches (such as hypnosis) in addition to standard therapies in oncology settings. The results of this study should be useful for improving knowledge about long-term efficacy of hypnosis-based group interventions for CRF, sleep and distress among all types of cancer patients and their partners, and to better understand the mechanisms of emotional regulation in cancer patients through the attentional bias task.


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Dental anxiety causes patients to refuse or delay treatment, which may exacerbate oral diseases. The aim of the current randomized controlled trial was to determine whether progressive muscle relaxation therapy could relieve dental anxiety. The trial included 68 periodontal patients with dental anxiety scores of ≥13 who were randomly assigned to either an intervention group or a control group (n = 34 per group). The intervention group was administered progressive muscle relaxation therapy for 20 min and oral health education for 15 min before periodontal treatment once per week for 4 wk. The control group was provided with oral health education only, for the same duration. Changes in dental anxiety, depression symptoms, blood pressure, heart rate, and salivary cortisol were evaluated 4 wk and 3 months after the intervention. The intervention group exhibited statistically significantly greater reductions in dental anxiety scores than did the control group at the 4-wk (-3.82 vs. -0.89) and 3-month (-4.22 vs. -0.28) assessments. They also exhibited significantly greater reductions in depression symptoms, systolic and diastolic blood pressure, pulse rate, and salivary cortisol levels at both time-points. Progressive muscle relaxation therapy relieves tension and anxiety in dental patients.


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[2623]


Prostate brachytherapy under hypnosedation: A prospective evaluation.

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PURPOSE: Hypnosedation (HS) for brachytherapy has been proposed in patients with prostate cancer and has been evaluated.

MATERIALS AND METHODS: 79 patients were treated with brachytherapy under HS. The Visual Analog Scale questionnaire was used to assess comfort and anxiety and the lowest, mean, and highest level of pain. Data for 79 patients who underwent general anesthesia (GA) and 37 patients who underwent spinal anesthesia (SA) treated at the same period were compared with HS group in terms of medication and treatment duration.

RESULTS: 11 patients (13.9%) requested a GA, because they did not reach the hypnotic level. For the remaining 68 patients, the mean pain and comfort scores evaluated just after the intervention were 3.1 and 7.4, respectively. At 8 weeks, the scores were 2.8 and 7.5, respectively. 66 patients (97%) would choose this approach again and recommend it to other patients. The patients in the HS group received significant less medications than in the GA (remifentanil, propofol, kétamine, phenylephrine, ephedrine…) or SA (sufentanil, midazolam, morphine, bupivacaine…) groups with mean values of 3.1 vs. 7.9 vs. 5.6 (p < 0.0001), respectively. HS increased the mean time of surgery room occupation by 12 min vs. GA and by 20 min vs. SA. However, the recovery room occupation is avoided with HS (GA = 61 min and SA = 67 min) and a shorter duration of a need for a urinary
CONCLUSIONS: HS is a feasible and comfortable method of anesthesia and a good alternative to GA and SA for patients undergoing prostate brachytherapy, with reduced treatment duration and number of medications.

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[2624]
The Role of Hypnosis in Cancer Care.
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PURPOSE OF REVIEW: This paper reviews the current evidence-base for the use of hypnosis as an adjunct treatment for common cancer-related symptoms and side effects, including those experienced during treatment, as well as long-term and late effects. First, a general description and history of medical hypnosis in cancer care is provided, followed by a review of the latest evidence across a range of common symptoms.

RECENT FINDINGS: The evidence suggests that hypnosis may help treat symptoms of nausea and vomiting in breast cancer patients, manage pain in a variety of contexts, and also reduce levels of anxiety and overall distress around surgical and medical procedures, both in children and adults. Emerging research shows promise for treating hot flashes in women with breast cancer. The research in this area would benefit from assessing populations beyond women with breast cancer, including late-stage disease, using more rigorous study designs, following published reporting guidelines and better describing and standardizing interventions.

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[2625]
The structure of resilience in irritable bowel syndrome and its improvement through hypnotherapy: Cross-sectional and prospective longitudinal data.
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BACKGROUND: Resilience refers to a class of variables that are highly relevant to wellbeing and coping with stress, trauma, and chronic adversity. Despite its
Irritable bowel syndrome (IBS) is a functional disorder with altered psychological stress reactivity and a brain-gut-microbiota axis, which causes high levels of chronic strain. Gut-directed Hypnotherapy (GHT) is a standardized treatment for IBS aimed at improving resilience. An improvement of resilience as a result of GHT has been hypothesized but requires further investigation. The aims of the study were to validate the construct and develop an integrational measure of various resilience domains by dimensional reduction, and to investigate changes in resilience in IBS patients after GHT.

**METHOD:** A total of N = 74 gastroenterology outpatients with IBS (Rome III criteria) were examined in 7 resilience domains, quality of life, psychological distress and symptom severity. Of these, n = 53 participated in 7 to 10 GHT group sessions (Manchester protocol). Post-treatment examinations were performed on average 10 months after last GHT session.

**RESULTS:** Resilience factors proved to be unidimensional in the total sample. Greater resilience (composite score of resilience domains) and quality of life, and lower symptom severity and psychological distress were found after treatment (n = 16). Similar differences were present in cross-sectional comparisons of n = 37 treated vs. n = 37 untreated patients.

**CONCLUSION:** Resilience factors share a common psychological dimension and are functionally connected. The absence of maladaptive behaviours contributes to resilience. Improvements in resilience after hypnotherapy with parallel increases in quality of life and reduced psychological distress and symptom severity were observed. Independent replications with larger sample sizes and randomized controlled trials are needed.

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Conflict of interest statement: The authors have declared that no competing interests exist.

[2626]


The effect of guided imagery on anxiety, depression and vital signs in patients on hemodialysis.

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BACKGROUND AND PURPOSE: Patients on hemodialysis experience anxiety and depression. This study aimed to investigate the effect of guided imagery on anxiety, depression, and vital signs in patients on hemodialysis.

MATERIALS AND METHODS: This randomized controlled clinical trial was conducted on 80 patients undergoing hemodialysis. The subjects were randomly assigned into two groups: a guided intervention group and a control group. Anxiety and depression were measured using the Hospital Anxiety and Depression Scale.
RESULTS: After the intervention, the level of anxiety and depression were significantly lower in the intervention group compared with the control group (p = 0.030, p = 0.001, respectively). A statistically significant reduction in the respiratory rate and heart rate was reported in the intervention group (p < 0.05).

CONCLUSION: Nurses are suggested to use guided imagery along with other interventions for the management of anxiety and depression. It can alleviate adverse psychological responses among patients on hemodialysis.

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[2627]
Vittorio Benussi, hypnosuggestive methods, and emotional functional autonomy.
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This article reconstructs Vittorio Benussi's (1878-1927) research on autonomia funzionale emotiva [emotional functional autonomy], carried out in Padua between 1920 and 1927. Its aim is to demonstrate that Benussi believed-against the intellectualist mainstream of the psychology of his time and even against the Brentanian-Meinongian tradition in which he was educated-in the fundamental independence of emotions from the cognitive functions that usually accompany them. To study this autonomy, Benussi used hypnosis as an experimental tool designed to disassemble the phenomena of mental life from their global functional unity. Benussi thus compared the work of psychologists with that of physicists or chemists. This was a unique undertaking for theoretical ambitions and experimental techniques, which was completely abandoned after his premature death. To conclude, the legacy of Benussi's research on emotions is highlighted, and the resumption of his research model within current studies on the relationships between emotion and cognition is encouraged. (PsycINFO Database Record (c) 2019 APA, all rights reserved).

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[2628]

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Many children suffer from headaches. Since stress may trigger headaches,
effective techniques to cope with stress are needed. We investigated the effectiveness of two mind-body techniques, transcendental meditation (TM) or hypnotherapy (HT), and compared them with progressive muscle relaxation (PMR) exercises (active control group). Children (9-18 years) suffering from primary headaches more than two times per month received either TM (N = 42), HT (N = 45) or PMR (N = 44) for 3 months. Primary outcomes were frequency of headaches and ≥ 50% reduction in headaches at 3 and 9 months. Secondary outcomes were adequate relief, pain coping, anxiety and depressive symptoms, somatisation and safety of treatment. Groups were comparable at baseline. Headache frequency was significantly reduced in all groups from 18.9 days per month to 12.5 and 10.5 at respectively 3 and 9 months (p < 0.001), with no significant differences between the groups. Clinically relevant headache reduction (≥ 50%) was observed in 41% and 47% of children at 3 and 9 months respectively, with no significant differences between the groups. No differences were observed in secondary outcome measures between the intervention groups. No adverse events were reported. Conclusion: All three techniques reduced primary headache in children and appeared to be safe. Trial registration: NTR 2955, 28 June 2011 (www.trialregister.nl)

What is Known: • Stress may be an important trigger for both tension type headache and migraine in children. • Good data are lacking on the effect of transcendental meditation, hypnotherapy or progressive muscle relaxation as possible stress-reducing therapies in children with primary headaches.

What is New: • Three non-pharmacological techniques, i.e., transcendental meditation, hypnotherapy and progressive muscle relaxation exercises, all result in a clinically significant reduction of headaches and use of pain medication. • No large differences between the three techniques were found, suggesting that children can choose either one of the three techniques based on personal preferences.

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Different cognitive strategies were observed in the three groups as the correlations between mental rotation, visuospatial and verbal working memory were different in highs, mediums and lows. In conclusion, present findings represent the first report of hypnotizability-related differences in a mental rotation task, which is relevant to several cognitive functions.

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[2630]

Remitting long-standing major depression in a multiple sclerosis patient with several concurrent conditions.

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In this report, we discuss the case of an multiple sclerosis (MS) patient, age 62, who learned to attain and sustain euthymia despite his ailments. He has Ehlers Danlos Syndrome (EDS), asthma, MS, urticaria, and major depression (MD). Despite thriving limitations, the patient is an accomplished scientist, who struggled for > twelve years to emerge from being confined to bed and wheel chair with MS, to walking with crutches, scuba diving, writing manuscripts, and living a positive life. Through former educators, he reacquired problem-solving habits to study the literature on his illnesses; keep records; try new therapies; and use pharmaceutical, nutritional, physical, and psychological methods to attain euthymia. With this inculcation, years later, he discovered that dimethyl fumarate (DMF) suppressed inflammation, cramping, urticaria, and asthma; and the combination of bupropion, S-adenosylmethionine (SAMe), vitamin-D3 (vit-D3), yoga, and self-hypnosis relieved MD. Then, after a 14-month respite, the patient, discovered that he had adult onset craniopharyngioma: a benign, recurring, epithelial tumor that grows from vestigial embryonic tissue (Rathke’s pouch) which formed the anterior pituitary. The tumor grows aggressively and causes surrounding tissue and function losses. It caused headaches, disorientation, bitemporal vision loss, among other problems. To emerge from this conundrum, the patient employed his relearned habits; the above antidepressant cocktail (bupropion, SAMe, and vit-D3); and with 30 fractionated stereotactic radiation treatments shrank his tumor and gained relief. This is a single case, and methods we discovered serendipitously may not work for other chronically ill patients. Consequently, we want to encourage such patients and their physicians to discuss their experiences in peer-reviewed domains so readers may acquire new perspectives that help individualize their care, and have productive contented lives.

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[2631]


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BACKGROUND: Hypnosis is a technique that could aid awake surgery protocols. The aim of the present study is to describe the results of a preliminary experience of a cohort of patients operated on with an original protocol of hypnosis-aided awake surgery (HAS).

METHODS: All patients were operated on with the aid of HAS and their data were retrospectively reviewed. A thorough literature review was conducted to compare the results of HAS with the standard awake surgery protocol regarding 1) the incidence of intraoperative pain; 2) the overall incidence of complications; 3) the length of time in which the patients were suitable for intraoperative neuropsychological testing; and 4) the incidence of gross total resection. The comparison presented a notably high statistical impact (1-β = 0.90-0.93 for α = 0.05; effect size, 0.5).

RESULTS: The final cohort comprised 6 patients from our institution and 43 records retrieved in the relevant literature underwent HAS for intrinsic brain tumor treatment. This cohort was compared with cohorts of patients who were considered eligible through a literature review. HAS showed a statistically significant superiority in the first 3 outcome variables, whereas the incidence of gross total resection favored the standard awake approaches.

CONCLUSIONS: According to the results, hypnosis-aided resection of intrinsic brain tumor located in eloquent areas is safe and effective, although dissociation phenomena deserve further investigation to be completely understood.

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BACKGROUND: Treatment of spinal cord injury (SCI)-associated neuropathic pain is challenging, with limited efficacy and no definitive options, and SCI patients often show resistance to pharmacologic treatment. Virtual reality (VR) therapy is a non-invasive, non-pharmacologic alternative with minimal adverse effects.

OBJECTIVE: To investigate the effect of VR therapy on SCI-associated neuropathic pain in a systematic review.

METHODS: Articles needed to 1) be written in English; 2) include adult subjects, with at least half the study population with a SCI diagnosis; 3) involve any form of VR therapy; and 4) assess neuropathic pain by quantitative outcome measures. Articles were searched in MEDLINE/PubMed, CINAHL®, EMBASE, and PsycINFO up to April 2018. Reference lists of retrieved articles were hand-searched. Methodologic quality was assessed by the Physiotherapy Evidence Database Score (PEDro) for randomized controlled trials and Modified Downs and Black Tool (D&B) for all other studies. Level of evidence was determined by using a modified Sackett scale.

RESULTS: Among 333 studies identified, 9 included in this review (n=150 participants) evaluated 4 methods of VR therapy (virtual walking, VR-augmented training, virtual illusion, and VR hypnosis) for treating neuropathic pain in SCI patients. Each VR method reduced neuropathic pain: 4 studies supported virtual walking, and the other 3 VR methods were each supported by a different study. Combined treatment with virtual walking and transcranial direct current stimulation was the most effective. The quality of studies was a major limitation.

CONCLUSION: VR therapy could reduce SCI-associated neuropathic pain, although the clinical significance of this analgesic effect is unclear. Clinical trials evaluating VR therapy as standalone and/or adjunct therapy for neuropathic pain in SCI patients are warranted.

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[2633]


Use of Complementary and Integrated Health: A Retrospective Analysis of U.S. Veterans with Chronic Musculoskeletal Pain Nationally.

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OBJECTIVE: To partially address the opioid crisis, some complementary and integrative health (CIH) therapies are now recommended for chronic musculoskeletal pain, a common condition presented in primary care. As such, health care systems are increasingly offering CIH therapies, and the Veterans Health Administration (VHA), the nation's largest integrated health care system, has been at the forefront of this movement. However, little is known about the uptake of CIH among patients with chronic musculoskeletal pain. As such, we
conducted the first study of the use of a variety of nonherbal CIH therapies among a large patient population having chronic musculoskeletal pain.

MATERIALS AND METHODS: We examined the frequency and predictors of CIH therapy use using administrative data for a large retrospective cohort of younger veterans with chronic musculoskeletal pain using the VHA between 2010 and 2013 (n = 530,216). We conducted a 2-year effort to determine use of nine types of CIH by using both natural language processing data mining methods and administrative and CPT4 codes. We defined chronic musculoskeletal pain as: (1) having 2+ visits with musculoskeletal diagnosis codes likely to represent chronic pain separated by 30-365 days or (2) 2+ visits with musculoskeletal diagnosis codes within 90 days and with 2+ numeric rating scale pain scores ≥4 at 2+ visits within 90 days.

RESULTS: More than a quarter (27%) of younger veterans with chronic musculoskeletal pain used any CIH therapy, 15% used meditation, 7% yoga, 6% acupuncture, 5% chiropractic, 4% guided imagery, 3% biofeedback, 2% t'ai chi, 2% massage, and 0.2% hypnosis. Use of any CIH therapy was more likely among women, single patients, patients with three of the six pain conditions, or patients with any of the six pain comorbid conditions.

CONCLUSIONS: Patients appear willing to use CIH approaches, given that 27% used some type. However, low rates of some specific CIH suggest the potential to augment CIH use.

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Hypnosis intervention for the management of pain perception during cataract surgery.

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Erratum in

Objective: To investigate the effectiveness of hypnosis in pain management during cataract surgery.

Methods: Male or female patients with bilateral age-related cataract who wished to have both eyes subjected to phacoemulsification surgery were preliminarily admitted. Immediately after the first-eye surgery, each patient was evaluated for pain using the visual analog scale (VAS), and patients with a VAS score >1 were enrolled. By using block randomization, the enrolled patients were allocated to either the treatment group, which received a hypnosis intervention before the scheduled second-eye surgery, or the control group, which did not undergo hypnosis. The levels of anxiety, pain, and cooperation were evaluated independently by the patients and the surgeon.

Results: During the intraoperative pain assessment, 5%, 34%, 38%, and 23% of patients in the control group reported experiencing no pain, mild pain, moderate pain, and severe pain, respectively. In contrast, in the hypnosis group, 18%, 56%, 15%, and 11% of patients reported experiencing no pain, mild pain, moderate pain, and severe pain, respectively, which showed significant differences between the groups (P<0.005). The evaluation of anxiety level showed that the mean score in the control group and hypnosis group was 11.77±0.32 and 6.64±0.21, respectively, revealing a highly significant difference between the two groups (P<0.005). The assessment of patient cooperation showed that only 5% and 18% of patients in the control group and 18% and 36% of patients in the hypnosis group showed excellent and good cooperation, respectively, while 47% of patients in the control group and only 24% of patients in the hypnosis group exhibited poor cooperation, revealing significant differences between the groups (P<0.005).

Conclusion: Hypnosis may be considered as an auxiliary measure in cataract surgery.
surgery, especially for patients who experienced obvious pain during the first-eye surgery.

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Conflict of interest statement: Disclosure The authors report no conflicts of interest in this work.

[2635]
Role of Complementary and Alternative Medicine in Otolaryngologic Perioperative Care.
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Background: During the perioperative period for otolaryngologic surgical cases, complications and delays can occur as the result of anxiety, pain, nausea, and vomiting. Conventional methods used to treat these symptoms include medications that can be expensive and invasive or that can cause adverse effects. Because of the concerns about opioid use in the United States, providers might want to consider using complementary and alternative medicine (CAM) as adjunctive or primary treatment plans.

Methods: To assess the current knowledge about the clinical effectiveness of CAM for patients undergoing otolaryngologic procedures, we searched the literature using MEDLINE, PubMed, and Google Scholar. We excluded studies published prior to 1990 and articles about surgeries that were unrelated to otolaryngology.

Results: An analysis of the selected studies revealed that CAM therapies—acupuncture, aromatherapy, hypnosis, and music therapy—have been shown to be effective at reducing preoperative anxiety, postoperative pain, and postoperative nausea and vomiting. No adverse side effects were associated with CAM use in these studies.

Conclusion: The use of CAM in patients undergoing otolaryngologic surgeries may relieve common perioperative symptoms. While further study is warranted, otolaryngology providers might consider implementing CAM with patients electing surgery.

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[2636]
Active-Alert Hypnosis: History, Research, and Applications.
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After a brief review of the history of the idea of an activity-increasing hypnotic induction procedure with eyes open and pedaling a bicycle ergometer, the features of active-alert hypnotic induction are summarized. Results of research conducted on healthy volunteers revealed the behavioral, experiential, physiological, and interactional characteristics of the induced altered state of consciousness (ASC), showing both similarities and differences between traditional and active-alert hypnosis. A short description of the application of the method is followed by two brief case studies.
Valencia Model of Waking Hypnosis: Background, Research, and Clinical Applications.

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The goal of this article is to provide a comprehensive review of the historical background, methods, and clinical applications of the Valencia Model of Waking Hypnosis (VMWH). The active-alert-waking methods have been developed and used since the 19th century as an alternative when the suggestions for relaxation and drowsiness were not helpful for specific cases, or when the person needed to use hypnotic suggestions in situations that required them to be alert and with their eyes open (i.e. in vivo exposure, sports performance, academic work, etc.). In most of these methods, the hypnotized person keeps their eyes open, and the suggestions given are for alertness, focused attention, mind expansion, and excitement. Physical relaxation is mostly not suggested, but tension or certain physical movements are used to elicit the activation of the hypnotized person. The VMWH consists of a number of methods combined to change attitudes and maximize the effects of the hypnotic suggestions. The procedures have empirical validation, and are straightforward and pleasant for patients as well as easy to learn and apply. It is structured, although its sequence is flexible and can be adapted to the needs of the intervention. Finally, research has revealed that this model has numerous advantages, and is potentially useful in clinical practice. Therefore, its incorporation into therapy may have great benefits for the patients.

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Alert Hypnosis With Tai Chi Movement for Trauma Resolution.

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Alert hypnosis has a growing body of evidence to support its use in resolving trauma symptoms. There is also research to support the use of tai chi in the treatment of post-traumatic stress disorder (PTSD). Integrating alert hypnosis with tai chi movements offers the potential to further the benefits of both approaches. Patients have an opportunity to work toward their desired goals using hypnotic techniques to embody targeted changes both in session and outside the office. Providers get behavioral information about the physical and emotional states in the patient. This overlap provides an advanced platform for integrated clinical work, supporting a closer integration of curative processes.

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Alert, Eyes-Open Sport Hypnosis.

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Sport hypnosis (SH) is a form of alert hypnosis defined by mental training procedures based on three techniques in combination: eyes-open hypnosis, traditional eyes-closed hypnosis, and self-hypnosis. The self-hypnotic state is operationally defined as the imagined "inner mental room" (IMR). The main purpose of SH is to produce the sport hypnotic state (SHS), or the flow state, a form of alert hypnosis. Another purpose of SHS is also to allow a user to initiate and release specific posthypnotic effects. These effects are designed to enhance the user's performance and well-being as an athlete. The SHS can be induced through rhythmic athletic activities and by posthypnotic signals (triggers). Performance in SHS happens in a flow state, an alternative state of consciousness which increases results despite decreased effort (relaxed effectiveness). Reports from Olympic Games champions show the importance of SHS training for peak performance. SH techniques can also be applied in other areas in the quest for excellence.

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Utilizing the Hypnotic Concomitants of Education: Suggestions to Enhance Teaching and Learning.

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Clinical hypnosis for improving learning has been advocated by scholars dating back to the late 19th century. Empirical research seeking to validate its use has been supported particularly for real life applications, though less so in laboratory memory experiments. Suggestions for the use of waking/alert hypnosis suggestion for both highly suggestible students who experience more advanced and compelling phenomena associated with hypnosis, and students in general are offered. Suggestions for future research are also provided.

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Looking at Alert, Conversational Hypnosis.

Wark DM, Reid DB.

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Conversational Hypnosis: Conceptual and Technical Differences Relative to Traditional Hypnosis.

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This article provides an overview of conversational hypnosis (CH) as distinct from traditional forms. The article includes a history of Ericksonian hypnosis followed by a conceptual model and operational definitions for CH. The analysis is built on three levels of comparison and contrast. Three concepts commonly used in the general hypnosis literature—focusing, engaging, and inciting—structure a comprehensive definition of CH. The article concludes with recommendations for future research.

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Learning Clinical Hypnosis Wide Awake: Can We Teach Hypnosis Hypnotically?

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Conversational hypnosis has been promoted as both more congruent with mechanisms of psychobiological change and more feasibly integrated into clinical care than the more dominant, ritualistic, hierarchical, induction-based Standards of Training in Clinical Hypnosis. Further, it has been argued that, in teaching the legacy standard, clinical hypnosis training lacks pedagogical integrity. This article builds on these premises by piloting a mixed-methods approach to studying the pedagogy and participant evaluations of two professional education events that focused on conversational hypnosis. Results indicate that this is an effective methodology for studying the impact of teaching hypnosis hypnotically and fostering wider integration of hypnosis into health and care.

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Effectiveness of a Self-Care Toolkit for Surgical Breast Cancer Patients in a Military Treatment Facility.


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OBJECTIVE: To assess whether a self-care toolkit (SCT) provided to breast cancer patients undergoing surgery could mitigate distress and lessen symptoms associated with surgery.

DESIGN: One hundred women with breast cancer, planning to undergo initial surgery, were randomly assigned to either one of two groups: treatment as usual (TAU; n = 49) or TAU with the addition of an SCT (n = 51). The SCT contained an MP3 player with audio-files of guided mind-body techniques (breathing, progressive muscle relaxation, meditation, guided imagery, and self-hypnosis) and acupressure antinausea wristbands. Anxiety, pain, nausea, sleep, fatigue, global health, and quality of life (QOL) were assessed using validated outcome measures. Two inflammatory blood markers (erythrocyte sedimentation rate [ESR] and C-reactive protein [CRP]) were measured serially. Data were collected at baseline (T1), immediately before surgery (T2), within 10 h postoperatively (T3), and ~2 weeks postsurgery (T4).

SETTINGS: Numerous studies have shown that psychological distress associated with a cancer diagnosis can affect pain perception and QOL.

RESULTS: Between T1 and T4, there were significant between-group differences in Patient-Reported Outcomes Measurement Information System (PROMIS)-57 scores of Pain Interference, Fatigue, and Satisfaction with Social Roles, favoring the SCT group compared with TAU (p = 0.005, p = 0.023, and p = 0.021, respectively). There was a significant mean change in Defense and Veterans Pain Rating Scale (DVPRS) scores from T2 to T3, with the SCT group having significantly smaller increases in postoperative pain (p = 0.008) and in postoperative ESR (p = 0.0197) compared with the TAU group. Clinically significant reductions in anxiety occurred in the SCT group during the main intervention period.

CONCLUSION: These results suggest that using the SCT in the perioperative period decreased pain perceptions, fatigue, and inflammatory cytokine secretion.

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(15%) reported unpleasant adverse effects related to pCAM.

CONCLUSION: Although CAM use was high among our patients, prevalence of pCAM use was lower than expected. Patients with higher education levels tended to use more pCAM.

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[2646]

Ernst Trömner: beyond the reflex hammer.

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Ernst Trömner (1868-1930) was a German neurologist and psychiatrist at the St. Georg Hospital in Hamburg. As clinician and researcher, he contributed to our understanding of various fields within neurology including language and speech disorders, hypnosis and suggestion, sleep physiology and diseases, leukemia with nervous system involvement, gait disorders, metabolic myelopathy, Parkinson's disease, organic psychosis, and schizophrenia. However, his main interest was muscle reflexes. De facto, Trömner described a variant of the Achilles tendon reflex, a modification of the Oppenheim's and Babinski's reflexes, "rediscovered" the corneomandibular reflex and described the joint reflexes of the lower extremities as well as a muscle stretch reflex of the diaphragm. Moreover, Trömner has developed the first sedimentation chamber to assess the cerebrospinal fluid as well as the muscle plessimeter and, probably most considerable, the reflex hammer which is widely used by neurologists around the globe to date and is commonly referred to as the "Trömner hammer." His name has also become inextricably linked with the finger flexor reflex, which is commonly known as the "Trömner reflex." This article briefly summarizes Professor Ernst Trömner's life and his contributions to clinical neurology and psychiatry beyond his most famous eponyms, the hammer and the finger flexor reflex.

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[2647]

Feasibility of clinical hypnosis for transesophageal echocardiography in children and adolescents.

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BACKGROUND: The use of hypnosis in children has been described more than two
centuries ago, with a more recent research and clinical application. There is currently a good level of evidence for the efficacy of clinical hypnosis in children for minor surgery, medical procedures or pain management. The use of clinical hypnosis, in paediatric cardiology, for invasive procedures such as transoesophageal echocardiography, has not been reported.

AIMS:: This study evaluated the feasibility of clinical hypnosis in children undergoing transoesophageal echocardiography.

METHOD:: This prospective, non-randomised, cross-sectional study was carried out over 24 months in a paediatric cardiology referral centre. All children aged 10-18 years requiring a transoesophageal echocardiography examination, outside the operating room and the catheterisation laboratory, were eligible for the study. Children and families could choose between transoesophageal echocardiography under clinical hypnosis or under general anaesthesia (<15 years) or sedation (⩾15 years).

RESULTS:: We included 16 children aged 11-18 years (seven girls, mean age 14.1±2.5 years). The hypnotic state was achieved for 15 out of the 16 participating children (94%). The transoesophageal echocardiography examination could be completely achieved with a full diagnosis for 15 out of 16 children (94%). In all cases, a transoesophageal echocardiography examination under clinical hypnosis provided a complete diagnosis.

CONCLUSION:: This study demonstrated that hypnosis was feasible and effective for transoesophageal echocardiography in adolescents and might be a good alternative to general anaesthesia. Further study with larger numbers of subjects and more diverse congenital cardiac conditions are needed to confirm the results in a more diverse sample.

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The Effect of Progressive Muscle Relaxation on Emotional Competence: Depression-Anxiety-Stress, Sense of Coherence, Health-Related Quality of Life, and Well-Being of Unemployed People in Greece: An Intervention Study.

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OBJECTIVES: Assessment of the impact of Jacobson Progressive Muscle Relaxation (PMR) on depression-anxiety-stress symptoms, sense of coherence, health-related quality of life and well-being in long-term unemployed people with anxiety disorders.

DESIGN AND SETTING: An intervention study was conducted at a relevant Organization, in Athens, Greece.

INTERVENTION: 50 long-term unemployed individuals suffering from anxiety disorders participated in the study. Participants were separated into two groups: (a) the intervention group (30 individuals) that was trained on an 8-week on Progressive Muscle Relaxation program and also received counseling services and (b) the control group (20 individuals) that received only counseling services.

MAIN OUTCOME MEASURES: Depression, Anxiety, Stress Scale, Sense of Coherence, Health-Related Quality of Life and Well-being were evaluated at baseline and after the intervention.

RESULTS: Significant changes were noted in the studied variables between the two groups, with improved outcomes in the intervention group. The intervention group showed a decrease in the symptoms of depression, anxiety, stress (p<0.001)
[depression (p<0.001), anxiety (p<0.001), stress (p<0.001)], a higher score of sense of coherence (p<0.001), improved health-related quality of life regarding the mental health domain (p<0.001), and improvement in well-being (p<0.001). No significant change was observed in the control group during the follow-up period.

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Effects of Self-Conditioning Techniques (Self-Hypnosis) in Promoting Weight Loss in Patients with Severe Obesity: A Randomized Controlled Trial.


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OBJECTIVE: The usefulness of the rapid-induction techniques of hypnosis as an adjunctive weight-loss treatment has not been defined. This randomized controlled trial evaluated whether self-conditioning techniques (self-hypnosis) added to lifestyle interventions contributed to weight loss (primary outcome), changes in metabolic and inflammatory variables, and quality of life (QoL) improvement (secondary outcomes) in severe obesity.

METHODS: Individuals (with BMI = 35-50 kg/m²) without organic or psychiatric comorbidity were randomly assigned to the intervention (n = 60) or control arm (n = 60). All received exercise and behavioral recommendations and individualized diets. The intervention consisted of three hypnosis sessions, during which self-hypnosis was taught to increase self-control before eating. Diet, exercise, satiety, QoL, anthropometric measurements, and blood variables were collected and measured at enrollment and at 1 year (trial end).

RESULTS: A similar weight loss was observed in the intervention (-6.5 kg) and control (-5.6 kg) arms (β = -0.45; 95% CI: -3.78 to 2.88; P = 0.79). However, habitual hypnosis users lost more weight (-9.6 kg; β = -10.2; 95% CI: -14.2 to -6.18; P < 0.001) and greatly reduced their caloric intake (-682.5 kcal; β = -643.6; 95% CI: -1064.0 to -223.2; P = 0.005) in linear regression models. At trial end, the intervention arm showed lower C-reactive protein values (β = -2.55; 95% CI: -3.80 to -1.31; P < 0.001), higher satiety (β = 19.2; 95% CI: 7.71-30.6; P = 0.001), and better QoL (β = 0.09; 95% CI: 0.02-0.16; P = 0.01).

CONCLUSIONS: Self-hypnosis was not associated with differences in weight change but was associated with improved satiety, QoL, and inflammation. Indeed, habitual hypnosis users showed a greater weight loss.

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Effect of progressive muscle relaxation on the caregiver burden and level of depression among caregivers of older patients with a stroke: A randomized controlled trial.

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AIM: This study aimed to investigate the effect of progressive muscle relaxation on the caregiver burden and level of depression among the caregivers of older patients with a stroke.

METHODS: This randomized, controlled experimental study was conducted between December, 2015 and July, 2017 with the caregivers of older patients with a stroke who had been admitted to the home care unit of a state hospital. The caregivers were randomly assigned to intervention (n = 23) and control (n = 21) groups, based on the study's inclusion criteria. The caregivers in the intervention group practiced progressive muscle relaxation exercises at home 3 days per week for 8 weeks. The control group had no intervention.

RESULTS: The mean age of the older patients with a stroke was 80.15 ± 9.86 years and the mean duration of the disease was 39.07 ± 44.69 months. The mean age of the caregivers was 50.29 ± 12.62 years, 84.1% of whom were female, 38.6% were elementary school graduates, and 86.4% were married. It was found that there was a statistically significant decrease in the mean Zarit Caregiver Burden Scale and Beck Depression Scale scores of the caregivers in the intervention group after practicing progressive muscle relaxation, but this decrease was not statistically significant when the intervention and control groups were compared.

CONCLUSION: This study showed that there was a statistically significant decrease in the caregiver burden and level of depression among the caregivers in the intervention group after progressive muscle relaxation exercises, but that there was no statistically significant difference when the intervention and control groups were compared.

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Integrative Pediatrics: Successful Implementation of Integrative Medicine in a German Hospital Setting-Concept and Realization.

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Complementary and Alternative Medicine (CAM) has not been systematically institutionalized in pediatric hospital care in Germany so far. For the responsible implementation and systematic evaluation of CAM in pediatric care, a model project was initialized in three different pediatric hospitals in Germany, one of them being the "Kinderkrankenhaus St. Marien" in Landshut, Germany. During this project, a concept of the implementation process was developed based on clinical care, teaching, and scientific evaluation. A project group was formed in St. Marien, which included leaders of the hospital, physicians, nurses, and physiotherapists. Over a period of three years, pediatric treatment modalities of the CAM-spectrum were systematically integrated into routine pediatric care and a new integrative medicine department was established. CAM is now being applied in an inpatient as well as outpatient setting, in addition to conventional medical treatments. The modalities now applied include Traditional Chinese Medicine (TCM), relaxation, hypnosis, reflexology, wraps and poultices, aromatherapy, homeopathy, yoga, and herbal medicine. Studies were initiated in some areas. The process and concept leading up to this successful implementation will be described in this article. We show that with motivated team players and structured proceedings, implementation of integrative medicine in a children’s hospital can be successful.

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Effects of relaxing therapies on patient's pain during percutaneous interventional radiology procedures.

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BACKGROUND: Interventional radiology procedures in cancer patients cause stress and anxiety. Our objective was to relate our experience in the use of sophrology techniques during interventional radiology procedures and evaluate the effects on patient's pain and anxiety.

METHODS: We present a prospective observational study on 60 consecutive patients who underwent interventional radiology procedures in a context of oncologic management from September 2017 to March 2018. Forty-two patients were asked if they wished to benefit from the sophrology and hypnosis techniques during their procedure. A control group was also made including 18 patients. Anxiety level and pain were evaluated using the visual analog scale (VAS) before and during procedures.

RESULTS: We observed a significant decrease in anxiety experienced by patients during interventional radiology procedures compared to before procedures in the sophrology group (P=3.318E-08), and a level of anxiety and pain during gestures inferior to that of the control group (P=2.035E-06 and 7.03E-05 respectively).

CONCLUSIONS: Relaxing therapies, such as sophrology and hypnosis, seems to be an interesting additional tool for the management of patients in interventional oncology, inducing a decrease of stress, pain, and anxiety in patients.

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CHANGES IN OXYTOCIN AND CORTISOL IN ACTIVE-ALERT HYPNOSIS: Hormonal Changes Benefiting Low Hypnotizable Participants.

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It is increasingly clear that oxytocin and cortisol play an intricate role in the regulation of behavior and emotions impacting health, relationships, and well-being. Their long-term, cross-generational effect makes them an important focus of the present study. This exploratory research examined changes in oxytocin and cortisol levels and their correlations with different phenomenological measures in both hypnotist and subject during active-alert hypnosis. The level of oxytocin increased whereas the level of cortisol decreased in the hypnotist. When comparing the oxytocin changes of subjects with their hypnotizability, those with low hypnotizability scores experienced an increase in oxytocin, and those with medium and high hypnotizability scores showed no change or decrease. This could explain why clients' hypnotizability is not considered an important factor during hypnotherapy.

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[2654]


Effects of a Brief Hypnosis Relaxation Induction on Subjective Psychological States, Cardiac Vagal Activity, and Breathing Frequency.

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This study investigated the effects of a brief hypnosis including relaxation suggestions on physiological markers of relaxation, cardiac vagal activity, and breathing frequency. Forty participants were tested in a within-subjects design. Participants listened to a recorded hypnosis session and to a nonhypnotic recording. No differences were found regarding cardiac vagal activity. Participants breathed significantly faster during the audio conditions (hypnosis and nonhypnotic recording) in comparison to resting measures. After hypnosis, subjective arousal was significantly lower and emotional valence was significantly more positive than after the nonhypnotic recording condition. The relaxing effects of hypnosis that includes relaxation suggestions appear to be located at the subjective level but not at the peripheral physiological level.

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Systematic Review of the Effectiveness of Hypnosis for the Management of Headache.

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Migraine is a complex neurological condition that causes a range of symptoms, the most common of which is a severe headache. The aim of this systematic review of the literature is to determine the efficacy of hypnosis in the treatment of migraine. A systematic search of 4 scientific databases was conducted using the primary search terms migraine, headache, hypnosis, and hypnotherapy. A total of 8 studies were identified that examined hypnotic techniques either alone or in combination with other nonpharmaceutical techniques, such as visual imagery, relaxation, and pain-displacement techniques. This study demonstrates that hypnotherapy and relaxation techniques are effective in reducing short- and long-term headache activity in migraine sufferers.

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A Comparison of the Efficacy of Acupuncture and Hypnotherapy in Patients With Migraine.

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This study investigated the effect of acupuncture, hypnotherapy, and pharmacotherapy in migraine treatments among 90 patients. They were divided into 3 groups of 30 persons each. Group 1, Group 2, and Group 3 were treated with acupuncture, hypnotherapy, and pharmacotherapy, respectively. Changes in the visual analog scale (VAS) and Migraine Disability Assessment (MIDAS) scores from baseline were monitored. Reductions in the percentages of the VAS and MIDAS scores at the end of the third month were significantly higher in the acupuncture and hypnotherapy groups than those of the pharmacotherapy group (p < .01). Acupuncture and hypnotherapy can be developed as treatment options alone as an equivalent to conventional treatment.

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Integrating Pediatric Hypnosis with Complementary Modalities: Clinical Perspectives on Personalized Treatment.


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While pediatric integrative medicine (PIM) emphasizes an "evidence-based practice using multiple therapeutic modalities"; paradoxically, literature reviews examining the prevalence and/or efficacy of such mind-body approaches often address PIM modalities separately. Such contributions are relevant, yet documentation of how to deliver combined complementary approaches in children and youth are scarce. Nevertheless, integrative practitioners in clinical practice routinely mix approaches to meet the individual needs of each patient. Best practices are flexible, and include blending and augmenting services within the same session, and/or connecting modalities sequentially for an incremental effect, and/or referring to outside resources for additional interventions. Resonating with integrative medicine's definition, this article's goal is to demonstrate paradigms that "bring together complementary approaches in a coordinated way within clinical practice" by linking clinical hypnosis, the trail-blazer modality in PIM's history, with mindfulness, biofeedback, acupuncture, and yoga. Following the consideration of the overlap of guided imagery with hypnosis and an abridged literature report, this clinical perspective considers the selection of modalities within a collaborative relationship with the child/teen and parents, emphasizing goodness-of-fit with patients' contexts, e.g., symptoms, resources, interests, goals, and developmental stage. Case vignettes illustrate practical strategies for mixing approaches.

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[2658]


Complementary and Alternative Medicine in Hospice and Palliative Care: A Systematic Review.

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CONTEXT: The aim of palliative care is to improve quality of life for patients with serious illnesses by treating their symptoms and adverse effects. Hospice care also aims for this for patients with a life expectancy of six months or less. When conventional therapies do not provide adequate symptom management or produce their own adverse effects, patients, families, and caregivers may prefer complementary or alternative approaches in their care. OBJECTIVES: The objectives of this study were to evaluate the available evidence on the use of complementary or alternative medicine (CAM) in hospice and
palliative care and to summarize their potential benefits.

METHODS: A defined search strategy was used in reviewing literature from major databases. Searches were conducted using base terms and the symptom in question. Symptoms included anxiety, pain, dyspnea, cough, fatigue, insomnia, nausea, and vomiting. Studies were selected for further evaluation based on relevancy and study type. References of systematic reviews were also assessed. After evaluation using quality assessment tools, findings were summarized and the review was structured based on Preferred Reporting Items for Systematic Reviews and Meta-Analyses guidelines.

RESULTS: Out of 4682 studies, 17 were identified for further evaluation. Therapies included acupressure, acupuncture, aromatherapy massage, breathing, hypnotherapy, massage, meditation, music therapy, reflexology, and reiki. Many studies demonstrated a short-term benefit in symptom improvement from baseline with CAM, although a significant benefit was not found between groups.

CONCLUSION: CAM may provide a limited short-term benefit in patients with symptom burden. Additional studies are needed to clarify the potential value of CAM in the hospice or palliative setting.

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Investigation on the Neural Mechanism of Hypnosis-Based Respiratory Control Using Functional MRI.

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Respiratory control is essential for treatment effect of radiotherapy due to the high dose, especially for thoracic-abdomen tumor, such as lung and liver tumors. As a noninvasive and comfortable way of respiratory control, hypnosis has been proven effective as a psychological technology in clinical therapy. In this study, the neural control mechanism of hypnosis for respiration was investigated by using functional magnetic resonance imaging (fMRI). Altered spontaneous brain activity as well as neural correlation of respiratory motion was detected for eight healthy subjects in normal state (NS) and hypnosis state (HS) guided by a hypnotist. Reduced respiratory amplitude was observed in HS (mean ± SD: 14.23 ± 3.40 mm in NS, 12.79 ± 2.49 mm in HS, p=0.0350), with mean amplitude deduction of 9.2%. Interstate difference of neural activity showed activations in the visual cortex and cerebellum, while deactivations in the prefrontal cortex and precuneus/posterior cingulate cortex (PCu/PCC) in HS. Within these regions, negative correlations of neural activity and respiratory motion were observed in visual cortex in HS. Moreover, in HS, voxel-wise neural correlations of respiratory amplitude demonstrated positive correlations in cerebellum anterior lobe and insula, while negative correlations were shown in the prefrontal cortex and sensorimotor area. These findings reveal the involvement of cognitive, executive control, and sensorimotor processing in the control mechanisms of hypnosis for respiration, and shed new light on hypnosis performance in interaction of psychology, physiology, and cognitive neuroscience.

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Clinical Hypnosis Today.

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Freud's objections to hypnosis have little relevance to modern approaches. Contemporary hypnosis has evolved beyond direct suggestion to include the suspending of critical thinking in order to allow the patient's unconscious mind to take over and make internal changes. Aspects of the author's experiences as a patient, trainee, and practitioner are noted by way of dispelling some common misunderstandings. The growing profession of hypnosis has support from research in neuroscience. A rapprochement with psychoanalysis may be possible.

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Mind-Body Therapies in Childhood Cancer.

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PURPOSE OF REVIEW: Advances in the field of Pediatric Oncology have led to increased survival rates in children with cancer, and addressing the emotional well-being and quality of life of this specific population is a critical component of care. Mind-body therapies (MBTs) are an adjuvant modality of treatment that appears to have a positive impact on patient quality of life, patient mental health, and family perceptions toward illness. In this review, we describe several evidence-based MBTs, such as art therapy, meditation, prayer, music therapy, hypnosis and relaxation techniques, their use, and our personal experience with MBT in our institution.

RECENT FINDINGS: Current data suggests that MBTs have been effective in decreasing symptoms related to oncologic pathology in children. Based on experience in our institution, the administration of these therapies can be expanded with the use of technology and also foster family inclusion in care, which can lead to improved quality of life for the patient and family. Further studies are warranted to ascertain the effects of MBTs in childhood cancer. MBTs are increasingly important in the care of youth with oncologic disease. It is necessary to increase the quantity and quality of research for the selection and inclusion of MBT in this population.

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Effectiveness of autogenic training on headache: A systematic review.

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PURPOSE: To investigate the impact of length of autogenic training (AT) use, alone and with the addition of adjunct treatments, on intensity and duration of primary headache in adults age 19 and older.

METHODS: We searched articles published in English and Korean from 1926 to 2016. A search of seven domestic and foreign databases was conducted from September 25, 2016 to December 30, 2016 using the search terms "autogenic training," "autogen," "relaxation," and "headache." The search was documented according to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA). The search yielded a total of 262 papers; a multi-step screening and selection process ultimately yielded six articles of randomized controlled trials (RCTs) for the systematic review. Cochrane's Risk of Bias Tool was used to evaluate the quality of the selected papers.

RESULTS: Five of the six studies demonstrated statistically significant reduction in headache by AT-only or biofeedback-assisted AT. The reviewed studies varied in characteristics of subjects, length of autogenic training and practice, use of adjunct therapies, and use of headache measures.

CONCLUSIONS: The small number of studies retrieved in this review, with their variations in AT interventions used, in AT training/practice time, and headache measures used, did not facilitate rigorous evaluation of the effectiveness of specific AT approaches nor of the optimum length of AT practice for reduction of headache. More research is needed on the effectiveness of AT-only for headache, the most effective duration of autogenic training and practice, and the type(s) of headache for which it is most effective.
Progressive muscle relaxation (PMR) after Jacobson has been used for migraine prophylaxis since the early 1970s. Migraine patients are assumed to have an enhanced autonomic arousal which can be counterbalanced by systematic relaxation. Relaxation techniques are thought to reduce the activation level, to alter cortical pain processing and to enhance activation in pain-reducing cortical structures in the periaqueductal grey matter. Meta-analyses could show PMR to be just as efficacious as pharmacological treatment options. A beneficial effect can only arise if regular daily exercises of 5-25 min are performed and the exercises are transferred into the daily routine. This review critically summarizes the empirical findings concerning the effects of PMR on migraine. A lack of recent research on this topic was determined. In a study by this group 50 migraine patients and 46 healthy controls were examined. It could be shown that in addition to the clinical efficacy on migraine frequency, changes in cortical information processing, measured by means of the evoked potential contingent negative variation (CNV) could also be determined. The initially increased CNV amplitude became normalized after regular PMR training in migraine patients. With the review of PMR studies on migraine prophylaxis and the results of our own study it could be shown that PMR is an efficacious non-pharmacological treatment option for migraine prophylaxis. In addition to its clinical effects, alterations in cortical stimulation processing in terms of a normalization of the CNV could be documented.

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[Placebo and nocebo effects on itch : Methodological and clinical implications].
[Article in German]

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Patients often experience positive (placebo) or negative (nocebo) treatment effects due to the positive or negative expectations they have about the treatment. Placebo and nocebo effects have only relatively recently received attention for itch. Experimental studies indicate that, in line with research in other areas, such as pain, learning via verbal suggestion and conditioning plays a key role in placebo and nocebo effects on itch. Results on contagious itch emphasize the role of observational learning and suggest that itch sensations might be particularly susceptible to suggestion and therefore placebo and nocebo effects. Substantial itch reductions in the placebo arms of clinical trials suggest that placebo effects are also important for clinical practice. In this article, an overview is given of how placebo and nocebo effects on itch can
Efficacy of hypnosis on pain, wound-healing, anxiety, and stress in children with acute burn injuries: a randomized controlled trial.


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No randomized controlled trial has investigated the efficacy of hypnosis for reducing pain and improving wound-healing in children with burns. This randomized controlled trial aimed to investigate whether hypnosis decreases pain, anxiety, and stress and accelerates wound-healing in children undergoing burn wound procedures. Children (4-16 years) with acute burns presenting for their first dressing change were randomly assigned to a Hypnosis Group who received hypnosis plus standard care or a Standard Care Group who received standard pharmacological and nonpharmacological intervention. Repeated measures of pain intensity, anxiety, stress, and wound-healing were taken at dressing changes until ≥95% wound re-epithelialization. Data for 62 children were analyzed on an intent-to-treat basis using Generalized Estimating Equations (n = 35 Standard Care Group; n = 27 Hypnosis Group). An effect on the primary outcomes of pain and wound healing was not supported (self-reported pain intensity largest Mean Difference [MD] = -0.85 [95% confidence interval [CI]: -1.91 to 0.22], P = 0.12; MD for re-epithelialization = -0.46 [95% CI: -4.27 to 3.35], P = 0.81). Some support was found for an effect on the secondary outcomes of preprocedural anxiety (MD = -0.80 [95% CI: -1.50 to -0.10], P = 0.03 before the second dressing change) and heart rate as a measure of stress (MD = 0.15 [95% CI: -0.71 to 2.02], P = 0.01 and MD = -0.20 [95% CI: -2.85 to 2.45], P = 0.02 before and after the third dressing change). Hypnosis may be effective for decreasing preprocedural anxiety and heart rate in children undergoing repeated pediatric wound care procedures but not for reducing pain intensity or accelerating wound healing.

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PMID: 29939959 [Indexed for MEDLINE]
BACKGROUND: Recent research on psychedelics and hypnosis demonstrates the value of both methods in the treatment of a range of psychopathologies with overlapping applications and neurophenomenological features. The potential of harnessing the power of suggestion to influence the phenomenological response to psychedelics toward more therapeutic action has remained unexplored in recent research and thereby warrants empirical attention.

AIMS: Here we aim to elucidate the phenomenological and neurophysiological similarities and dissimilarities between psychedelic states and hypnosis in order to revisit how contemporary knowledge may inform their conjunct usage in psychotherapy.

METHODS: We review recent advances in phenomenological and neurophysiological research on psychedelics and hypnosis, and we summarize early investigations on the coupling of psychedelics and hypnosis in scientific and therapeutic contexts.

Results/outcomes: We highlight commonalities and differences between psychedelics and hypnosis that point to the potential efficacy of combining the two in psychotherapy. We propose multiple research paths for coupling these two phenomena at different stages in the preparation, acute phase and follow-up of psychedelic-assisted psychotherapy in order to prepare, guide and integrate the psychedelic experience with the aim of enhancing therapeutic outcomes.

CONCLUSIONS/INTERPRETATION: Harnessing the power of suggestion to modulate response to psychedelics could enhance their therapeutic efficacy by helping to increase the likelihood of positive responses, including mystical-type experiences.

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[2667]

Review of neuroimaging studies related to pain modulation.

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BACKGROUND AND PURPOSE: A noxious stimulus does not necessarily cause pain. Nociceptive signals arising from a noxious stimulus are subject to modulation via endogenous inhibitory and facilitatory mechanisms as they travel from the periphery to the dorsal horn or brainstem and on to higher brain sites. Research on the neural structures underlying endogenous pain modulation has largely been restricted to animal research due to the invasiveness of such studies (e.g., spinal cord transaction, brain lesioning, brain site stimulation). Neuroimaging techniques (e.g., magnetoencephalography (MEG), positron emission tomography (PET) and functional magnetic resonance imaging (fMRI)) provide non-invasive means to study neural structures in humans. The aim is to provide a narrative review of neuroimaging studies related to human pain control mechanisms.

METHODS: The approach taken is to summarise specific pain modulation mechanisms within the somatosensory (diffuse noxious inhibitory controls, acupuncture, movement), affective (depression, anxiety, catastrophizing, stress) and cognitive (anticipation/placebo, attention/distraction, hypnosis) domains with emphasis on the contribution of neuroimaging studies.
RESULTS AND CONCLUSIONS: Findings from imaging studies are complex reflecting activation or deactivation in numerous brain areas. Despite this, neuroimaging techniques have clarified supraspinal sites involved in a number of pain control mechanisms. The periaqueductal grey (PAG) is one area that has consistently been shown to be activated across the majority of pain mechanisms. Activity in the rostral ventromedial medulla known to relay descending modulation from the PAG, has also been observed both during acupuncture analgesia and anxiety-induced hyperalgesia. Other brain areas that appear to be involved in a number of mechanisms are the anterior cingulate cortex, prefrontal cortex, orbitofrontal cortex and nucleus accumbens, but their exact role is less clear.

IMPLICATIONS: Neuroimaging studies have provided essential information about the pain modulatory pathways under normal conditions, but much is still to be determined. Understanding the mechanisms of pain control is important for understanding the mechanisms that contribute to failed pain control in chronic pain. Applying fMRI outside the brain, such as in the trigeminal nucleus caudalis of the spinothalamic pathway and in the dorsal horn of the spinal cord, and coupling brain activity with activity at these sites may help improve our understanding of the function of brain sites and shed light on functional connectivity in the pain pathway. © 2011 Scandinavian Association for the Study of Pain. Published by Elsevier B.V. All rights reserved.

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THE EFFECTIVENESS OF HYPNOTHERAPY IN THE TREATMENT OF CHINESE PSYCHIATRIC PATIENTS.
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This is a prospective randomized, controlled study of patients suffering from anxiety, depression, or mixed anxiety-depressive disorder attending a hypnotherapy clinic for 8 weeks. Participants were assessed with various clinical scales and randomly assigned to either the study or control group. The study group received 5 to 7 sessions of hypnotherapy through the 8-week period, whereas the control group received conventional psychiatric treatment. All patients’ clinical conditions were reassessed at the end of the 8th week. Comparing study and control groups at the end of the 8th week, there was improvement in the study group in the scores of an array of clinical scales. Such satisfactory results illustrate the effectiveness of hypnotherapy in relieving anxiety and depressive symptoms.

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HYPNOTIZABILITY AND PAIN MODULATION: A Body-Mind Perspective.
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The study investigated whether the cardiac activity and cognitive-emotional traits sustained by the behavioral inhibition/activation system (BIS/BAS) may contribute to hypnotizability-related pain modulation. Nociceptive stimulation (cold-pressor test) was administered to healthy participants with high (highs) and low (lows) hypnotizability in the presence and absence of suggestions for analgesia. Results showed that heart rate increased abruptly at the beginning of nociceptive stimulation in all participants. Then, only in highs heart rate decreased for the entire duration of hand immersion. During stimulation with suggestions of analgesia, pain threshold negatively correlated with heart rate. BIS/BAS activity partially accounted for the observed hypnotizability-related differences in the relation between cardiac interoception and pain experience.

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THE MCCARTHY TEAPOT TEST.

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Expectancy has often been declared to be the single most important factor in the success or failure of any hypnotic intervention. Given this truism that expectancy is so crucial, this article shows how a potential patient's expectancy can be influenced and lowered or raised by the words and actions of the therapist. The essence of this innovative, simple, and quick method is that it is an expectancy-enhancement procedure that masquerades as a hypnotizability assessment. What makes this method powerful is the author's emphasis on the theatrical components of therapist performance (it even includes acting instructions). No one fails this test.

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BILATERAL ELECTRODERMAL ACTIVITY IN THE ACTIVE-ALERT HYPNOTIC INDUCTION.

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Shifts in hemispheric dominance were previously proposed to play a role in hypnosis. Participants (N=32) were exposed to an active-alert hypnosis induction and a music-control condition while electrodermal activity was registered bilaterally, providing information on alterations in hemispheric dominance. The results suggest that highly hypnotizable participants show a shift to right-sided and low hypnotizable participants demonstrated a shift to left-sided electrodermal dominance in response to the induction, whereas no change in laterality is present in the control condition. Additionally, the authors found that self-reported hypnosis experiences were also associated with a shift in laterality. These results underline the importance of the shift to right hemispheric activity in hypnosis and underscore the importance of hemispheric changes in shaping subjective experience.
FLOW AND HYPNOTIZABILITY IN A COLLEGE STUDENT POPULATION.

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The concept of "flow" refers to a state of heightened attention and concentration in a current task. Benefits of entering a flow state may include the ability to optimize performance by reducing conscious cognitive processing. Various theories have suggested that flow is a state of consciousness similar to that of hypnosis. The present study addresses the relationship between flow and hypnotizability. In a college sample, a significant correlation was found between flow experience and hypnotizability, suggesting that those high in hypnotizability are more likely to experience flow states during hypnosis. In addition, results suggest that hypnosis may be used to develop higher frequency of flow states, especially in those with low dispositional flow.

USE OF NEUROFEEDBACK AND MINDFULNESS TO ENHANCE RESPONSE TO HYPNOSIS TREATMENT IN INDIVIDUALS WITH MULTIPLE SCLEROSIS: Results From a Pilot Randomized Clinical Trial.

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This pilot study evaluated the possibility that 2 interventions hypothesized to increase slower brain oscillations (e.g., theta) may enhance the efficacy of hypnosis treatment, given evidence that hypnotic responding is associated with slower brain oscillations. Thirty-two individuals with multiple sclerosis and chronic pain, fatigue, or both, were randomly assigned to 1 of 2 interventions thought to increase slow wave activity (mindfulness meditation or neurofeedback training) or no enhancing intervention, and then given 5 sessions of self-hypnosis training targeting their presenting symptoms. The findings supported the potential for both neurofeedback and mindfulness to enhance response to hypnosis treatment. Research using larger sample sizes to determine the generalizability of these findings is warranted.
Hypnosis for burn wound care pain and anxiety: A systematic review and meta-analysis.

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BACKGROUND: Evidence from clinical trials suggests psychological interventions should be considered as an adjunct to medications.

OBJECTIVE: The purpose of this systematic review and meta-analysis was to evaluate the effectiveness of clinical hypnosis on pain, anxiety and medication needs during wound care in adults suffering from a burn injury.

DATA SOURCES: Medline, PsychINFO, CINAHL, Embase, ISI, SCOPUS, Cochrane, and Proquest databases were searched for randomized controlled trials comparing hypnosis to other interventions during dressing change in adult patients.

DATA SYNTHESIS: Two independent reviewers extracted relevant articles and assessed their methodological quality. Only six studies met the inclusion criteria and were described in detail. Available data was pooled with Revman 5.3.

RESULTS: For the primary outcome, we found a statistically significant difference in pain intensity ratings favoring hypnosis (MD=-8.90, 95% CI -16.28, -1.52). For the secondary outcomes, there was a statistically significant difference in anxiety ratings favoring hypnosis (MD=-21.78, 95% CI -35.64, -7.93) and no difference in medication usage (MD=-0.07, 95% CI -0.32, 0.17).

CONCLUSION: These results suggest that hypnosis reduces pain intensity and anxiety ratings in adults undergoing burn wound care. However, because of the limitations discussed, clinical recommendations are still premature.

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[2675]


Hey Wait! I Just Thought of Something Else! Advaita and Clinical Hypnosis.

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While much has been made of the value of Buddhist mindfulness in clinical treatment, little attention has been given over to its parallels, if not antecedents in Hindu philosophy. Buddhist traditions in the vipassana, ch'an and zen tradition, and the practices associated, find their roots in Advaita philosophy and practice. This article looks at the useful/effective nature of Advaita and its specific application in clinical hypnosis. The linkage between traditional wisdom sources, psychological investigations of the self and contemporary hypnosis is articulated in the article which follows, and a case example, regarding clinical application, is provided.

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[2676]
Mindful Self-Hypnosis for Self-Care: An Integrative Model and Illustrative Case Example.

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The combination of mindfulness and self-hypnosis could provide a tool that is easily implemented by individuals who want to care for their well-being in times of high stress. Each discipline has been shown to be effective in relieving stress, and integration could further facilitate change while creating a tool that is highly accessible. There are many similarities between the two practices, such as focusing of attention and the emphasis on mind-body connection. However, important distinctions in psychological (e.g., self-monitoring) and neural (e.g., functional connectivity) elements are noted. A theory of how integrated mindful self-hypnosis may create change is presented. An illustrative case example of mindful self-hypnosis practice and a self-hypnosis transcript are provided.

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Mindfulness-Based Cognitive Hypnotherapy and Skin Disorders.

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Mindfulness-based cognitive hypnotherapy integrates mindfulness, cognitive-behavioral therapy, and hypnotherapy to improve physical, emotional, mental, and/or spiritual aspects of skin disorders. Meditation, including mindfulness meditation, and hypnosis both utilize trance phenomena to help produce focalization and specific improvements in skin disorders through psycho-neuro-endocrine-immunologic mechanisms. Hypnosis, cognitive hypnotherapy, focused meditation, and mindfulness meditation are discussed with respect to improving various skin disorders including acne, acne excoriée, alopecia areata, atopic dermatitis, congenital ichthyosiform erythroderma, dyshidrotic dermatitis, erthyema nodosum, erythromelalgia, furuncles, glossodynia, herpes simplex, hyperhidrosis, ichthyosis vulgaris, lichen planus, neurodermatitis, nummular dermatitis, postherpetic neuralgia, prurigo nodularis, pruritus, psoriasis, rosacea, trichotillomania, urticaria, verruca vulgaris, and vitiligo. Their integration into mindfulness-based cognitive hypnotherapy is then discussed and illustrated with improvement in a patient with systemic lupus erythematosus.

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The Association Between Mindfulness and Hypnotizability: Clinical and Theoretical Implications.

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Mindfulness-based interventions and hypnosis are efficacious treatments for addressing a large number of psychological and physical conditions, including chronic pain. However, there continues to be debate surrounding the relative uniqueness of the theorized mechanisms of these treatments—reflected by measures of mindfulness facets and hypnotizability—with some concern that there may be so much overlap as to make the mechanism constructs (and, therefore, the respective interventions) redundant. Given these considerations, the primary aim of the current study was to examine the degree of unique versus shared variance between two common measures of mindfulness facets and hypnotizability: the Five Facet Mindfulness Questionnaire and the Stanford Hypnotic Clinical Scale. A cross-sectional survey was conducted with a sample of (N = 154) veterans with heterogeneous chronic pain conditions. Bivariate Pearson correlations were used to examine the associations between the target scales. Results showed that the correlations between the Five Facet Mindfulness Questionnaire scales and Stanford Hypnotic Clinical Scale total score were uniformly weak, although significant negative correlations were found between mindfulness facets of observe and nonreact with hypnotizability (ps < 0.05). Thus, not only are the mindfulness and hypnotizability constructs unique, but when significantly associated, hypnotic suggestibility corresponds with a tendency to be less mindful. These findings have important implications for future research aimed toward matching patients to the treatment most likely to be of benefit, and suggest that matching patients on the basis of these theoretically derived "unique" moderators may hold potential.

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[2679]

Stress and psoriasis.
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The links between psoriasis and stress are complex. This article proposes a review of the literature on the relationship between stress and psoriasis. In 31-88% of cases, patients report stress as being a trigger for their psoriasis. There was also a reported higher incidence of psoriasis in subjects who had a stressful event the previous year, suggesting that stress may have a role in triggering the disease in predisposed individuals. Stress is also a consequence of psoriasis outbreaks. Understanding the role of stress makes it appropriate to target stress when proposing treatment to patients with psoriasis. Several controlled studies have demonstrated that relaxation, hypnosis, biofeedback, and behavioral and cognitive stress management therapies have been effective in people with psoriasis.

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[2680]

Anxiety-Related Bleeding and Thrombosis.
Anxiety, a normal response to stressful situations, is characterized by increased levels of factor VIII, fibrinogen, and von Willebrand factor, and by enhanced platelet aggregability. One would expect acute anxiety to be a prothrombotic state, but since acute mental stress induces tissue plasminogen activator (tPA) release from endothelial and chromaffin cells, fibrinolysis counteracts procoagulant stimuli. It could be said that procoagulant changes accompanying the fight-or-flight response reduce the risk of bleeding in case of potential injuries, while activation of fibrinolysis counteracts activation of hemostasis to prevent intravascular thrombus formation before injuries occur. Acutely anxious patients are prone to bleeding or thrombosis when the balance between hypercoagulation and hyperfibrinolysis is disturbed. Acute anxiety not only increases the risk of bleeding in hemophilia or von Willebrand disease, but many reports have shown that anxiolytic interventions such as hypnosis are effective in controlling bleeding in hemostatic disorders. The pathogenesis of cardiovascular and thrombotic diseases in highly anxious patients is multifactorial. An important element is α-adrenergic vasoconstriction, which increases viscosity due to leakage of intravascular fluid into the interstitium, and also causes hypertension, favoring plaque rupture. Paradoxical as it may seem, over secretion of tPA may increase cardiovascular risk. This is because tPA degrades the extracellular matrix, causing vascular stiffness that increases cardiac workload, and thus oxygen requirements. Anxious patients with conditions associated with increased plasminogen activator inhibitor-1 levels, such as depression or postprandial hyperinsulinemia, are at high risk of thrombosis. Postprandial hyperinsulinemia may result from consumption of high-carbohydrate foods, considered anxiolytic, combined with a sedentary life, which is common among anxious individuals. Preliminary evidence suggests that high anxiety combined with either depression or a lifestyle that results in hyperinsulinemia has an important role in the pathogenesis of thrombotic events currently classified as unprovoked.
(guitar) or mismatched it (rubber). In Experiment 2, participants studied Spanish words where the English translation either matched their expectations (pariente-relative) or mismatched it (carpeta-folder). Both experiments show that errors benefit memory to the extent that they overlap semantically with targets. Results are discussed in terms of the retrieval benefits of activating related concepts during learning.

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[2682]

Hypnosis Enhances the Effects of Pain Education in Patients With Chronic Nonspecific Low Back Pain: A Randomized Controlled Trial.

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The potential benefits of combining pain education (PE) with clinical hypnosis (CH) has not yet been investigated in individuals with chronic pain. A total of 100 patients with chronic nonspecific low back pain were randomized to receive either: 1) PE alone, or 2) PE with CH. Outcomes were collected by a blinded assessor at 2 weeks and 3 months after randomization. The primary outcomes were average pain intensity, worst pain intensity (both assessed with 11-point numeric rating scales), and disability (24-item Roland Morris Disability Questionnaire) at 2 weeks. At 2 weeks, participants who received PE with CH reported lower worst pain intensity (mean difference = 1.35 points, 95% confidence interval [CI] = .32-2.37) and disability (mean difference = 2.34 points, 95% CI = .64-4.61), but not average pain intensity (mean difference = .67 point, 95% CI = -.27 to 1.62), relative to participants who received PE alone. PE with CH participants also reported more global perceived benefits at 2 weeks (mean difference = -1.98 points, 95% CI = -3.21 to -.75). At 3 months, participants who received PE with CH reported lower worst pain intensity (mean difference = 1.32 points, 95% CI = .29-2.34) and catastrophizing (mean difference = 5.30 points, 95% CI = 1.20-9.41). No adverse effects in either treatment condition were reported. To our knowledge, this is the first trial showing that additional use of hypnosis with PE results in improved outcomes over PE alone in patients with chronic nonspecific low back pain.PERSPECTIVE: This study provides evidence supporting the efficacy of another treatment option for teaching patients to self-manage chronic low back pain that has a relatively low cost and that can be offered in groups.

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[2683]


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BACKGROUND/PURPOSE: The Nuss procedure to correct pectus excavatum is associated with severe postoperative pain. The purpose of this retrospective study was to compare pain management outcomes of thoracic epidural analgesia and continuous infusion of local anesthetic (CILA) with and without preoperative self-hypnosis training (SHT) after Nuss procedure (4 treatment groups).

METHODS: Between February 2010 and December 2013, 24 of 53 adolescents who underwent Nuss procedure received SHT. Of these, 16 received thoracic epidural analgesia and 8 received CILA postoperatively. Of the 29 patients who did not receive SHT, 19 received thoracic epidural analgesia and 10 received CILA. All patients received intravenous patient-controlled opioid analgesia and intravenous nonsteroidal anti-inflammatory drugs (IVNSAIDs) and then were transitioned to oral opioids and NSAIDs. Postoperative mean and maximum pain scores, opioid (morphine equivalents) use and side effects, and hospital length of stay (LOS) were compared between groups.

RESULTS: Patients who received SHT reported lower mean (P = .0047) and maximum (P = .0028) pain scores and used less morphine equivalents/hour over time (P = .046) compared to patients who did not receive SHT. Patients who received thoracic epidural analgesia reported lower mean (P = .0092) and maximum (P = .0083) postoperative pain scores and used more morphine equivalents/hour (P = .01) compared to those who received CILA. In addition, patients who received SHT and CILA had shorter LOS (P = .0013) than patients who received thoracic epidural analgesia without SHT.

CONCLUSIONS: SHT before pectus excavatum repair by Nuss procedure results in less postoperative pain and requires less morphine equivalents over time for postoperative pain management. Opioid-sparing CILA, when paired with SHT, results in shorter LOS.

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[2684]


Hypnosis as adjunct therapy to conscious sedation for venous access device implantation in breast cancer: A pilot study.

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BACKGROUND: Recent reviews support that hypnosis has great potential for reducing pain and anxiety during mini-invasive surgery. Here, we assessed the feasibility of hypnotic induction session as adjunct therapy in conscious sedation for venous access device implantation. Primary outcomes were safety and patient satisfaction.

METHODS: Thirty consecutive women with breast cancer were proposed adjunct of hypnosis before implantation under conscious sedation (midazolam: 0.5 mg ± bolus of Ketamin: 5 mg on demand) indicated for chemotherapy. Self-hypnosis was programmed and guided by one of two trained anesthesiologists. Implantation was performed by one of two experimented surgeons. It consisted of blind subclavian implantation of Braun ST 305 devices using a percutaneous technique adapted from Selinger's procedure. Clinical data were prospectively collected and retrospectively analyzed. A comprehensive custom-made questionnaire recorded patient satisfaction.

RESULTS: In all, 30/30 patients consented to the procedure. The median age was 54 years (range: 35-77 years). The primary procedure was successful in 29/30. One case was converted into internal jugular vein access after a first attempt. Median length time of the implantation procedure in the operative room was 20 min (range: 10-60 min). Median length time in the recovery room preceding home discharge was 65 min (range: 15-185 min). None of the patients suffered complications. The satisfaction rate was ≥90%, 27/30 patients would get hypnosis in case of reimplantation if necessary and 27/30 would recommend this procedure to others.

CONCLUSION: Hypnosis under conscious sedation appears feasible and safe for port implantation under conscious sedation in cancer patients. Further studies would determine the exact value of hypnosis effectiveness.

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PMID: 29566587 [Indexed for MEDLINE]

INTRODUCTION: Preoperative anxiety may lead to medical and surgical complications, behavioral problems and emotional distress. The most common means of prevention are based on using medication and, more recently, hypnosis. The aim of our study was to determine whether a virtual reality (VR) program presenting natural scenes could be part of a new therapy to reduce patients' preoperative anxiety.

MATERIALS AND METHODS: Our prospective pilot study consisted of a single-blind trial in skin cancer surgery at the Henri-Mondor teaching hospital in France. In the outpatient surgery department, 20 patients with a score of >11 on the Amsterdam preoperative anxiety and information scale (APAIS) were virtually immersed into a natural universe for 5 minutes. Their stress levels were assessed.

Using virtual reality to control preoperative anxiety in ambulatory surgery patients: A pilot study in maxillofacial and plastic surgery.

Ganry L(1), Hersant B(2), Sidahmed-Mezi M(2), Dhonneur G(3), Meningaud JP(2).
before and after this experience by making use of a visual analog scale (VAS), by measuring salivary cortisol levels, and by determining physiological stress based on heart coherence scores.

**RESULTS:** The VAS score was significantly reduced after the simulation (\(P<0.009\)) as was the level of salivary cortisol (\(P<0.04\)). Heart coherence scores remained unchanged (\(P=0.056\)).

**DISCUSSION:** VR allows patients to be immersed in a relaxing, peaceful environment. It represents a non-invasive way to reduce preoperative stress levels with no side effects and no need for additional medical or paramedical staff. Our results indicate that VR may provide an effective complementary technique to manage stress in surgery patients. Randomized trials are necessary to determine precise methods and benefits.

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[2686]

Effects of progressive muscle relaxation training on sleep and quality of life in patients with pulmonary resection.

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**BACKGROUND:** The inadequate quality and nature of sleep is a commonly reported problem among hospitalized patients. The purpose of this study is to examine the effects of progressive muscle relaxation training program on sleep quality, sleep state, pain, and quality of life in patients who underwent pulmonary resection.

**METHODS:** Our study was planned as a single-blind prospective randomized controlled trial. The study was conducted on 26 patients who underwent surgery by using posterolateral thoracotomy method. Progressive muscle relaxation training were given to the training group with a therapist two times a day. Sleep quality, daytime sleeping, pain, and quality of life were respectively evaluated in the morning before the surgery and 1 week after the surgery by using Pittsburgh Sleep Quality Index, Epworth Sleepiness Scale, visual analogue scale, and Euro Quality of Life-5D (EQ-5D).

**RESULTS:** There is no significant difference between preoperative groups in the total Pittsburgh Sleep Quality Index, Epworth Sleepiness Scale, Euro Quality of Life-5D, and visual analogue scale scores (\(p > 0.05\)). The intra-group change in the study group showed a significant deterioration in the Euro Quality of Life-5D and visual analogue scale scores (\(p < 0.05\)). There was a significant deterioration in the total Pittsburgh Sleep Quality Index, Epworth Sleepiness Scale, EQ-5D, and visual analogue scale scores in the control group (\(p < 0.05\)). The Pittsburgh Sleep Quality Index, Epworth Sleepiness Scale, and Euro Quality of Life-5D scores showed significant improvements in the relaxation training group after treatment at 1 week (\(p < 0.05\)).

**CONCLUSIONS:** Progressive muscle relaxation prevents a decline in patient-reported sleep quality following pulmonary resection.

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[2687]
Techniques for nothingness: Debate over the comparability of hypnosis and Zen in early-twentieth-century Japan.

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This paper explores a debate that took place in Japan in the early twentieth century over the comparability of hypnosis and Zen. The debate was among the first exchanges between psychology and Buddhism in Japan, and it cast doubt on previous assumptions that a clear boundary existed between the two fields. In the debate, we find that contemporaries readily incorporated ideas from psychology and Buddhism to reconstruct the experiences and concepts of hypnosis and Buddhist nothingness. The resulting new theories and techniques of nothingness were fruits of a fairly fluid boundary between the two fields. The debate, moreover, reveals that psychology tried to address the challenges and possibilities posed by religious introspective meditation and intuitive experiences in a positive way. In the end, however, psychology no longer regarded them as viable experimental or psychotherapeutic tools but merely as particular subjective experiences to be investigated and explained.

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[2688]

Does a hypnosis session reduce the required propofol dose during closed-loop anaesthesia induction?: A randomised controlled trial.


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BACKGROUND: Hypnosis has a positive effect on peri-operative anxiety and pain.
OBJECTIVE: The objective of this study was to assess the impact of a formal deep hypnosis session on the consumption of propofol for anaesthetic induction using automated administration of propofol guided by the bispectral index (BIS) in a closed loop.

SETTING: Tertiary care centre in France from April 2014 to December 2015.
PATIENTS: Female adult patients scheduled for outpatient gynaecological surgery under general anaesthesia.
INTERVENTION: Before surgery, patients were randomised to receive either a deep hypnosis session or routine care. Anaesthetic induction was performed automatically by propofol without opioids and was assisted by the BIS in a closed loop.
MAIN OUTCOME MEASURES: The primary endpoint was the propofol dose required for anaesthesia induction, defined as a BIS less than 60 for at least 30s.
RESULTS: Data for 31 patients in the hypnosis group and 35 in the control group were analysed. There was no evidence of a difference in the mean required propofol dose for anaesthetic induction between the hypnosis and the control groups (2.06mgkg (95% confidence interval [1.68 to 2.43]) versus 1.79mgkg (95% CI [1.54 to 2.03]), P=0.25, respectively).
CONCLUSION: The current study, which was designed to determine the effect of a deep hypnosis session on anaesthesia induction using an automated tool for propofol administration, failed to detect a difference in the required dose of propofol.
INTRODUCTION: Fear of childbirth is a problematic mental health issue during pregnancy. But, effective interventions to reduce this problem are not well understood.

OBJECTIVES: To examine effective interventions for reducing fear of childbirth.

MATERIAL AND METHODS: The Cochrane Central Register of Controlled Trials, PubMed, Embase and PsycINFO were searched since inception till September 2017 without any restriction. Randomised controlled trials and quasi-randomised controlled trials comparing interventions for treatment of fear of childbirth were included. The standardized mean differences were pooled using random and fixed effect models. The heterogeneity was determined using the Cochran's test and I2 index and was further explored in meta-regression model and subgroup analyses.

RESULTS: Ten studies inclusive of 3984 participants were included in the meta-analysis (2 quasi-randomized and 8 randomized clinical trials). Eight studies investigated education and two studies investigated hypnosis-based intervention. The pooled standardized mean differences of fear for the education intervention and hypnosis group in comparison with control group were -0.46 (95% CI -0.73 to -0.19) and -0.22 (95% CI -0.34 to -0.10), respectively.

CONCLUSIONS: Both types of interventions were effective in reducing fear of childbirth; however our pooled results revealed that educational interventions may reduce fear with double the effect of hypnosis. Further large scale randomized clinical trials and individual patient data meta-analysis are warranted for assessing the association.

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Commonplace in the world of gaming or the cinema, virtual reality headsets have made their appearance in the hospital over recent years. A nursing team in Lyon shares its feedback regarding the benefit of these tools as a complement to the care provided to patients in a palliative care unit.

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Guided Imagery, Biofeedback, and Hypnosis: A Map of the Evidence [Internet].
VA Evidence-based Synthesis Program Reports.

The Veterans Health Administration (VHA) established the Integrative Health Coordinating Center (IHCC) with the Office of Patient Centered Care and Cultural Transformation (OPCC&CT) to aid in development and implementation of complementary and integrative health (CIH) strategies across the VHA. This topic was nominated by Dr. Ben Kligler, National Director of the Coordinating Center for Integrative Health (IHCC) and Laura Krejci, Associate Director of the Office of Patient Centered Care and Cultural Transformation (OPCC&CT). The purpose of this report is to provide a broad overview of the effectiveness of guided imagery, biofeedback, and hypnosis, and the health conditions for which these interventions have been examined in systematic reviews, in the form of evidence maps. The evidence maps will be used to guide and support decision-making about these treatment modalities in the VHA.

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Impact of Perioperative Hypnosedation on Postmastectomy Chronic Pain: Preliminary Results.
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Objectives: The main aim of this prospective nonrandomized study was to evaluate if mastectomy performed with perioperative hypnosedation led to a lower incidence of chronic pain compared with mastectomy under general anesthesia. Methods: Forty-two breast cancer patients who underwent mastectomy either under GA (GA group, n = 21) or HYP (HYP group, n = 21) associated with local and/or regional anesthesia were included. The type of adjuvant therapy as well as the number of reconstructive surgical procedures were well balanced between the 2 groups. The average age of the patients and the type of axillary surgery were also equivalent. Incidence of postmastectomy chronic pain, lymphedema, and shoulder range of motion (ROM) were evaluated after a mean 4-year follow-up. Results: The study shows a statistically significant lower incidence of postmastectomy chronic pain in HYP group (1/21, 1 patient out of 21 experiencing pain) compared with GA
group (9/21) with 9 patients out of 21 experiencing pain (P = .008). ROM for shoulder was also less frequently affected in the hypnosedation group, as only 1 patient had decreased ROM, instead of 7 in the other group (P = .04).

Conclusions: Our study is the first to hint at the potential benefits of hypnosedation on postmastectomy chronic pain. Despite the limitations of this study (nonrandomized, small sample), preliminary results merit further study of hypnosedation.

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[2693]

Optimizing Expectations via Mobile Apps: A New Approach for Examining and Enhancing Placebo Effects.

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There is growing interest in interventions that enhance placebo responses in clinical practice, given the possibility that this would lead to better patient health and more effective therapy outcomes. Previous studies suggest that placebo effects can be maximized by optimizing patients’ outcome expectations. However, expectancy interventions are difficult to validate because of methodological challenges, such as reliable blinding of the clinician providing the intervention. Here we propose a novel approach using mobile apps that can provide highly standardized expectancy interventions in a blinded manner, while at the same time assessing data in everyday life using experience sampling methodology (e.g., symptom severity, expectations) and data from smartphone sensors.

Methodological advantages include: 1) full standardization; 2) reliable blinding and randomization; 3) disentangling expectation effects from other factors associated with face-to-face interventions; 4) assessing short-term (days), long-term (months), and cumulative effects of expectancy interventions; and 5) investigating possible mechanisms of change. Randomization and expectancy interventions can be realized by the app (e.g., after the clinic/lab visit). As a result, studies can be blinded without the possibility for the clinician to influence study outcomes. Possible app-based expectancy interventions include, for example, verbal suggestions and imagery exercises, although a large number of possible interventions (e.g., hypnosis) could be evaluated using this innovative approach.

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PMCID: PMC6554680
PMID: 31214057

[2694]


Professional Hypnosis Databank - page 860 of 889 - by Alberto Torelli, hypnologist
PURPOSE: It is usual for cancer patients to use complementary and alternative medicines (CAMs) and yet the literature evaluating their efficacy in cancer patients is very limited. The objective of the present study was to report on the nature, frequency of use, and patient-reported outcome of CAMs in a single-center study.

METHODS: All the consecutive patients treated between November 2017 and June 2018 at the Lucien Neuwirth Cancer Institute (France) were screened. Their reasons for using CAMs and their usage habits were collected. Patients evaluated their benefit.

RESULTS: Of the 209 patients screened, 200 patients were included. CAMs ranged from osteopathy, homeopathy, acupuncture, healing touch, magnetism, naturopathy, suction cups, Chinese medicine, reflexology, to hypnosis. CAMs were widely used (n = 166, 83%), the first being osteopathy (n = 99, 49.5%), the second homeopathy (n = 78, 39.0%), and finally acupuncture (n = 76, 38.0%). Whatever the CAM, high satisfaction rates were reported (median satisfaction: 61-81%). CAMs were mainly used to prevent/treat side effects of anticancer treatments (81.2% for healing touch), increase well-being (55.4% for naturopathy), improve the immune system (16.9% for homeopathy), and treat cancer (n = 3, 5.1% for homeopathy). Patients could easily consider using CAMs, as up to 50.8% would have accepted a consultation.

CONCLUSIONS: The reasons for using CAMs differed among patients. They praised CAMs and kept asking for more information although there is limited evidence about their efficacy in the literature. Thus, prospective randomized controlled trials exploring the safety and efficacy of CAMs in cancer patients are needed.

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INTRODUCTION: After being discarded from hospitals due to its lack of scientific evidence, medical hypnosis is once more in the spotlight thanks to neuroscience and medical imaging, which have proven its specificity. Medical hypnosis is currently enjoying real enthusiasm, and now the doors are opening not only to medical and surgical units but also to our orthodontic clinics.

MATERIALS AND METHODS: This article defines hypnosis and its different levels of application and the required techniques. It also explores all the different fields in which it can be used in orthodontic treatment.

DISCUSSION: Hypnosis can be applied from the very first contact with the patient and can be useful and therapeutic at every step of the process. It is useful to think of it in our discipline as a treatment in its own right contributing to
Addressing Pain With Inpatient Integrative Medicine at a Large Children's Hospital.


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BACKGROUND: Pediatric integrative medicine (IM) includes the use of therapies not considered mainstream to help alleviate symptoms such as pain and anxiety. These therapies can be provided in the inpatient setting.

METHODS: This 10-week study involved the integration of acupuncture, biofeedback, clinical hypnotherapy, guided imagery, meditation, and music therapy to address pain in children admitted to a large US children's hospital.

RESULTS: Of 51 patients enrolled, 60% of the patients, 66% of their mothers, and 56% of their fathers used CAM (complementary and alternative medicine) in the preceding 1 year. Although 51 families requested integrative therapies, only 18 patients received them because of inadequate provider availability. All recorded pain scores improved with integrative therapies. One parent reported a possible side effect of irritability in the child after clinical hypnotherapy while 5 children reported opiate side effects. All participating families interviewed responded that IM services helped their child's pain and helped their child's mood, and that our hospital should have a permanent IM consult service.

CONCLUSION: Integrative therapies can be helpful to address pain without significant side effects. Further studies are needed to investigate the integration, cost, and cost-effectiveness of integrative therapies in pediatric hospitals.

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Responsiveness to suggestions while hypnotized is termed hypnotic susceptibility. An association between reaction time and hypnotic susceptibility has been demonstrated, but whether distinct changes in brain activity accompany this relationship remains unclear. We investigated the effect of hypnotic susceptibility on the speed of information processing and motor cortical preparatory activity. Twenty-one "low" (LowHS) and fifteen "high" (HighHS) hypnotically susceptible right-handed participants performed precued simple (SRT) and choice (CRT) reaction time key-press tasks under hypnotized and non-hypnotized conditions. Force and surface electromyography data were recorded from left and right index fingers. The contingent negative variation (CNV) was derived from electroencephalography data. Mean reaction time and premotor time was shorter in HighHS participants than LowHS participants for both simple and choice reaction time tasks. HighHS participants in the hypnotized state performed fewer errors than HighHS participants in the non-hypnotized state and LowHS participants in either state for the SRT task. HighHS participants made fewer errors overall than LowHS participants for the CRT task. Mean C3/C4 CNV amplitude was larger in HighHS than in LowHS participants. Furthermore, larger CNV amplitude was associated with shorter premotor time. Our findings indicate that shorter reaction time in the high hypnotically susceptible group is associated with a greater change in brain activity during motor preparation. One interpretation is that hypnotic susceptibility and neural mechanisms of arousal and selective attention are linked.

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[2698]


Time perception and the experience of agency in meditation and hypnosis.

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Mindfulness meditation and hypnosis are related in opposing ways to awareness of intentions. The cold control theory of hypnosis proposes that hypnotic responding involves the experience of involuntariness while performing an actually intentional action. Hypnosis therefore relies upon inaccurate metacognition about intentional actions and experiences. Mindfulness meditation centrally involves awareness of intentions and is associated with improved metacognitive access to intentions. Therefore, mindfulness meditators and highly hypnotizable people may lie at opposite ends of a spectrum with regard to metacognitive access to intention-related information. Here we review the theoretical background and evidence for differences in the metacognition of intentions in these groups, as revealed by chronometric measures of the awareness of voluntary action: the timing of an intention to move (Libet's "W" judgments) and the compressed perception of time between an intentional action and its outcome ("intentional binding"). We review these measures and critically evaluate their proposed connection to the experience of volition and sense of agency.

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[2699]

Despite the shift toward a biopsychosocial paradigm of medicine, many physicians and mental health professionals (MHPs) find it difficult to treat patients with psycho-somatic disorders. This situation is particularly troublesome due to the high prevalence of these conditions. Although progress has been made over the last few decades in understanding mechanisms underlying the mind-body relationship, disparities remain between research and its clinical implementation. One possible reason for this is the lack of a comprehensive, agreed-upon model that incorporates a biopsychosocial framework and is rooted in an understanding of the various psychobiological pathways. Such a model would enable better communication between physicians and MHPs, allowing them to provide coordinated, stratified treatment. In this paper, four archetypal case studies, together with standard care options are presented to illustrate the current state of affairs. A four-tiered conceptual model of mind-body interrelationships based on pathophysiological and psychopathological mechanisms is suggested to help optimize the treatment of somatic complaints. This Four-Cluster model consists of: (1) Organic Conditions: Structural, or degenerative processes that can affect mood and psychological responses but are not clearly exacerbated by stress. (2) Stress Exacerbated Diseases: Biological disorders with a distinct pathophysiology, such as inflammatory or autoimmune diseases, whose progression is clearly exacerbated by stress. (3) Functional Somatic Syndromes: Conditions wherein heightened sensitivity to stimuli together with hyper-reactivity of the autonomic system form a "vicious cycle" of mutually enhancing learning processes. These processes involve biological mechanisms, such as central sensitization and psychological mechanisms such as catastrophization and selective attention. (4) Conversion Disorder: Physical manifestations of psychological distress, expressed somatically. Symptoms are solely an expression of problems in patients' psychic functioning and are not caused by biological pathology. Finally, suggested management of the aforementioned case studies is presented through the lens of the Four-Cluster model and a proposed integration of our model with existing theories is discussed. As it is rooted in an understanding of psychobiological pathways of illness, the proposed model enables a new way to discern which form of mind-body interaction is manifesting in different diseases and proposes a way to coordinate treatment plans accordingly, to enhance the accuracy and efficacy of care.

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PMID: 30881314

[2700]


Complementary and Alternative Medicine for Menopause.

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Menopause is associated with problematic symptoms, including hot flashes, sleep problems, mood disorders, sexual dysfunction, weight gain, and declines in cognitive functioning. Many women seek complementary and alternative medicine (CAM) for symptom management. This article critically reviews the existing...
literature on CAM treatments most commonly used for menopausal symptoms. Electronic searches were conducted to identify relevant, English-language literature published through March 2017. Results indicate that mind and body practices may be of benefit in reducing stress and bothersomeness of some menopausal symptoms. In particular, hypnosis is a mind-body intervention that has consistently shown to have a clinically significant effect on reducing hot flashes. Evidence is mixed in regard to the efficacy of natural products and there are some safety concerns. Health care providers should consider the evidence on CAM in providing an integrative health approach to menopausal symptom management.

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PMID: 30868921

[2702]


Hypnotherapy for the Treatment of Persistent Pain: A Literature Review.

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BACKGROUND: Persistent pain causes a significant decrease in quality of life and increases overall disability more than any other condition. Hypnotherapy is
emerging as a treatment option for pain management; examination of this treatment modality and its effectiveness is needed.

AIM(S): To examine evidence for effectiveness of hypnotherapy to treat persistent pain in adults.

METHOD: A consolidated review was completed through searching biomedical and life sciences literature databases.

RESULTS: Results were obtained through appraisal of six identified studies meeting inclusion criteria.

DISCUSSION: Hypnotherapy decreases pain and improves pain-related function and quality of life outcomes to a greater extent than other psychological interventions or usual treatments. Furthermore, it has been shown to be effective in a variety of chronic pain conditions.

CONCLUSIONS: Current treatment practices fail to alleviate pain adequately; there is sufficient evidence to suggest hypnotherapy as a viable treatment modality for persistent pain. However, more definitive studies are needed for it to be a first-line intervention.

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[2703]


Can hypnotic suggestibility be measured online?


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Hypnosis and hypnotic suggestions are gradually gaining popularity within the consciousness community as established tools for the experimental manipulation of illusions of involuntariness, hallucinations and delusions. However, hypnosis is still far from being a widespread instrument; a crucial hindrance to taking it up is the amount of time needed to invest in identifying people high and low in responsiveness to suggestion. In this study, we introduced an online assessment of hypnotic response and estimated the extent to which the scores and psychometric properties of an online screening differ from an offline one. We propose that the online screening of hypnotic response is viable as it reduces the level of responsiveness only by a slight extent. The application of online screening may prompt researchers to run large-scale studies with more heterogeneous samples, which would help researchers to overcome some of the issues underlying the current replication crisis in psychology.

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[2704]


[Monitoring pain intensity during general anaesthesia].

[Article in Danish]

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This review summarises the knowledge of pain monitoring during surgery in Denmark. General anaesthesia consists of hypnosis, relaxation and analgesia. The first two can be objectively monitored, but analgesia is traditionally evaluated by the anaesthesiologist. Several monitors for assessing pain exist, and all types of pain monitoring are superior to traditional evaluation and seem to have several advantages but are still not used routinely in Denmark. The nociception level monitor is multimodal and incorporates movement, heart rate, heart rate variability, pulse plethysmography, skin temperature and galvanic skin response. It has been validated, but further research is needed.

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[2705]


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BACKGROUND: Despite their high prevalence and advances in the field of neurogastroenterology, there remain few effective treatment options for functional gastrointestinal disorders (FGIDs). It is recognized that approximately 25% of sufferers will have symptoms refractory to existing therapies, causing significant adverse effects on quality of life and increased healthcare utilization and morbidity. Gut-focused hypnotherapy, when delivered by trained therapists, has been shown to be highly effective in severe refractory FGIDs. However, hypnotherapy continues to be surrounded by much misunderstanding and skepticism.

PURPOSE: The purpose of this review is to provide a contemporary overview of the principles of gut-focused hypnotherapy, its effects on gut-brain interactions, and the evidence-base for its efficacy in severe FGIDs. As supplementary material, we have included a hypnotherapy protocol, providing the reader with an insight into the practical aspects of delivery, and as a guide, an example of a script of a gut-focused hypnotherapy session.

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[2706]

The effectiveness of hypnosis for pain relief: A systematic review and meta-analysis of 85 controlled experimental trials.


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The current meta-analysis aimed to quantify the effectiveness of hypnosis for reducing pain and identify factors that influence efficacy. Six major databases were systematically searched for trials comparing hypnotic inductions with no-intervention control conditions on pain ratings, threshold and tolerance using experimentally-evoked pain models in healthy participants. Eighty-five eligible studies (primarily crossover trials) were identified, consisting of 3632 participants (hypnosis n=2892, control n=2646). Random effects meta-analysis found analgesic effects of hypnosis for all pain outcomes (g=0.54-0.76, p's<.001). Efficacy was strongly influenced by hypnotic suggestibility and use of direct analgesic suggestion. Specifically, optimal pain relief was obtained for hypnosis with direct analgesic suggestion administered to high and medium suggestibles, who respectively demonstrated 42% (p<.001) and 29% (p<.001) clinically meaningful reductions in pain. Minimal benefits were found for low suggestibles. These findings suggest that hypnotic intervention can deliver meaningful pain relief for most people and therefore may be an effective and safe alternative to pharmaceutical intervention. High quality clinical data is, however, needed to establish generalisability in chronic pain populations.

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The effect of progressive muscle relaxation on cancer patients' self-efficacy.

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BACKGROUND AND PURPOSE: Self-efficacy is considered as one of the influential parameters affecting the health of patients. This study aimed to investigate the effect of relaxation techniques on self-efficacy of patients suffering from cancer.

MATERIALS AND METHODS: This study was a clinical trial in which 80 patients suffering from cancer were randomly assigned to two groups of experimental and control. Data collection instruments consisted of demographic information and Strategies Used by People to Promote Health questionnaires. In the experimental group, the patients performed relaxation techniques once a day for 30 min over two months. In the control group, the patients received the routine care.

RESULTS: A statistically significant difference was observed between the mean self-efficacy indices in the experimental group (p = 0.001). There was no significant difference in the control group (p = 0.3).

CONCLUSION: Muscle relaxation can enhance self-efficacy of cancer patients.
Therefore, it can be used as an alternative method for patients who are willing to use this technique.

Gut-focused hypnotherapy is an effective treatment for irritable bowel syndrome but is not widely available. This study assessed whether providing hypnotherapy by Skype might partially overcome this problem. Using a 50-point or more reduction in the IBS Symptom Severity Score as the primary outcome measure, 65% of subjects responded to Skype hypnotherapy with all other outcomes significantly improving. The primary outcome figure for face-to-face hypnotherapy was 76%. When other outcome scores for Skype and face-to-face treatment were compared, the mean changes were these: symptom severity (-94.1 vs. -129.2), noncolonic score (-52.3 vs. -64.8), quality of life (+56.4 vs. +66.2), anxiety (-3.3 vs. -3.0), depression (-1.7 vs. -2.5), and a 30% or more pain reduction (44% vs. 62%). Skype hypnotherapy is effective but slightly less so than face-to-face treatment. However, many patients would have been unable to access treatment without the Skype option.


Clinical Hypnosis and Music In Breast Biopsy:A Randomized Clinical Trial.
A randomized clinical study was conducted to evaluate the effects on anxiety, depression, stress and optimism levels of an audio-recorded clinical hypnosis intervention and a music session and compare them with a control group in women scheduled for breast biopsy. We analyzed the data of 170 patients with an average age of 47 years, who were randomly assigned to each of the groups. The psychosocial variables were measured in three moments: baseline, which corresponds to the period before the intervention with hypnosis, music or waiting in the room before biopsy; a second measurement after the interventions and a third measurement after the breast biopsy procedure was finished. The results showed a statistically significant reduction in the stress ($p < .001$, $\eta^2_p = .06$); pain, ($p < .01$, $\eta^2_p = .04$); anxiety, ($p < .001$, $\eta^2_p = .07$) and depression, ($p < .001$, $\eta^2_p = .05$) in hypnosis and music groups compared with the control group. Before biopsy, hypnosis decrease significantly pain and depression levels compared with music, but after biopsy there were no differences between both groups. It is recommended to use audio-recorded hypnosis and music interventions to reduce physical and emotional discomfort during the biopsy procedure and to improve the quality of life of patients with suspected breast cancer.

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fast oscillations rather than an insufficient depth of hypnosis.

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[2712]
An Internet-based controlled trial of interpretation bias modification versus progressive muscle relaxation for body dysmorphic disorder.

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OBJECTIVE: The current study extended upon previous research efforts by evaluating the utility and feasibility of an 8-session Internet-based interpretation bias modification (IBM) training protocol targeting evaluation- and appearance-related threat biases characteristic of the disorder compared to a progressive muscle relaxation (PMR) condition for treatment of body dysmorphic disorder (BDD).

METHOD: Fifty participants with BDD were recruited from across the United States and randomly assigned to eight sessions of either IBM or PMR. Assessments of interpretation bias, BDD symptoms, depression, and anxiety were administered at pretreatment, 1-week posttreatment, and 3-month follow-up.

RESULTS: Compared to the PMR group, individuals in the IBM condition reported less negative/threat interpretation biases and greater positive/benign interpretation biases at posttreatment and follow-up. There were no significant differences between groups with regard to BDD symptoms, depression, or anxiety. Clinically significant improvement was common in both conditions (IBM = 64.0%; PMR = 52.0%), though it did not differ between them.

CONCLUSIONS: Contrary to our hypothesis, IBM did not outperform PMR with regard to BDD symptom reduction, though both treatments yielded significant improvements on symptom outcomes. Findings suggest that IBM and/or PMR may be promising treatment strategies for BDD, perhaps adjunctively. Overall, these findings provide helpful future directions for IBM research and provide an additional lens through which to examine its potential effectiveness for BDD. (PsycINFO Database Record (c) 2019 APA, all rights reserved).

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[2713]
Is hypnotherapy helpful for irritable bowel syndrome in primary and secondary care?

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Comment on

DOI: 10.1016/S2468-1253(18)30344-3
Progressive muscle relaxation therapy to relieve dental anxiety: a randomized controlled trial.

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Dental anxiety causes patients to refuse or delay treatment, which may exacerbate oral diseases. The aim of the current randomized controlled trial was to determine whether progressive muscle relaxation therapy could relieve dental anxiety. The trial included 68 periodontal patients with dental anxiety scores of ≥13 who were randomly assigned to either an intervention group or a control group (n = 34 per group). The intervention group was administered progressive muscle relaxation therapy for 20 min and oral health education for 15 min before periodontal treatment once per week for 4 wk. The control group was provided with oral health education only, for the same duration. Changes in dental anxiety, depression symptoms, blood pressure, heart rate, and salivary cortisol were evaluated 4 wk and 3 months after the intervention. The intervention group exhibited statistically significantly greater reductions in dental anxiety scores than did the control group at the 4-wk (-3.82 vs. -0.89) and 3-month (-4.22 vs. -0.28) assessments. They also exhibited significantly greater reductions in depression symptoms, systolic and diastolic blood pressure, pulse rate, and salivary cortisol levels at both time-points. Progressive muscle relaxation therapy relieves tension and anxiety in dental patients.


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The Effect of Progressive Muscle Relaxation on Emotional Competence: Depression-Anxiety-Stress, Sense of Coherence, Health-Related Quality of Life, and Well-Being of Unemployed People in Greece: An Intervention Study.

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OBJECTIVES: Assessment of the impact of Jacobson Progressive Muscle Relaxation (PMR) on depression-anxiety-stress symptoms, sense of coherence, health-related quality of life and well-being in long-term unemployed people with anxiety.
disorders.

**DESIGN AND SETTING:** An intervention study was conducted at a relevant Organization, in Athens, Greece.

**INTERVENTION:** 50 long-term unemployed individuals suffering from anxiety disorders participated in the study. Participants were separated into two groups: (a) the intervention group (30 individuals) that was trained on an 8-week on Progressive Muscle Relaxation program and also received counseling services and (b) the control group (20 individuals) that received only counseling services.

**MAIN OUTCOME MEASURES:** Depression, Anxiety, Stress Scale, Sense of Coherence, Health-Related Quality of Life and Well-being were evaluated at baseline and after the intervention.

**RESULTS:** Significant changes were noted in the studied variables between the two groups, with improved outcomes in the intervention group. The intervention group showed a decrease in the symptoms of depression, anxiety, stress (p<0.001) [depression (p<0.001), anxiety (p<0.001), stress (p<0.001)], a higher score of sense of coherence (p<0.001), improved health-related quality of life regarding the mental health domain (p<0.001), and improvement in well-being (p<0.001). No significant change was observed in the control group during the follow-up period.

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Reconsidering the autohypnotic model of the dissociative disorders.

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The dissociative disorders field and the hypnosis field currently reject the autohypnotic model of the dissociative disorders, largely because many correlational studies have shown hypnotizability and dissociation to be minimally related (r = .12). Curiously, it is also widely accepted that dissociative patients are highly hypnotizable. If dissociative patients are highly hypnotizable because only highly hypnotizable individuals can develop a dissociative disorder - as the author proposes - then the methodology of correlational studies of hypnotizability and dissociation in random clinical and community samples would necessarily be constitutively unable to detect, and statistically unable to reflect, that fact. That is, the autohypnotic, dissociative distancing of that small subset of highly hypnotizable individuals who repeatedly encountered intolerable circumstances is statistically lost among the data of (1) the highly hypnotizable subjects who do not dissociate and (2) subjects (of all levels of hypnotizability) who manifest other kinds of dissociation. The author proposes that, when highly hypnotizable individuals repeatedly engage in autohypnotic distancing from intolerable circumstances, they develop an overlearned, highly-motivated, automatized pattern of dissociative self-protection (i.e., a dissociative disorder). The author urges that theorists of hypnosis and the dissociative disorders explicitly include in their theories (a) the trait of high hypnotizability, (b) the phenomena of autohypnosis, and (c) the manifestations of systematized, autohypnotic pathology. Said differently, the author is suggesting that autohypnosis and autohypnotic pathology are unacknowledged nodes in the nomothetic networks of both hypnosis and dissociation.

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Investigation of the Effect of Hypnotic Anesthesia on Nerve Conduction Velocity (NCV).


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Background: Hypnosis is a psychological method used for treatment of different types of disorders and illnesses. This technique is also used in surgical interventions. Many studies proved the efficacy of hypnosis in medical treatment. However, the mechanism of hypnosis is unclear for scientists. To find out if the peripheral nervous system has a role in hypnotic anesthesia, we aimed to investigate the effect of hypnotic anesthesia on nerve conduction velocity (NCV).

Methods: In this study, healthy volunteers with high hypnotizability entered the study. First, The NCV test was performed in both hands of participants and then they all underwent hypnosis. Hypnotic anesthesia was induced in the right hand of all subjects followed by painful stimuli in their hand by vascular clamping. Then, the NCV test was repeated in both hands again. Data were analyzed by SPSS version16.

Results: The group study consisted of 13 (65%) women and 7 (35%) men with their age ranging between 14 to 52 years. According to the results, the mean values of sensory latency, and NCV changed from 3.225 ms and 54.355 m/s before hypnotic anesthesia to 3.32 ms and 55.3 m/s after hypnotic anesthesia in right hand, respectively. Results showed that there was a significant difference between data before and after hypnotic induction (P < 0.001). The covariance test also indicated a significant difference between the data obtained from both hands (P < 0.001).

Conclusions: In contrast to our hypothesis, the NCV test showed an increase after the hypnotic anesthesia. However, increase in NCV did not lead to experience pain after the painful stimuli. It seems that central nervous system should be involved in this process.

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PMCID: PMC6119217
PMID: 30214883

[2718]

[An evaluation of hypnosis practices in palliative care.]

[Article in French]

Quintini D, Fichaux M, Surdej F, Espanet N, Salas S.

There are very few studies in existence today that look at the value of hypnosis in palliative care. The aim of our study was to measure the impact of hypnosis on managing symptoms in palliative care. This quantitative retrospective monocentric observational study evaluated pain and patient satisfaction using monitoring and evaluation sheets, which included a rating scale before and after hypnosis.
sessions in a palliative care unit. For two years, thirty-seven patients participated in hypnosis sessions mostly for pain (41%) and anxiety (27%). 51% reported a decrease in symptoms, with 35% even reporting that the intensity of their symptoms vanished. Most of the patients were satisfied with the approach and at the end of the study some of them were able to recreate its effects by using self-hypnosis. Despite the small sample, the results confirm those found in the few palliative studies that do exist, particularly relating to the improvement of symptoms such as pain, anxiety, nausea, and respiratory disorders.

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[2719]


Effectiveness of autogenic training on headache: A systematic review.

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PURPOSE: To investigate the impact of length of autogenic training (AT) use, alone and with the addition of adjunct treatments, on intensity and duration of primary headache in adults age 19 and older.

METHODS: We searched articles published in English and Korean from 1926 to 2016. A search of seven domestic and foreign databases was conducted from September 25, 2016 to December 30, 2016 using the search terms "autogenic training," "autogen," "relaxation," and "headache." The search was documented according to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA). The search yielded a total of 262 papers; a multi-step screening and selection process ultimately yielded six articles of randomized controlled trials (RCTs) for the systematic review. Cochrane's Risk of Bias Tool was used to evaluate the quality of the selected papers.

RESULTS: Five of the six studies demonstrated statistically significant reduction in headache by AT-only or biofeedback-assisted AT. The reviewed studies varied in characteristics of subjects, length of autogenic training and practice, use of adjunct therapies, and use of headache measures.

CONCLUSIONS: The small number of studies retrieved in this review, with their variations in AT interventions used, in AT training/practice time, and headache measures used, did not facilitate rigorous evaluation of the effectiveness of specific AT approaches nor of the optimum length of AT practice for reduction of headache. More research is needed on the effectiveness of AT-only for headache, the most effective duration of autogenic training and practice, and the type(s) of headache for which it is most effective.

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[2720]

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BACKGROUND: The aepEXplus monitoring system, which uses mid-latency auditory evoked potentials to measure depth of hypnosis, was evaluated in pediatric patients receiving desflurane-remifentanil anesthesia.

METHODS: Seventy-five patients, 1-18 years of age (stratified for age; 1-3, 3-6, 6-18 years, for subgroup analyses), were included in this prospective observational study. The aepEX and the bispectral index (BIS) were recorded simultaneously, the latter serving as a reference. The ability of the aepEX to detect different levels of consciousness, defined according to the University of Michigan Sedation Scale, investigated using prediction probability (Pk), and receiver operating characteristic (ROC) analysis, served as the primary outcome parameter. As a secondary outcome parameter, the relationship between end-tidal desflurane and the aepEX and BIS values were calculated by fitting in a nonlinear regression model.

RESULTS: The Pk values for the aepEX and the BIS were, respectively, .68 (95% CI, 0.53-0.82) and .85 (95% CI, 0.73-0.96; P = .02). The aepEX and the BIS had an area under the ROC curve of, respectively, 0.89 (95% CI, 0.80-0.95) and 0.76 (95% CI, 0.68-0.84; P = .04). The maximized sensitivity and specificity were, respectively, 81% (95% CI, 61%-93%) and 86% (95% CI, 74%-94%) for the aepEX at a cutoff value of >52, and 69% (95% CI, 56%-81%) and 70% (95% CI, 57%-81%) for the BIS at a cutoff value of >65. The age-corrected end-tidal desflurane concentration associated with an index value of 50 (EC50) was 0.59 minimum alveolar concentration (interquartile range: 0.38-0.85) and 0.58 minimum alveolar concentration (interquartile range: 0.41-0.70) for, respectively, the aepEX and BIS (P = .69). Age-group analysis showed no evidence of a difference regarding the area under the ROC curve or EC50.

CONCLUSIONS: The aepEX can reliably differentiate between a conscious and an unconscious state in pediatric patients receiving desflurane-remifentanil anesthesia.

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[2721]


Does the phase of the menstrual cycle really matter to anaesthesia?

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The menstrual cycle is a physiological phenomenon that is accompanied by several hormonal fluctuations involving oestrogen and progesterone. Oestrogen and progesterone exert several physiological effects. There are many questions pertaining to the influence of the physiology of menstruation on anaesthesia. We attempted to find out whether the phase of the menstrual cycle can alter the physiological functions during anaesthesia, the perioperative management and outcomes. We performed a literature search in Google Scholar, PubMed and Cochrane databases for original and reviewed articles on the phases of the menstrual cycle and their relation to anaesthesia-related physiological parameters to find an answer to these questions. Many studies have shown that women, perimenstrually, may have increased pain perception, exacerbation of systemic diseases, vocal
cord/peripheral oedema and post-operative nausea and vomiting (PONV). Some of the
other notable findings in most studies were sleep disturbances in the luteal
phase (LP), increased occurrence of PONV in the ovulatory phase and a lower
requirement of intravenous sedative and anaesthetic drug requirements in the LP.
We found contradictory results concerning pain perception and PONV in relation to
the follicular and LPs. However, we found that literature regarding the phase of
the menstrual cycle and the haemodynamic response to intubation,
aesthesia-induced hypnosis and perioperative blood loss is relatively scarce.
Thus, there is a need to conduct good quality research on these topics.

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[2722]
24.

Hypnosis for burn wound care pain and anxiety: A systematic review and
meta-analysis.
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BACKGROUND: Evidence from clinical trials suggests psychological interventions
should be considered as an adjunct to medications.

OBJECTIVE: The purpose of this systematic review and meta-analysis was to
evaluate the effectiveness of clinical hypnosis on pain, anxiety and medication
needs during wound care in adults suffering from a burn injury.

DATA SOURCES: Medline, PsychINFO, CINAHL, Embase, ISI, SCOPUS, Cochrane, and
Proquest databases were searched for randomized controlled trials comparing
hypnosis to other interventions during dressing change in adult patients.

DATA SYNTHESIS: Two independent reviewers extracted relevant articles and
assessed their methodological quality. Only six studies met the inclusion
criteria and were described in detail. Available data was pooled with Revman 5.3.

RESULTS: For the primary outcome, we found a statistically significant difference
in pain intensity ratings favoring hypnosis (MD=-8.90, 95% CI -16.28, -1.52). For
the secondary outcomes, there was a statistically significant difference in
anxiety ratings favoring hypnosis (MD=-21.78, 95% CI -35.64, -7.93) and no
difference in medication usage (MD=-0.07, 95% CI -0.32, 0.17).

CONCLUSION: These results suggest that hypnosis reduces pain intensity and
anxiety ratings in adults undergoing burn wound care. However, because of the
limitations discussed, clinical recommendations are still premature.

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[2723]
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The effect of progressive muscle relaxation on the management of fatigue and
quality of sleep in patients with chronic obstructive pulmonary disease: A randomized controlled clinical trial.

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OBJECTIVE: To assess the effect of progressive muscle relaxation (PMR) on fatigue and sleep quality of patients with chronic obstructive pulmonary disease (COPD) stages 3 and 4.

MATERIALS AND METHODS: The pretest posttest clinical trial recruited 91 patients COPD grades 3 and 4. Following random assignment of subjects, the treatment group (n = 45) performed PMR for eight weeks and the control group (n = 46) received routine cares. At baseline and after the intervention, fatigue and sleep quality was assessed. Data obtained were analyzed in SPSS.

RESULTS: It was determined that PMR decreased patients' fatigue level and improved some sleep quality subscales including subjective sleep quality, sleep latency, sleep duration and habitual sleep efficiency, but no improvement was found in global sleep quality and other sleep subscales.

CONCLUSION: An eight-week home-based PMR program can be effective in reducing fatigue and improving certain subscales of sleep quality in patients with COPD stages 3,4. (IRCT2016080124080N3).

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Effect of hypnotic suggestion on knee extensor neuromuscular properties in resting and fatigued states.

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PURPOSE: The aim of this study was to investigate whether hypnotic suggestions can alter knee extensor neuromuscular function at rest and during exercise.

METHODS: Thirteen healthy volunteers (8 men and 5 women, 27 ± 3 years old) took part in this counterbalanced, crossover study including two experimental (hypnosis and control) sessions. Knee extensor neuromuscular function was tested
before and after hypnosis suggestion by using a combination of voluntary contraction, transcutaneous femoral nerve electrical stimulation and transcranial magnetic stimulation (TMS). A fatiguing exercise (sustained submaximal contraction at 20% maximal voluntary contraction (MVC) force) was also performed to evaluate the potential influence of hypnosis on the extent and origin of neuromuscular adjustments.

RESULTS: Hypnosis did not (p>0.05) alter MVC force or knee extensor neural properties. Corticospinal excitability, assessed with the amplitude of knee extensor motor evoked potentials, was also unchanged (p>0.05), as was the level of intracortical inhibition assessed with paired pulse TMS (short-interval intracortical inhibition, SICI). Time to task failure (~300 s) was not different (p>0.05) between the two sessions; accordingly, hypnosis did not influence neuromuscular adjustments measured during exercise and at task failure (p>0.05). CONCLUSION: Hypnotic suggestions did not alter neuromuscular properties of the knee extensor muscles under resting condition or during/after exercise, suggesting that hypnosis-induced improvement in exercise performance and enhanced corticospinal excitability might be limited to highly susceptible participants.

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[2725]

[Self-hypnosis training for in-hospital chronic pain patients : A retroactive observational study].

[Article in German]
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BACKGROUND: Hypnosis is probably one of the oldest therapies known to man. In the last decades modern hypnosis has mainly been used by psychotherapists; however, hypnosis is becoming increasingly more important as a therapeutic method in medicine. Hypnosis can be used for a variety of medical indications. In the literature there is much evidence for the effectiveness of hypnosis. The aim of the present investigation was to demonstrate the effectiveness of hypnosis in inpatient treatment of chronic pain patients and to present a self-hypnosis program, which can be easily integrated into pain therapy.

METHODS: From October 2012 to April 2013 all inpatient chronic pain patients were included (group 1: non-hypnosis group, group 2: hypnosis group). Concerning group 2 a standardized protocol for hypnotherapy was integrated in addition to the standardized pain management program. The main goal of hypnotherapy was to integrate a self-hypnosis training so that further implementation in a domestic setting could be guaranteed. By means of standardized test procedures, e. g. Patient Health Questionnaire (PHQ-9), Pain Disability Index (PDI), Generalized Anxiety Disorder (GAD-7) and Numerical Rating Scales (NRS) for pain and general well-being, data were evaluated before and after the pain therapy.

RESULTS: The prestandardized and poststandardized test procedures of 30 chronic pain patients were evaluated (17 patients without hypnosis, 13 patients with hypnosis). The main diagnosis according to ICD-10 was "chronic pain disorder" (F45.41) with a MPSS stage III in all patients. The PDI was significantly improved in the hypnosis group (p = 0.019). The other items all showed a trend towards improvement in the hypnosis group (exception GAD-7) but without
statistical significance (p > 0.05).

DISCUSSION: In a small patient collective, the present investigation was able to show that the integration of modern hypnotherapy into the treatment of chronic pain patients in an inpatient setting can be another useful therapeutic aspect. In particular, the instructions for learning independently seem to be useful due to the limited in-patient time. More research needs to be carried out to support our initial findings.

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[2726]


Use, applicability and reliability of depth of hypnosis monitors in children - a survey among members of the European Society for Paediatric Anaesthesiology.

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BACKGROUND: To assess the thoughts of practicing anaesthesiologists about the use of depth of hypnosis monitors in children.

METHODS: Members of the European Society for Paediatric Anaesthesiology were invited to participate in an online survey about their thoughts regarding the use, applicability and reliability of hypnosis monitoring in children.

RESULTS: The survey achieved a response rate of 30% (N = 168). A total of 138 completed surveys were included for further analysis. Sixty-eight respondents used hypnosis monitoring in children (Users) and 70 did not (Non-users). Sixty-five percent of the Users reported prevention of intra-operative awareness as their main reason to apply hypnosis monitoring. Among the Non-users, the most frequently given reason (43%) not to use hypnosis monitoring in children was the perceived lack or reliability of the devices in children. Hypnosis monitoring is used with a higher frequency during propofol anaesthesia than during inhalation anaesthesia. Hypnosis monitoring is furthermore used more frequently in children > 4 years than in younger children. An ideal hypnosis monitor should be reliable for all age groups and any (combination of) anaesthetic drug. We found no agreement in the interpretation of monitor index values and subsequent anaesthetic interventions following from it.

CONCLUSIONS: Prevention of intraoperative awareness appears to be the most important reason to use hypnosis monitoring in children. The perceived lack of reliability of hypnosis monitoring in children is the most important reasons not to use it. No consensus currently exists on how to adjust anaesthesia according to hypnosis monitor index values in children.

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[2727]


Hypnosis Enhances the Effects of Pain Education in Patients With Chronic Nonspecific Low Back Pain: A Randomized Controlled Trial.

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The potential benefits of combining pain education (PE) with clinical hypnosis (CH) has not yet been investigated in individuals with chronic pain. A total of 100 patients with chronic nonspecific low back pain were randomized to receive either: 1) PE alone, or 2) PE with CH. Outcomes were collected by a blinded assessor at 2 weeks and 3 months after randomization. The primary outcomes were average pain intensity, worst pain intensity (both assessed with 11-point numeric rating scales), and disability (24-item Roland Morris Disability Questionnaire) at 2 weeks. At 2 weeks, participants who received PE with CH reported lower worst pain intensity (mean difference = 1.35 points, 95% confidence interval [CI] = .32-2.37) and disability (mean difference = 2.34 points, 95% CI = .06-4.61), relative to participants who received PE alone. PE with CH participants also reported more global perceived benefits at 2 weeks (mean difference = -1.98 points, 95% CI = -3.21 to -.75). At 3 months, participants who received PE with CH reported lower worst pain intensity (mean difference = 1.32 points, 95% CI = .29-2.34) and catastrophizing (mean difference = 5.30 points, 95% CI = 1.20-9.41). No adverse effects in either treatment condition were reported. To our knowledge, this is the first trial showing that additional use of hypnosis with PE results in improved outcomes over PE alone in patients with chronic nonspecific low back pain. PERSPECTIVE: This study provides evidence supporting the efficacy of another treatment option for teaching patients to self-manage chronic low back pain that has a relatively low cost and that can be offered in groups.

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[2728]


Lifestyle Therapy for the Management of Atrial Fibrillation.


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Atrial fibrillation (AF) is a common arrhythmia associated with increased risk of morbidity and mortality. There is evidence that lifestyle interventions may serve as complementary treatments to reduce AF burden. The objective of this review was...
to summarize the efficacy of lifestyle interventions for the management of AF. Studies which included patients with systolic heart failure (ejection fraction ≤40%), and those limited to an examination of vigorous physical activity were excluded from our search. Studies were identified through a search of the following databases: MEDLINE, EMBASE, CINAHL, and PubMed, run from inception through August 2016. All studies were graded for quality using the Oxford Centre for Evidence-based Medicine recommendations. Meta-analyses of the studies were not performed due to the heterogeneity of the studies. From a total of 1,811 publications, 10 articles were identified and included. Selected publications included 1 study on yoga, 2 studies on acupuncture, 3 studies that examined weight loss programs, and 4 studies that evaluated the impact of moderate physical activity. Yoga was associated with less symptomatic AF episodes and improved quality of life. Acupuncture was associated with reduced AF occurrence in patients with persistent and paroxysmal AF. Weight loss was associated with a significant reduction AF burden and symptoms. Moderate exercise resulted in greater arrhythmia free survival and a mean reduction in AF burden. In conclusion, evidence exists to suggest that yoga, weight loss, and moderate exercise are associated with reductions in AF burden and symptoms. Evidence is greatest for weight loss and moderate exercise.

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[2729]


Enhancing Placebo Effects in Somatic Symptoms Through Oxytocin.

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OBJECTIVE: Placebo effects relieve various somatic symptoms, but it is unclear how can be enhanced to maximize positive treatment outcomes. Oxytocin administration may potentially enhance placebo effects, but few studies have been performed, and they have had conflicting findings. The study aim was to investigate the influence of positive verbal suggestions and oxytocin on treatment expectations and placebo effects for pain and itch.

METHODS: One hundred eight female participants were allocated to one of the following four groups: (1) oxytocin with positive verbal suggestions, (2) placebo with positive verbal suggestions, (3) oxytocin without suggestions, and (4) placebo without suggestions. The administration of 24 IU oxytocin or a placebo spray was preceded by positive verbal suggestions regarding the pain- and itch-relieving properties of the spray or no suggestions, depending on group allocation. Pain was assessed with a cold pressor test, and itch was assessed with histamine iontophoresis.

RESULTS: Positive verbal suggestions induced expectations of lower pain (F = 4.77, p = .031) and itch (F = 5.38, p = .022). Moreover, positive verbal suggestions elicited placebo analgesia (F = 5.48, p = .021) but did not decrease itch. No effect of oxytocin on the placebo effect or on expectations was found.

CONCLUSIONS: Positive suggestions induced placebo analgesia but oxytocin did not enhance the placebo effect. Study limitations are that we only included a female sample and a failure to induce placebo effect for itch. Future studies should focus on how oxytocin might influence placebo effects, taken into account the role of sex, dose-dependent effects, and various expectation manipulations.

TRIAL REGISTRATION: The study was registered as a clinical trial on www.trialregister.nl (number 6376).

Is hypnotherapy an acceptable treatment option for children with habit cough?
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Habit cough is a chronic, persistent dry cough which occurs in children only when awake. It is considered functional (non-organic) and can have a significant impact on the quality of life of the child and their family. One possible treatment option for habit cough is hypnotherapy. At our centre we offered hypnotherapy sessions to patients diagnosed with habit cough, and conducted telephone interviews with patients’ parents to determine the acceptability of this therapy. Nine patients’ parents were interviewed, and despite being unsure of what to expect with hypnotherapy, all nine found it an acceptable treatment option. Parents reported that hypnotherapy appeared to result in cough reduction or cessation in 6 out of 9 cases.

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The Effect of Hypnosis on Adherence to Antituberculosis Drugs Using the Health Belief Model.
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An RCT on the efficacy of hypnosis in improving adherence to antituberculosis treatment using the Health Belief Model (HBM). Sixty study subjects were sampled at random from tuberculosis patients who visited the Center for Pulmonary Community Health in Solo, Indonesia. Hypnotherapy with posthypnotic suggestions was delivered once a week over 6 months. The data on pretested 7 HBM constructs were analyzed using t test and path analysis. Hypnotherapy had a positive effect on perceived susceptibility, seriousness, threat, benefit, and self-efficacy. It indirectly had a positive effect on adherence. Hypnotherapy had a negative effect on perceived barrier. This study supports the hypothesis that hypnotherapy effectively improves adherence to tuberculosis treatment, by enhancing health-related perception and beliefs in the HBM.

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REVISITING THE SAFE PLACE: Method and Regulatory Aspects in Psychotherapy when Easing Allostatic Overload in Traumatized Patients.

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Safe-place inductions are considered important altered states of consciousness (ASC) to be (re)installed during trauma-informed psychotherapy. Coregulation aimed at changing implicit relational knowing and increasing integration and coherence through relational work and hypnotic techniques is crucial, as clients' abilities to self-soothe and regulate have become seriously impaired. Thus, resource-oriented metaphors as inner strength imagery is advocated. Also, methods such as creative-arts therapy and neurofeedback will induce ASCs, as most methods used with complex traumatized clients, due to their high hypnotizability. When positive or soothing imagery or relationally held suggestions for changed attentional focus are added to both psychodynamic psychotherapy and CBT, a hetero-hypnosis will be induced—a prerequisite for phase-specific trauma therapy aimed at changing inner schemas and scripts.

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[2733]

[The nocebo effect: Various aspects and consequences in clinical practice].

[Article in French]

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[2734]

The impact of Narcotrend™ EEG-guided propofol administration on the speed of recovery from pediatric procedural sedation-A randomized controlled trial.
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BACKGROUND: Propofol is often used for procedural sedation in children undergoing gastrointestinal endoscopy. Reliable assessment of the depth of hypnosis during the endoscopic procedure is challenging. Processed electroencephalography using the Narcotrend Index can help titrating propofol to a predefined sedation level.

AIMS: The aim of this trial was to investigate the impact of Narcotrend Index-guided titration of propofol delivery on the speed of recovery.

METHODS: Children, aged 12-17 years, undergoing gastrointestinal endoscopy under procedural sedation, had propofol delivered via target controlled infusion either based on Narcotrend Index guidance (group NI) or standard clinical parameters (group C). Sedation was augmented with remifentanil in both study groups. The primary endpoint of this study was to compare the speed of fulfilling discharge criteria from the operating room between study groups. Major secondary endpoints were propofol consumption, discharge readiness from the recovery room, hypnotic depth as measured by the Narcotrend Index, and adverse events.

RESULTS: Of the 40 children included, data were obtainable from 37. The time until discharge readiness from the operating room was shorter in group NI than in group C, with a difference between medians of 4.76 minutes [95% CI 2.6 to 7.4 minutes]. The same accounts for recovery room discharge times; difference between medians 4.03 minutes [95% CI 0.81 to 7.61 minutes]. Propofol consumption and the percentage of EEG traces indicating oversedation were higher in group C than in group NI. There were no significant adverse events in either study group.

CONCLUSION: Narcotrend Index guidance of propofol delivery for deep sedation in children aged 12-17 years, undergoing gastrointestinal endoscopy results in faster recovery, less drug consumption, and fewer episodes of oversedation than dosing propofol according to clinical surrogate parameters of depth of hypnosis. The results of this study provide additional evidence in favor of the safety profile of propofol/remifentanil for procedural sedation in adequately selected pediatric patients.

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[2735]


Hypnotizability influences the cortical representation of visually and kinaesthetically imagined head position.

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The study investigates the cortical representation of the visual and kinesthetic image of a rotated position of the head in highly (highs) and low hypnotizable individuals (lows) of both gender. Participants were invited to imagine maintaining their head rotated toward one side by seeing their chin aligned with their right shoulder (V, visual imagery), and in a different condition, by feeling tension in their neck muscles (K, kinaesthetic imagery). Vividness of imagery and cognitive effort were reported after each task. Alpha and beta band absolute power was studied. Highs reported higher vividness than lows only for
the kinaesthetic modality of imagery. The cortical desynchronization observed during visual and kinaesthetic imagery were different in high females (HM), low females (LF), high males (HM) and low males (LM). In fact, only HF and LM exhibited significant power changes during the kinaesthetic task, whereas visual imagery was associated with cortical desynchronization in all subgroups except HM. The study supports earlier findings of an advantage of highs in kinesthetic imagery, shows an intriguing interaction of hypnotizability and gender, and indicates topographical difference in the four subgroups of participants suggesting differences in underlying generators.

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Complementary and Alternative Medicine Usage by Multiple Sclerosis Patients: Results from a Prospective Clinical Study.


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OBJECTIVES: To investigate the factors associated with complementary and alternative medicine (CAM) usage by multiple sclerosis (MS) patients. Design, Setting/Location: Single-center, prospective clinical study at an academic MS center in the northeastern United States.

METHODS: This study included CAM data from 524 MS patients and 304 healthy controls (HC) enrolled in a prospective study of clinical, neuroimaging, and environmental risk factors in MS at an academic MS Center. Clinical, neuroimaging, and disease-modifying treatment data were obtained. In addition, data on usage of CAM modalities, including acupuncture, aromatherapy, Ayurveda, Chinese herbal medicine, chiropractor, electromagnetic therapy, homeopathy, hypnosis, massage, naturopathy, Qi gong, Reiki, therapeutic touch, and bee stings were collected in an in-person interview.

RESULTS: The percentages of HC reporting usage of any CAM (32%) was similar to that in MS patients after diagnosis (30.5%). The usage of any CAM was higher in MS patients after MS diagnosis compared to before MS diagnosis (p < 0.001). The three most frequently used CAM for MS patients after MS diagnosis and HC were chiropractor, massage, and acupuncture. The most frequent reasons for CAM use were MS symptom relief, back problems, and pain. In multivariate analysis, female gender, higher education level, MS disease course, and not currently on disease-modifying therapies (DMT) treatment status were associated with CAM usage.

CONCLUSIONS: Gender, education level, DMT treatment status, and MS disease course are associated with CAM usage in MS patients. Ever-CAM usage patterns in MS patients are similar to those in HC.

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An Extension Study Using Hypnotic Suggestion as an Adjunct to Intravenous
Sedation.

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The effects of hypnosis/therapeutic suggestion in connection with intravenous sedation and surgery have been described in many clinical publications; however, few randomized, controlled, and blind studies have been performed in the outpatient area. The original study published in 2010 aimed to evaluate the use of hypnosis/therapeutic suggestion as an adjunct to intravenous sedation in patients having third molar removal in an outpatient setting. The patients were randomly assigned to a treatment or control group. The treatment group listened to a rapid conversational induction and therapeutic suggestions via headphones throughout the entire surgical procedure along with a standard sedation dose of intravenous anesthetic. The control group received intravenous anesthesia but listened to only music without any hypnotic intervention. The current replication study addressed several of the limitations of the original. Sample size was increased and selection of participants from a different geographic area in Pennsylvania. Intra-operative propofol administration, patient post-operative pain ratings, and post-operative prescription pain reliever consumption were all significantly reduced in the treatment compared to the control group. Implications of these results are discussed.

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[2738]

Integrating Hypnosis with Other Therapies for Treating Specific Phobias: A Case Series.

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There is a high prevalence of anxiety disorders including specific phobias and panic disorder in the United States and Europe. A variety of therapeutic modalities including pharmacotherapy, cognitive behavioral therapy, systematic desensitization, hypnosis, in vivo exposure, and virtual reality exposure therapy have been applied. No one modality has been entirely successful. There has been only a limited attempt to combine psychological therapies in the treatment of specific phobias and panic disorder and what has been done has been primarily with systematic desensitization or cognitive behavioral therapy along with hypnotherapy. I present two cases of multiple specific phobias that were successfully treated with hypnotherapy combined with virtual reality exposure therapy or in vivo exposure therapy. The rationale for this integrative therapy and the neurobiological constructs are considered.

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[2739]

Two are Better Than One: Dual-Track Interventions in Hypnotherapy.

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The current article provides clinical conceptualizations of six dual-track interventions for dealing with stuck and resistant situations in hypnotherapy. Dual-track interventions are based on the assumption that patients habitually regard their problems as one-dimensional and thus, tend to become rigid in their attitudes toward these problems. Dual-track interventions constitute hypnotherapeutic processes for transforming patients' negative and rigid perceptions of their problems into more positive and functional mental states that provide a dual-dimensional view, thereby offering patients more options and freeing them to contend with their problems more effectively. We introduce a novel hypnotherapeutic tool from the Illness/Nonillness Model (Navon 2014). This tool, known as the differentiation tool, can transform negative perceptions of psychological and emotional conditions to positive and hopeful perceptions.

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Effects of hypnosis on the relative parasympathetic tone assessed by ANI (Analgesia/Nociception Index) in healthy volunteers: a prospective observational study.


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Hypnosis has shown an effect on the regulation of the autonomic nervous system by increasing parasympathetic activity. The Analgesia/Nociception Index (ANI) is derived from heart rate variability and represents the relative parasympathetic tone. We investigated the effects of hypnosis on ANI in healthy volunteers. Participants to the 2016 International Hypnosis congress, Saint Malo, France were recruited in this prospective observational study. After comfortable positioning of the subject in the sitting position (T0), the hypnotic trance was induced (T1) then conducted with suggestions of comfort (T2) before return to normal consciousness (T3). The ANI, heart rate (HR) and respiratory rate (RR) were recorded at the different time-points. Forty subjects were enrolled (31 women, 9 men). The mean ± SD ANI at T2 (84 ± 12) was significantly greater than at T0 (60 ± 10), T1 (62 ± 9) and T3 (59 ± 11). The median [25th-75th percentile] ANI values at T2 were significantly greater in women (90 [83-95]) than in men (74 [68-83]). There were no significant variations of HR during time. The median [25th-75th percentile] RR at T1 (16 [14-18] breaths/min) and T2 (14 [12-16] breaths/min) were significantly smaller than at T0 (18 [16-20] breaths/min) and T3 (18 [16-20] breaths/min). This study shows that hypnosis induces an increase in the relative parasympathetic tone assessed by ANI in healthy volunteers, with greater ANI values observed in women. These results suggest that ANI monitoring may provide an objective tool for the measurement of the intensity of the hypnotic process, although this should be confirmed by further studies.

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