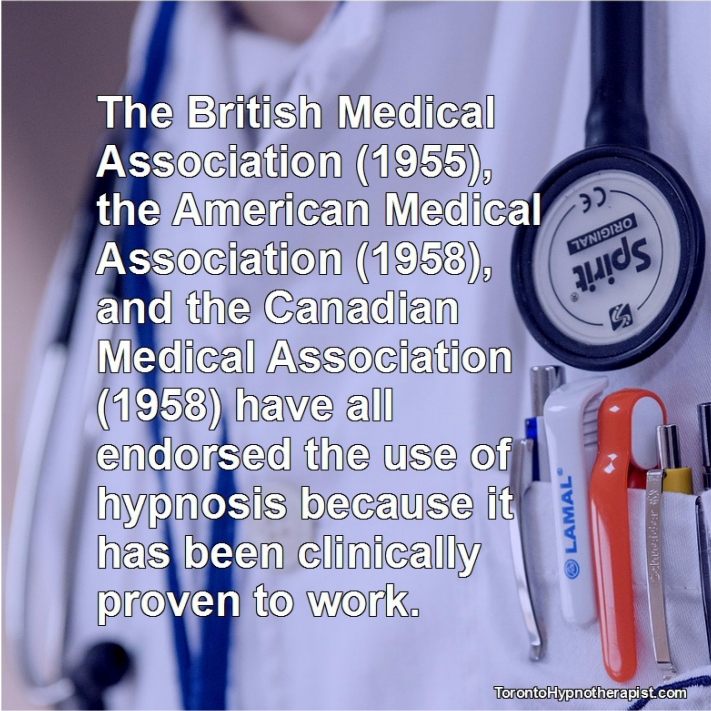


SOME SCIENTIFIC RESEARCH ON HYPNOSIS

Compiled by Allan Clews
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The British Medical Association (1955), the American Medical Association (1958), and the Canadian Medical Association (1958) have all endorsed the use of hypnosis because it has been clinically proven to work.

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**The National Institutes of Health
& the Joint Commission
Association for Health Care
endorse the use of HYPNOSIS
for PAIN CONTROL because it
works better than Placebos.**

HYPNOTHERAPY AND ADDICTIONS

INTENSIVE THERAPY: UTILIZING HYPNOSIS IN THE TREATMENT OF SUBSTANCE ABUSE DISORDERS. American Journal of Clinical Hypnosis, Jul 2004 vol.47(1) :21-28 . Potter G.

This paper reports on 18 cases over a 7-year period where hypnosis was used to treat a variety of addictions. Fifteen cases involved alcohol, two involved cocaine and one involved marijuana. All subjects were given 20 daily hypnosis sessions and then followed up a year later where it was found that using hypnosis in this fashion led to a 77% success rate.

THE USE OF HYPNOSIS IN COCAINE ADDICTION. American Journal of Clinical Hypnosis, 1993 Oct;36(2):120-3. Page RA, Handley GW.

A woman in her twenties, who had been addicted to cocaine for 8 months and was spending over \$500 a day to support her habit, decided to use a self-hypnosis tape to her break free from this addiction. The self-hypnosis tape was actually designed for weight-loss, however she mentally substituted the word "coke" and listened to it three times a day for four months, by which point she had freed herself from her addiction. She was still drug free nine years later when this report was made. The authors found this case very interesting because she did not use any other technique and did not have any social support to help her.

HYPNOTIC DEPENDENT INSOMNIA IN AN OLDER ADULT WITH ADDICTION-PRONE PERSONALITY. Clinical Case Studies, Vol. 2, No. 4, 247-258 (2003). Cooper TV, Lichstein KL, Aguillard RN.

This paper reports on the case study of an older man who had a history of engaging in addictive behaviour. When the authors of this paper saw him, he was addicted to heavy sleeping pills. Not only were the authors able to use hypnosis to help him successfully break free from this addiction, but they were also able to help him overcome his insomnia and improve the quality of his sleep.

SELF-HYPNOSIS RELAPSE PREVENTION TRAINING WITH CHRONIC DRUG/ALCOHOL USERS: EFFECTS ON SELF-ESTEEM, AFFECT, AND RELAPSE. American Journal of Clinical Hypnosis 2004 Apr;46(4):281-97. Pekala RJ, Maurer R, Kumar VK, Elliott NC, Masten E, Moon E, Salinger M.

This study recruited 261 veterans who were admitted into a residential program for substance abuse. The aim was to find out if self-hypnosis could help chronic abusers of drugs and alcohol improve their sense of self-esteem, control their emotions and prevent relapses. Participants were broken into four groups and were assessed before and after they entered the program and then again 7 weeks later. And while the rate of relapse for all four groups was roughly the same (13%), those who were taught self-hypnosis and who listened to self-hypnosis recordings at home 3 to 5 times a week were more serene, had higher levels of self-esteem, and had greater control over anger and impulsive behaviour.

HYPNOTHERAPY AND ALLERGIES

MODULATION OF TYPE I IMMEDIATE AND TYPE IV DELAYED IMMUNOREACTIVITY USING DIRECT SUGGESTION AND GUIDED IMAGERY DURING HYPNOSIS. Allergy Volume 44(8): 537 – 542. Zachariae R, Bjerring P, Arendt-Nielsen L.

Eight highly hypnotizable volunteers were recruited for this study where it was found that when these subjects were given suggestions while in hypnosis to decrease their reaction to a histamine prick test, there was a significant reduction in the inflammation of the skin when compared to a control group. This study confirmed numerous anecdotal reports that hypnotic suggestions can decrease inflammation and other allergic skin reactions.

ABREACTION DURING SYSTEMATIC DESENSITIZATION UNDER HYPNOSIS FOR FOOD ALLERGY[translated from Japanese]. Japanese Society of Psychosomatic Medicine 34(4) pp.329-333 1994. Junko I, Yoichi M, Hiroyuki A, Hideki T, Tetsuya N.

The authors of this paper state that it is well known that some food allergies are heavily influenced by psychological events and that fear and anxiety can play a role in this process. Then they describe the case of a 52-year-old woman who was admitted to hospital because of an allergic reaction caused by eating fish. She had only recently developed this allergy and when the authors of this study used hypnosis to uncover the cause, they found it was linked to the fear and anger she felt towards her ex-husband and her children's attempt to get her to reconcile with him. After this fear and anger was released during hypnosis she no longer continued to have an allergy to fish.

EFFECT OF SELF-HYPNOSIS ON HAY FEVER SYMPTOMS - A RANDOMISED CONTROLLED INTERVENTION STUDY. *Psychother Psychosom* 2005;74:165-172. Langewitza W, Izakovicb J, Wylerc J, Schindlerd C, Kissa A., Bircherb AJ.

Seventy-nine subjects who were moderately to severely allergic to birch pollen and grass were taught how to practice self-hypnosis to decrease their allergic reactions and increase their feelings of well-being. The researchers managed to follow 52 of them over the next two years (or two complete allergy seasons). After the first allergy season was over, the subjects reported that they experienced (on average) a 29.2 % reduction of their symptoms and a 26.2% improvement in their overall well-being, when compared to a control group. And while there were no further improvements between the first and second year of the study, the gains that were made the first year were maintained.

INCREASE AND DECREASE OF DELAYED CUTANEOUS REACTIONS OBTAINED BY HYPNOTIC SUGGESTIONS DURING SENSITIZATION STUDIES ON DINITROCHLOROBENZENE AND DIPHENYLCYCLOPROPENONE. *Allergy* Vol. 48(1):6 -11. Zachariae R, Bjerring P.

Sixteen highly hypnotizable subjects were recruited to test how their skin reacted to two drugs (DNCB and DCP). They were randomly assigned to two groups. Using a combination of direct suggestion and guided imagery, hypnosis was used to heighten the immunological response to these drugs in one group and to reduce it in the other group. They were then sent them home and only brought back one month later for the actual skin-prick test where the researchers found a significant difference in the allergic skin reaction between these two groups. Proving that hypnosis can both increase and decrease an allergic reaction.

SKIN REACTIONS TO HISTAMINE OF HEALTHY SUBJECTS AFTER HYPNOTICALLY INDUCED EMOTIONS OF SADNESS, ANGER, AND HAPPINESS. *Allergy* Vol. 56(8):734 – 740. Zachariae R, Jørgensen MM, Egekvist H, Bjerring P.

The authors of this study begin by noting some of the anecdotal reports that claim emotions can increase allergic reactions. In an attempt to verify this, they recruited 15 highly hypnotizable subjects and gave them each a histamine prick test and then measured the size of the flare-up on the subject's skin at specific intervals. They then repeated this after hypnotizing these subjects and inducing three emotions: sadness, hap-

piness and anger. Happiness and anger did not cause any real changes. However, when they hypnotically induced feelings of sadness they found that there was a significant increase in the allergic reaction.

HYPNOTHERAPY AND ANTI-AGING

Stress Reducing Regulative Effects of Integrated Mental Training With Self-Hypnosis on the Secretion of Dehydroepiandrosterone Sulfate (DHEA-S) and Cortisol in Plasma: A Pilot Study. *Contemporary Hypnosis*, May 2006, Vol. 23(3):101-11024. Johansson B, Uneståhl LE.

This study looked at whether or not self-hypnosis could be used to lower the stress-related hormone cortisol and raise the anti-aging hormone dehydroepiandrosterone sulfate (DHEA-S). Twelve healthy subjects were recruited and randomly assigned to a control and a self-hypnosis group. Those in the self-hypnosis group were brought together and taught self-hypnosis and mental training to reduce cortisol levels and increase DHEA-S. They were then asked to integrate these techniques into their daily life for the next six-months. At the end of the study it was shown that the hypnosis group had increased their DHEA-S levels by 16% and reduced their cortisol levels by 12.3% when compared to the control group. It was also noted that those in the hypnosis group now had DHEA-S levels equivalent to someone who was 5 to 10 years.

HYPNOTHERAPY AND ANXIETY DISORDERS

EFFECTS OF ANXIETY-REDUCING HYPNOTIC TRAINING ON LEARNING AND READING-COMPREHENSION TASKS. *J Natl Med Assoc.* 1984 March; 76(3): 233–235. Johnson RL, Johnson HC.

The authors of this paper wanted to determine if hypnosis can be used to reduce anxiety and therefore increase the ability to learn. They recruited 15 students who suffered from test-taking anxiety and randomly assigned these students to a control or an experimental group. Those in the experimental group were given hypnosis to reduce their anxiety before they were asked to read some information and be tested on it. There was no difference between the two groups when it came to simply recalling the information. However, when it came to comprehending this material and making logical inferences, those who had received hypnosis to reduce their anxiety significantly outperformed those who did not.

RESEARCH NOTE: ALLEVIATION OF PERFORMANCE ANXIETY THROUGH HYPNOTHERAPY. *Psychology of Music*, Vol. 21, No. 1, 78-82 (1993). Stanton HE.

The author of this paper recounts three case studies where hypnosis was successfully used to help musicians overcome debilitating feelings of performance anxiety. A guitarist in a rock band, a music student, and a member of an orchestra were each given two hypnosis sessions involving guided imagery and Rational-Emotive Therapy. This helped them to alleviate this problem so they were able to perform in public without experiencing stage-fright.

HYPNOSIS REDUCES PREOPERATIVE ANXIETY IN ADULT PATIENTS. *Anesthesia and Analgesia* 2006, vol. 102, no5, pp. 1394-1396. Saadat H, Drummond-Lewis J, Maranets I, Kaplan D, Saadat A, Wang SM, Kain ZN.

Many surgical patients experience feelings of extreme anxiety before their surgery. As a result, 76 patients were recruited for this study. They were randomly assigned to three groups: one group received the standard level of pre-operative care, the second group received "attentive care" where they had someone listen to and support them, while the third group received hypnosis and suggestions for well-being. Those who received hypnosis felt significantly less anxious about their upcoming surgery than the other two groups. Furthermore, when they were taken into the operating room and asked if their feelings of anxiety had increased or decreased. Those who had received the standard treatment (the control group) reported experiencing a 47% increase, those who had received "attentive care" reported a 10% increase, while those who had received hypnosis reported a 56% decrease in their level of anxiety.

HYPNOTHERAPY AND ASTHMA

HYPNOSIS FOR ASTHMA - A CONTROLLED TRIAL. *Br Med J* 1968;4:71-76 (12 October), doi:10.1136/bmj.4.5623.71. A Report to the Research Committee of the British Tuberculosis Association

Two hundred and fifty-two participants aged 10 to 60 were broken into two groups. One hundred and 27 were given monthly hypnosis sessions for a year and taught to practice self-hypnosis every day and 125 (the control group) were taught a series of breathing exercises designed to bring on deep relaxation. When they were independently assessed at the

end of the trial there was a statistically significant difference between the two groups. The hypnosis group had improved by 59% compared to a 43% improvement among those who had only been taught the breathing exercises.

EVIDENCE-BASED HYPNOTHERAPY FOR ASTHMA: A CRITICAL REVIEW. *International Journal of Clinical and Experimental Hypnosis* 2007 April.55(2)220-49. Brown D

This paper reviewed various research studies involving the use of hypnosis with asthmatics and it determined that while hypnosis has been shown to possibly help treat some of the physical symptoms associated with asthma such as the obstruction of airways and the inflammatory process, it has been proven to help improve the emotional well-being of asthmatic and help them to reduce the emotional triggers that can lead to asthma attacks. It also concludes that in spite of the numerous promising studies, there are some problems with the methodology and that larger, better designed studies are really needed.

HYPNOTIC SUSCEPTIBILITY AND ITS RELATIONSHIP TO OUTCOME IN THE BEHAVIORAL TREATMENT OF ASTHMA: SOME PRELIMINARY DATA. *Psychological Reports*. 1989 Oct; 65(2): 691-8. Murphy AI, Lehrer PM, Karlin R, Swartzman L, Hochron S, McCann B.

This study involved 12 subjects who were assessed on their hypnotizability using the Harvard Group Scale of Hypnotic Susceptibility and it was found that those who were the most hypnotizable improved the most when subjected to a methacholine test to measure the severity of their asthma. Those who were the most hypnotizable also reported a greater improvement in their symptoms.

CHRONIC ASTHMA AND IMPROVEMENT WITH RELAXATION INDUCED BY HYPNOTHERAPY. *J R Soc Med*. 1988 Dec; 81(12) 701-4. Morrison JB

This study followed 16 asthmatics whose condition was not properly controlled by drugs. They were given hypnosis sessions Southport General Infirmary in England. As a group their admissions to the hospital dropped from 44 (the year before the use hypnosis) to 13 (the year following their hypnosis sessions). Furthermore, 13 of these asthmatics reduced the total number of days they spent in hospital by 249 when these two periods were compared. 8 of them reduced their use of prednisolone, 6

stopped taking prednisolone all together, and the other 2 did not increase their dosage. Adverse side-effects from their medication was also reduced. And 62% of them reported that their condition had improved.

IMPROVEMENT IN BRONCHIAL HYPER-RESPONSIVENESS IN PATIENT WITH MODERATE ASTHMA AFTER TREATMENT WITH A HYPNOTIC TECHNIQUE: A RANDOMISED CONTROLLED TRIAL. *Br Med J (Clin Res Ed)*. 1986 Nov 1;293(6555): 1129-32. Ewer TC, Stewart DE

39 adults who had mild to moderate asthma were graded on their hypnotizability. 12 who moderately to highly hypnotizable and 10 who were much less hypnotizable were then enrolled in a 6 week hypnotherapy program. The 12 who responded well to hypnosis improved their bronchial hyper-responsiveness (as measured by the methacholine challenge test) by 79%. In addition to this 41% of them reported an improvement in their symptoms and as a group they reduced their use of bronchodilators by 26%. In contrast the 17 patient who formed the control group and 10 who were not that hypnotizable had no change. This study concluded that hypnosis was a very effective technique for asthmatics who were moderately to highly hypnotizable.

HYPNOSIS FOR EXERCISE-INDUCED ASTHMA. *AMERICAN REVIEW OF RESPIRATORY DISEASE*. 1982 Apr;125(4):392-5. Ben-Zvi Z, Spohn WA, Young SH, Kattan M.

This study explored the effectiveness on 10 stable asthmatics who were required to run on a treadmill for 6 minutes a day on 5 separate days. They received hypnosis on 2 of those days, and either saline or cromolyn mist (randomly given in a double-blind fashion with the suggestion that they were going to have a positive effect) on 2 other days and no treatment on 1 day. The study concluded that hypnosis can alter the magnitude of the response to exercise-induced asthma and help reduce the bronchospasms that occurred after exercise.

HYPNOSIS AND ASTHMA: CRITICAL REVIEW. *Journal of Asthma*, Volume 37, Issue 1 February 2000 , pages 1 - 15. Hackman RM, Stern JS, Gershwin ME.

This report analyzed numerous studies that were conducted on the effect of hypnosis on asthmatic patients. It concluded that there was sufficient significant data to conclude that hypnosis can be used to effectively help treat asthma. It found that the effectiveness of hypnosis was enhanced

when it involved multiple sessions and then reinforced with self-hypnosis. It found that children responded particular well to hypnosis.

HYPNOTHERAPY AND AUTO-IMMUNE DISORDERS

MIND-BODY HYPNOTIC IMAGERY IN THE TREATMENT OF AUTO-IMMUNE DISORDERS. *The American Journal of Clinical Hypnosis*, 2007, vol. 50, no2, pp.157-170. Torem MS.

This paper discusses the old belief that the body's immune system worked independently from the central nervous system. Then it highlights the advances that have been made in the last 50 years that prove that these systems not only interact, but actively influence each other. The author then shows how this interaction provides a doorway that allows hypnosis and imagery to influence the immune system. The author finishes by providing five cases where hypnosis was successfully used to help people suffering from auto-immune disorders.

HYPNOTHERAPY AND BLADDER PROBLEMS

HYPNOTHERAPY FOR THE UNSTABLE BLADDER: FOUR CASE REPORTS. *Contemporary Hypnosis*. 2006. Vol. 16(2):87-94. Smith N, Vasanti D'Hooghe SD, Fitzsimmons D, Rippin C, Wilde G.

This paper examines the effectiveness of hypnosis in helping four individuals with unstable bladders who were unable to take the anticholinergic drugs and who had failed to respond to conventional treatment (which included bladder training, reducing caffeine and advice on the consumption of fluids). They were all given three 1-hour hypnosis sessions. Two patients immediately responded to hypnosis and were still symptom-free six months later. The other two received some benefit but continued to have some symptoms.

HYPNOTHERAPY FOR INCONTINENCE CAUSED BY THE UNSTABLE DETRUSOR. *Br Med J (Clin Res Ed)* 1982;284:1831-1834. Freeman RM, Baxby K.

Fifty women with unstable bladders each received 12 hypnosis sessions and self-hypnosis audiotapes to use at home. By the end of the 12 sessions, 29 or 58% of the women no longer had any symptoms. It also

helped 14 or 28% of them improve their condition. While the outcome for 7 or 14% remained unchanged.

HYPNOTHERAPY AND BULIMIA NERVOSA

THE DISSOCIATIVE STATE

To understand some of these following studies involving bulimia, it is necessary to recognize that a dissociative state is a state where a person feels disconnected from themselves and/or their environment. We have all had minor experiences of this state, perhaps when we were so engrossed in a daydream that we briefly lost touch with what is going on around us.

The dissociative state can also be used as a defensive mechanism to protect us from bad experiences. For instance, children who have been repeatedly sexually abused often learn to dissociate from this experience in order to survive it. In extreme conditions it can even lead to the creation of multiple personalities.

THE USE OF HYPNOTHERAPY IN THE TREATMENT OF EATING DISORDERS. International Journal of Eating Disorders. VOL 7(5): 673-679. Vanderlinden J, Vandereycken W.

This report reviews various case studies involving the use of hypnosis to treat patients with eating disorders. It notes that while more scientifically rigorous studies need to be created to assess the potential of hypnosis to treat eating disorders, there is never-the-less some promising research in this field. Particularly with those who are suffering from bulimia nervosa because it has been found that bulimics are able to readily enter into a dissociative state (a trait often associated with a high level of highly hypnotizability).

THE USE OF HYPNOSIS IN THE TREATMENT OF BULIMIA NERVOSA. Int J Clin Exp Hypn. 1990 Apr;38(2):101-11. Vanderlinden J, Vandereycken W.

As a result of the various studies that demonstrate a link between high levels of hypnotizability and dissociation among bulimics, the authors of this study decided to incorporate hypnosis into their treatment of bulimics. It then goes on to describe various ways of doing this. It concludes

by noting that hypnosis can be used to help both the therapist and the patient discover new approaches to follow.

GUIDED IMAGERY TREATMENT TO PROMOTE SELF-SOOTHING IN BULIMIA NERVOSA: A THEORETICAL RATIONALE. *Journal Psychotherapy Practice and Research* 7:102-118, April 1998. Esplen MJ, Garfinkel PE.

Previous studies have shown that bulimia nervosa is a disorder involving the inability to regulate powerful emotions and to engage in a process of self-soothing. As a result, this report suggests that any treatment of this disorder should address these problems. It particularly recommends the use of guided imagery to help develop the ability to engage in healthy self-soothing practices.

HYPNOTIZABILITY, DISSOCIATION, AND BULIMIA NERVOSA. *Journal of Abnormal Psychology*. Vol 103(3), Aug 1994:455-459. Covino NA, Jimerson DC, Wolfe BE, Franko DL, Frankel FH.

This study examined 17 bulimics who were of a normal weight and 20 healthy people to serve as a control. It found that the bulimics were significantly more hypnotizable than those in the control group. It also found that bulimics had higher self-rated scores on a dissociative scale. This reports notes that these findings are consistent with other studies and it concludes that those psychological factors which are associated with a higher level of hypnotizability may play an important part in both the cause of this problem and its solution.

HYPNOTIZABILITY IN BULIMIC PATIENTS AND CONTROLS. A PILOT STUDY. *Eur Arch Psychiatry Clin Neurosci*, vol. 242, pp. 72-6, 1992. Kranhold C, Baumann U, Fichter M.

This study attempts to confirm that growing belief that bulimics are more hypnotizable and more able to dissociate than others. Fifteen bulimics in an inpatient program were matched with 15 others of similar age and education. They were evaluated by the Harvard Group Scale of Hypnotic Susceptibility. The results demonstrated that the bulimics were more hypnotizable than the control group.

AUTOHYPNOSIS, HYPNOTIC ANAESTHESIAS, HYPNOID STATES, HIDDEN EGO STATES, DEPERSONALIZATION AND OTHER DISSO-

CIATIVE PHENOMENA UNDERLYING ANOREXIA AND BULIMIA CASE STUDIES: METHODS OF TREATMENT. *Dissociation*: Vol. 9(1):37-45. Katz, BE.

This study examines the evidence gained from years of clinical work in dealing with patients suffering from eating disorders. It focuses on the role that autohypnosis (self-hypnosis in the form of extremely negative inner self-talk and negative inner suggestions), hypnotic anaesthesia (the ability to block out the pain of hunger, or the pain involved in making oneself vomit) and dissociation plays in anorexia and bulimia. The author of this study concludes that the unconscious misuse these three abilities most likely played a significant role in triggering these disorders. She concludes by stating that the skillful encouragement of the use positive autohypnosis can be used to help reverse this destructive behaviour.

HYPNOTHERAPY AND CANCER

EFFECT OF PSYCHOSOCIAL TREATMENT ON SURVIVAL OF PATIENTS WITH METASTATIC BREAST CANCER. *Lancet*. 1989 Oct 14;2(8668):888-91. Spiegel D, Bloom JR, Kraemer HC, Gottheil E.

Eighty-six patients with metastatic breast cancer who participated in a study on the effects of self-hypnosis on nausea and vomiting were tracked down 10 years later. Eight-three had died and only three were still living. However, when the researchers located the death certificates of the 83 they found something startling. The women in the study were divided in two groups, a control group which received normal care, and a group which was taught to use hypnosis. The mean survival in the control group was 18.9 months, while the mean survival for those in the hypnosis group was 36.6 months or nearly twice as long.

EARLY CHILDHOOD EMOTIONAL TRAUMA: AN IMPORTANT FACTOR IN THE AETIOLOGY OF CANCER AND OTHER DISEASES. *European Journal of Clinical Hypnosis* Vol. 7(2). Harris GA.

This research paper explores the evidence that links early childhood trauma (which must occur before the age of 7 or 8) to the development of cancer later in life. The author claims that this trauma causes the child to repress certain emotions. This repression then acts like a "time bomb" that can be triggered by events later in life. When this happens, it leads to the suppression of the immune system. This then allows diseases such as cancer to arise. The author goes on to say that the immune

system can be reactivated if the trauma and its underlying emotional impact is properly dealt with and resolved. The easiest way of doing this is through the use of hypnotic age regression techniques.

EFFICACY OF HYPNOTHERAPY AS A SUPPLEMENT THERAPY IN CANCER INTERVENTION. *European Journal of Clinical Hypnosis*. Vol. 6(1). Peynovska R, Fisher J, Oliver D, Mathew VM.

This paper reports on the use of hypnosis to help terminally ill hospice patients suffering from cancer. Participants were given three individually tailored hypnosis sessions. These sessions revolved around 4 themes: The management of emotions such as anger, frustration, depression and anxiety; the management of physical symptoms such as pain, insomnia and exhaustion; the management of the side-effects of their treatment (such as the nausea that accompanies chemotherapy); and the use of visualization to increase feelings of health and wellbeing.

HYPNOSIS FOR NAUSEA AND VOMITING IN CANCER CHEMOTHERAPY: A SYSTEMATIC REVIEW OF THE RESEARCH EVIDENCE. *Eur J Cancer Care*, Sept 2007; 16(5): 402-12. Richardson J, Smith J E, McCall G, Richardson A, Pilkington K, Kirsch I.

This study involved a review of six research studies (five which involved children) on the ability of hypnosis to relieve the nausea and vomiting associated with chemotherapy in cancer patients. The researchers found that hypnosis can play a significant role in reducing both anticipatory nausea and chemotherapy-induced nausea and vomiting.

HYPNOSIS IN THE TREATMENT OF ANTICIPATORY NAUSEA AND VOMITING IN PATIENTS RECEIVING CANCER CHEMOTHERAPY. *Oncology* 2000;59:100-104 Marchioro G, Azzarello G, Vivianic F, Barbato F, Pavanetto M, Rosetti F, Pappagallob GL, Vinanteb O.

Not only can cancer patients experience nausea and vomiting after their chemotherapy sessions, but they can even begin to experience these symptoms before their sessions. This is referred to as anticipatory nausea and vomiting. This study examined the effect that a relaxation induction followed by hypnosis had on 16 adult cancer patients who had all previously experienced anticipatory nausea and vomiting. All 16 patients stopped experiencing anticipatory nausea and vomiting with the aid of hypnosis.

A RANDOMIZED TRIAL OF SELF-HYPNOSIS TO CONTROL NAUSEA IN WOMEN RECEIVING MODERATE EMETOGENIC CHEMOTHERAPY. *Journal of Clinical Oncology 2005 Annual Meeting Proceedings*. Vol 23, No. 165 (June Supplement), 2005: 8182. Hurley R, Trezona P, Peczkalska E, Jirik C, Anderson E, Heinrich R.

The control of nausea during chemotherapy for cancer usually requires costly anti-emetic (anti-vomiting) drugs. Twenty-five women suffering from lung, ovarian or breast cancer were recruited for this study and randomly placed into a control or a hypnosis group. The hypnosis group were given two 1-hour sessions where they were taught relaxation and self-hypnosis exercises. Both groups received medication to reduce nausea and vomiting, however those in the relaxation/self-hypnosis, not only tended to take less medication (though not by a statistically significant amount) they also felt significantly less nausea than the control group. As a result, this study concluded that self-hypnosis can reduce the nausea associated with chemotherapy and may even reduce the use of anti-vomiting medication.

HYPNOSIS IN THE PREVENTION OF CHEMOTHERAPY-RELATED NAUSEA AND VOMITING IN CHILDREN: A PROSPECTIVE STUDY. *J Dev Behav Pediatr* 1994 Aug;15(4):258-64. Jacknow DS, Tschann JM, Link MP, Boyce WT.

Twenty patients receiving chemotherapy to treat cancer were randomly assigned to either a hypnosis or a control group. The control group received the normal anti-vomiting medication, while the hypnosis group relied primarily on the use of hypnosis to control any nausea and vomiting and only received medication if they needed it. Both groups experienced the same amount of nausea and vomiting as a result of the chemotherapy sessions. However, the group using hypnosis required significantly less medication to achieve this. This study also found that those in the group using hypnosis also experienced less anticipatory nausea and vomiting than those in the control group.

A RANDOMIZED CLINICAL TRIAL OF A BRIEF HYPNOSIS INTERVENTION TO CONTROL SIDE EFFECTS IN BREAST SURGERY PATIENTS. *Journal of the National Cancer Institute* 2007 99(17):1304-1312. Montgomery GH, Bovbjerg DH, Schnur JB, David D, Goldfarb A, Weltz CR, Schechter C, Graff-Zivin J, Tatrow K, Price DD, Silverstein JH.

Two hundred patients who were due to have surgery on their breasts were randomly assigned to a control group (who had people pay attention to them and listen to their concerns before they had surgery), and to a group that received a single 15-minute hypnosis session prior to surgery. This study found that not only did those who received hypnosis require less medication (propofol and lidocaine), they also reported experiencing less "pain, nausea, fatigue, discomfort and emotional upset" than the control group. It was further determined that patients in the hypnosis group also saved the hospital an average of \$772.71 because they required less time in surgery.

HYPNOTIC CONTROL OF ANTICIPATORY EMESIS IN PATIENTS RECEIVING CANCER CHEMOTHERAPY. Journal of Consulting and Clinical Psychology. Vol 50(1), Feb 1982, 14-19. Redd WH, Andersen GV, Minagawa RY.

Six female patients, aged 24 to 56 years old, who were undergoing chemotherapy and were experiencing anticipatory vomiting were given "deep muscle relaxation hypnosis." It was found that this form of hypnosis helped all of them to control this condition.

HYPNOTHERAPY AND CHILDHOOD AILMENTS

CHILDHOOD HABIT COUGH TREATED WITH SELF-HYPNOSIS. J Pediatr. 2004 Feb;144(2):213-7. Anbar RD, Hall HR.

Fifty-six children and adolescents who suffered from habitual coughing were taught self-hypnosis to help them relax and ignore the sensations that triggered the cough. The mean age of the subjects was 10.7 years. 59% of them had their coughs triggered by respiratory infections, 13% by asthma, 5% by exercise and 4% by eating. Fifty-one of the subjects actually followed through and used self-hypnosis. Among this group, 78% stopped coughing after the initial instruction session and a further 12% stopped within one month (for a total of 90%). The study concluded that even though habitual coughing was triggered by a wide variety of causes, self-hypnosis provided a safe and efficient way to treat this problem.

HYPNOTHERAPEUTIC MANAGEMENT OF PEDIATRIC AND ADOLESCENT TRICHOTILLOMANIA. J Dev Behav Pediatr. 1996 Oct;17(5):328-34. Kohen DP.

Trichotillomania, or hair-loss caused by the repetitive pulling of the hair,

is a particularly hard problem to treat by conventional means, especially when it leads to alopecia (spotty bald patches). As a result, this report focused on how hypnosis was used to successfully treat five childhood and adolescent cases. It made particular note of the fact there was no standard, uniform way to treat this problem with hypnosis and that success was only achieved when various hypnotic techniques were customized to the specific needs each patient.

HYPNOTHERAPY AND CHILDHOOD ASTHMA

HYPNOTHERAPY IN THE TREATMENT OF BRONCHIAL ASTHMA. *Annals of Allergy* 1975 Jun; 34(6) 356-62. Aronoff GM, Aronoff S, Peck L.

This study involved 17 children and adolescents aged 6 to 17 to determine how effective hypnosis was in stopping acute asthmatic attacks. They were assessed prior to receiving hypnosis, in the period immediately following hypnosis and two other subsequent times. All subjects experienced an average improvement that was greater than 50% as measured by three objective tests and their own self-reported ratings. It concluded that hypnosis can reduce asthmatic symptoms in children and adolescents and improve breathing.

HYPNOSIS AS AN ADJUNCT THERAPY FOR ASTHMA: CASE REPORT. *Journal of Adolescent Health Care* 1982 Aug;3(1)45-8. Neinstein LS, Dash J

This study reported on a case involving an asthmatic adolescent with a moderately severe case of asthma. He was given 4 weekly hypnosis sessions and his progress was then monitored every two weeks for a year. At the end of the study it was concluded that his daily 'peak expiratory flow rate' had increased from 486 liters a minute to 502 litres a minute. In addition to this, it was also found that both his attendance and his academic performance had improved over the year.

HYPNOTHERAPY AND CHRONIC FATIGUE SYNDROME

INFORMATION PROCESSING IN CHRONIC FATIGUE SYNDROME: A PRELIMINARY INVESTIGATION OF SUGGESTIBILITY. *Journal of Psychosomatic Research*, Vol. 51(5):679-686. DiClementi J.

This study attempted to determine if there were any substantial intellectual and cognitive differences between a group of healthy people and those suffering from Chronic Fatigue Syndrome. The researchers found that while there was no difference between these two groups in terms of memory and general intellectual functioning, there was one significant difference, because those suffering from CFS group were found to be far more suggestible. Furthermore, it was found that among the CFS group, the more suggestible an individual was, the more severe their symptoms were.

HYPNOSIS IN THE MANAGEMENT OF CHRONIC FATIGUE SYNDROME. *Journal Of Chronic Fatigue Syndrome*, Vol.12(4) 2005. Vallings R.

This paper discusses how, over the last 30 years, hypnosis is becoming more and more accepted by the medical community. So much so, that it has now been successfully incorporated into treatment of many different medical conditions. The author focuses on the fact that hypnosis has been proven to help control the severity of the symptoms, increase the expectation that there will be a positive outcome, and enhance the effectiveness of more conventional treatments. They then describe various hypnotic techniques (and even provide scripts) that can be used to help those suffering from CFS to better manage their condition.

THE USE OF HYPNOSIS IN BOOSTING THE EFFECT OF COGNITIVE BEHAVIOURAL THERAPY IN THE TREATMENT OF CHRONIC FATIGUE. *The European Journal of Clinical Hypnosis* Vol. 5 (3). Wailes J.

This study involved three groups: a control, one that only received Cognitive Behavioural Therapy (CBT) and one that received hypnosis and CBT. And while those who were in the experimental groups reported a significant increase in their level of energy when compared to the control group, those who received hypnosis and CBT were only moderately better off than those who only received CBT. However, when assessing all of the data, the authors found that there is a possible link between CFS and stress. They then theorized that ongoing stress somehow depleted the physical resources of those suffering from CFS and how this in turn might lead to a dysfunction in the Hypothalamus, Pituitary and Adrenal Glands Axis (or HPA Axis). And since there are other researchers who theorize that one of the reasons hypnosis works is because it somehow affects the Limbic-Hypothalamic Pituitary System, this means that there is room for further research in this field.

HYPNOTHERAPY AND CLAUSTROPHOBIA

MAGNETIC RESONANCE IMAGING: IMPROVED PATIENT TOLERANCE UTILIZING MEDICAL HYPNOSIS. *Am J Clin Hypn.* 1990 Oct;33(2):80-4. Friday PJ, Kubal WS.

Magnetic Resonance Imaging (MRI) is a medical procedure where patients are required to lie on their backs in a tight cylinder (with only a few inches of space between their face and the top of the chamber) for up to an hour. Between one and ten percent of patients experience feelings of panic and other claustrophobic reactions. Many are unable to complete the procedure. This study reports on how hypnosis was used to help ten claustrophobic patients successfully undergo this procedure.

HYPNOSIS USING A COMMUNICATION DEVICE TO INCREASE MAGNETIC RESONANCE IMAGING TOLERANCE WITH A CLAUSTROPHOBIC PATIENT. *Mil Med.* 1999 Jan;164(1):71-2. Simon EP.

The paper reports on the case of a woman who was unable to have an MRI because she was claustrophobic and panicked in such confined environments. She was then hypnotized twice and given post-hypnotic suggestions to increase her sense of comfort and relaxation and gain control over her body's responses. She was then hypnotized through headphones when she entered the MRI unit where she was able to complete the procedure.

HYPNOTHERAPY AND CONTROL OF BLEEDING

PREOPERATIVE INSTRUCTIONS FOR DECREASED BLEEDING DURING SPINE SURGERY. *Anesthesiology*, Sept. 1986 – Vol.65 :A246. Bennett HL, Benson DR, Kuiken DA.

Ninety-two patients who were scheduled for spinal surgery were randomly divided into three groups. One served as the control, the second were given suggestions for relaxation, while the third were given preoperative suggestions that the blood would leave the area where the surgery was to take place at the start of the operation and then remain away until it was complete. Those who were given the suggestions for the blood to move away, lost significantly less blood than those in both the control and relaxation groups.

HYPNOTIC CONTROL OF UPPER GASTROINTESTINAL HEMORRHAGE: A CASE REPORT. 1984 Am J Clin Hypn 27;1:22-5. Bishay EG, Stevens G, Lee C.

This paper reports on the case of a woman who was in shock due to bleeding in her gastrointestinal tract. She was on her way to have an endoscopy, so that her doctors could see what was going on, when the bleeding stopped as a direct result of someone reading a hypnosis script to her.

THE USE OF HYPNOSIS WITH HEMOPHILIA. Psychiatr Med, 1992, Vol. 10;4:89-98. LaBaw, W.

This paper describes the use of hypnosis to help hemophiliacs at the Colorado Health Sciences Center. It found that both the frequency and the severity of bleeding among hemophiliacs can be reduced if hypnosis is used. The authors noted that not only does this result in the need for fewer blood transfusions, but it also gives those involved a greater sense of control and makes them feel more confident they can manage their condition.

THE USE OF HYPNOSIS IN HEMOPHILIA DENTAL CARE. Ann N Y Acad Sci, 1975 , 240;263-6. Lucas ON.

This paper discusses how hypnosis can not only lower the anxiety hemophiliacs have about dental care, it can also reduce the secretion of saliva and decrease the amount of capillary bleeding. The author also notes that post-hypnotic suggestions can then be used to reduce any subsequent post-operative bleeding.

HYPNOTHERAPY AND DEPRESSION

A META-ANALYSIS OF HYPNOSIS IN THE TREATMENT OF DEPRESSIVE SYMPTOMS: A BRIEF COMMUNICATION. The International Journal of Clinical and Experimental Hypnosis, Vol. 57(4) October 2009; 431 – 442. Shih M, Yang Y-H, Koo M.

The authors of this paper statistically analyzed the results of six research studies involving the use of hypnosis to treat depression. They concluded

that not only has hypnosis been shown to significantly reduce the symptoms of depression, but it also provides a viable alternative to medication.

COGNITIVE HYPNOTHERAPY FOR DEPRESSION: AN EMPIRICAL INVESTIGATION. *Int J Clin Exp Hypn.* 2007 Apr;55(2):147-66 Alibhai A.

This study compared the results of Cognitive Hypnotherapy with Cognitive-Behavioural Therapy (a well-established form of treatment for depression) in the treatment of depression. Eighty-four people suffering from depression were randomly assigned to a 16-week program that involved one of these two treatments. When it was over the researchers found that there were significant improvements to both groups. However, those who were assigned Cognitive Hypnotherapy improved more than the other group and had a 6% greater reduction in depression, a 5% greater reduction in anxiety and an 8% greater reduction in feelings of hopelessness. These increases continued to be maintained one year later. This study concluded that Cognitive Hypnotherapy met the American Psychological Association's evidence-based criteria for it to be accepted as a legitimate treatment of depression.

EVIDENCE-BASED COGNITIVE HYPNOTHERAPY FOR DEPRESSION. *Contemporary Hypnosis Vol.* 26(4):245-262. Assen Alladin.

This article starts by noting that depression is one of the most common disorders treated by psychiatrists. Unfortunately, it is also a very complex problem because it affects thoughts, emotions, behaviours and bodily functions. The author describes the use of Cognitive Hypnotherapy in the treatment of depression and goes into enough detail so that others can replicate this technique. He concludes by stating that Cognitive Hypnotherapy is now supported by sound clinical evidence in the treatment of depression and that this approach should now be used as a template to help with other similar disorders, especially since it can be used in conjunction with various other forms of treatment.

HYPNOTICALLY CATALYZING EXPERIENTIAL LEARNING ACROSS TREATMENTS FOR DEPRESSION: ACTIONS CAN SPEAK LOUDER THAN MOODS. *The International Journal of Clinical and Experimental Hypnosis Vol.* 58 (2), April 2010. Yapko. M.

A number of different studies on depression have shown that a critical juncture in recovery comes when a depressed individual begins to learn

and use new skills. As a result, the author of this paper describes how hypnosis can not only be used as a catalyst to encourage this type of experiential learning, it can also be used to decrease the thoughts and perceptions that often impede this important step.

HYPNOSIS, RUMINATION, AND DEPRESSION: CATALYZING ATTENTION AND MINDFULNESS-BASED TREATMENTS. The International Journal of Clinical and Experimental Hypnosis. Vol. 58(2), April 2010. Lynn SJ, Barnes S, Deming A, Accardi M.

This paper discusses the evidence that has been accumulated in the last 30 years which proves hypnosis can be used to increase “attention, imagination, and motivation.” The authors then discuss how these qualities can be used to help people to recover from depression. They finish by focusing on the role that learning and practicing various mindfulness techniques (such as meditation or t'ai chi) can play in this recovery. They finish by discussing various ways that hypnosis can be used to teach mindfulness and how it can be used to motivate people to practice these techniques on a regular basis.

SYSTEMIC HYPNOSIS WITH DEPRESSED INDIVIDUALS AND THEIR FAMILIES. The International Journal of Clinical and Experimental Hypnosis. Vol. 58(2), April 2010. Lorio C, Torti C.

Depression has historically been viewed as something that only affects individuals. As a result, conventional treatments tend to focus exclusively on the person who is suffering from it. However, the authors of this paper note that family members and cultural influences can also play a role in the development of this illness. As a result, when using hypnosis to treat people with depression, the authors have found that it helps if the family is included in the treatment.

TREATING POSTPARTUM DEPRESSION WITH HYPNOSIS: ADDRESSING SPECIFIC SYMPTOMS PRESENTED BY THE CLIENT. The American Journal of Clinical Hypnosis 2006, vol.49,(3),pp.219-223. Yexley MJ.

This study examines a case where hypnosis was used to successfully treat a new mother who was suffering from Postpartum Depression. It noted that hypnosis was ideally suited to addressing the various problems that plagued this client by helping her to develop the necessary skills to resolve these problems and prevent any further re-occurrence.

CAN HYPNOSIS REDUCE POSTNATAL DEPRESSION? *British Journal of Midwifery*, Vol. 11, Iss. 5, 01 May 2003, pp 299-301. Mantle F.

The report looks at some of the potential causes of Postnatal Depression, a disorder that affects between 10-15% women who have just given birth. It states some forms of postnatal depression can be caused by things such as an abnormal labour and even by obstetricians who attempt to shorten the length of labour in order to make it a less exhausting process for the new mother. It states that hypnosis is particularly valuable in reducing Postnatal Depression when it is used during pregnancy and in preparation of childbirth.

HYPNOTHERAPY AND DIABETES

HYPNOSIS AS AN ADJUNCT THERAPY IN THE MANAGEMENT OF DIABETES. *Int J Clin Exp Hypn.* 2008 Jan;56(1):63-72. Xu Y, Cardena E.

This paper notes that the conventional medical treatment of diabetes all too often fails to take psychological factors into account. This is why the authors concluded that hypnosis should be considered as a part of a multi-modal treatment program for diabetes. The authors also examined the literature on the use of hypnosis to support the medical treatment of diabetes. Among the benefits of including hypnosis in a comprehensive treatment program are a better regulation of blood sugar levels, an increased compliance with diet and exercise requirements, as well as the ability to improve blood circulation in peripheral regions of the body.

HYPNOSIS AND DIABETES: APPLICATIONS FOR CHILDREN, ADOLESCENTS, AND ADULTS. *Australian Journal of Clinical Hypnotherapy and Hypnosis*, 2006, 27(1), 19-27. Kihlslinger D, & Sapp M.

This paper describes a number of ways that hypnosis is being used to help diabetics. The authors note that using Cognitive Behavioural techniques during hypnosis to challenge diabetic's "core cognitive distortions" regarding their diabetes can be beneficial. Particularly for young diabetics who often develop a distorted view of themselves and the nature of diabetes. The authors go on to describe how hypnosis has been used to help adolescent diabetics improve their feelings of self-esteem and develop healthy relationships. The authors also discuss the accumulating

evidence that proves hypnosis can influence the functioning of various systems in our brain and body. They even note that there is a direct relationship between stress and glucose levels, and how studies have demonstrated that when stress is reduced, blood glucose levels also drop.

FEAR OF INJECTIONS: THE VALUE OF HYPNOSIS IN FACILITATING CLINICAL TREATMENT. Contemporary Hypnosis. Vol.18 (2); 100 -106.

This paper discusses three cases where the patients were extremely afraid of needles. It noted that even though all three differed in the cause and history surrounding their fear of needles, they were all able to overcome it with the help of hypnosis.

HYPNOTHERAPY AND DIGESTION/IRRITABLE BOWEL SYNDROME

CONTROLLED TRIAL OF HYPNOTHERAPY IN THE TREATMENT OF SEVERE REFRACTORY IRRITABLE-BOWEL SYNDROME. Lancet. 1984 Dec 1;2(8414):1232-4. Whorwell PJ, Prior A, Faragher EB.

This study was one of the earliest ones that proved IBS could be successfully treated with hypnosis. It involved 30 patients who were suffering from severe refractory irritable-bowel syndrome. They were randomly assigned to two groups. One received hypnotherapy, while the other received psychotherapy. The patients who were in the psychotherapy group showed a small improvement in some aspects of their condition, while those in the hypnosis group showed a dramatic improvement in all aspects of their condition.

HYPNOTHERAPY IN SEVERE IRRITABLE BOWEL SYNDROME: FURTHER EXPERIENCE. Gut. 1987 Apr;28(4):423-5. Whorwell PJ, Prior A, Colgan SM.

This paper reports on a study conducted on 15 patients, eighteen months after they were successfully treated with hypnosis for severe intractable irritable bowel syndrome. The authors report that even though two of the patients had minor relapses (and were successfully treated with hypnosis again) all patients still remained free of any symptoms 18 months later.

SYMPTOMATOLOGY, QUALITY OF LIFE AND ECONOMIC FEATURES OF IRRITABLE BOWEL SYNDROME – THE EFFECT OF HYPNOSIS. *Aliment Pharmacol Ther*, 1996 Feb, 10:1, 91-5. Houghton LA, Heyman DJ, Whorwell PJ.

This study involved 50 patients who were all suffering from severe IBS. Twenty-five of them were treated with hypnosis and 25 were treated with more conventional means. At the end of the study, the researchers found that those who were treated with hypnosis showed a significant improvement in their condition when compared to the other group. They also determined that those who were treated with hypnosis took less time off work, made fewer visits to their physicians and had a better (self-reported) quality of life. This led the authors of this study to conclude there were substantial economic savings involved in treating IBS with hypnosis.

HYPNOTHERAPY IN IRRITABLE BOWEL SYNDROME: A LARGE-SCALE AUDIT OF THE CLINICAL SERVICE WITH EXAMINATION OF FACTORS INFLUENCING RESPONSIVENESS. *Am J Gastroenterol* 2002 Apr;97(4):954-61. Gonsalkorale WM, Houghton LA, Whorwell PJ.

This is a report on the first 250 patients to use a new facility in England exclusively dedicated to using hypnosis to help those suffering from IBS. All 250 patients received 12 individual hypnosis sessions over a three month period and were required to practice self-hypnosis at home between sessions. There was a marked improvement in all symptoms of IBS among all patients (with the exception of males who were also suffering from diarrhea), as well as an improvement in their quality of life and a reduction in feelings of depression and anxiety.

LONG-TERM IMPROVEMENT IN FUNCTIONAL DYSPEPSIA USING HYPNOTHERAPY. *Gastroenterology*. 2002 Dec;123(6):1778-85. Calvert EL.

This study involved 126 patients who were suffering from functional dyspepsia (digestive problems). They were randomly assigned to one of three groups for a 16-week program. One group received hypnosis, another received 'supportive therapy' (which included a placebo medication), while the third received medical treatment. At the end of the program it was found that those given hypnosis had improved by 59%, compared to a 41% improvement among those given supportive therapy, and a 33% improvement among those treated medically. Fifty-six weeks later during a follow-up, it was found that those who had been given

hypnosis and those who had been given medical treatments had both continued to improve (the hypnosis group had now improved by 79% and the medical treatment group by 43%), while those who had received supportive therapy had declined (to 33%) . However, by this point, 90% of the medical treatment group and 82% of the supportive therapy group had begun to take medication for this condition; something that no one in the hypnosis group had done. Furthermore, those who had been in the hypnosis group had significantly reduced the number of visits they made to see their physicians (with a median of 1 visit, compared to a median of 4 visits in both of the other groups). The authors of this study concluded that in addition to providing an effective treatment for dyspepsia, there were significant economic advantages to encouraging those with this illness to have it treated with hypnosis.

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. Houghton LA, Cooper P, Morris J, Whorwell PJ.

This study focused on how hypnosis affects the speed it takes for food and drink to empty from the stomach (gastric emptying) in 11 healthy subjects and 15 patients who were suffering from digestive problems (dyspepsia). Both groups were monitored under 3 conditions: during rest; after cisapride (a drug that increases the speed at which the stomach empties); and during a 90-minute hypnosis session. It was found that among the 15 patients who were suffering from digestive problems (dyspepsia), it took an average of 274 minutes for the stomach to empty during rest, 227 minutes with cisapride and 150 minutes with hypnosis. Among the 11 healthy subjects, only hypnosis significantly increased the speed at which the stomach emptied. This study concluded that hypnosis is effective in helping to shorten the time it takes to empty the stomach in both healthy and dyspeptic subjects.

HYPNOTHERAPY AND FEAR/DENTAL ANXIETY

HYPNOSIS TECHNIQUES USED TO DIMINISH ANXIETY AND FEAR: REVIEW OF THE LITERATURE. *Rev Belge Med Dent.* 2003;58(2):99-104; Willemsen R.

This study reviewed the academic and scientific literature that dealt with the use of hypnosis for patients who were afraid of medical or dental treatments. It determined that hypnosis could help because of its ability

to focus attention and increase the effectiveness of suggestions. It also found there was strong evidence that hypnosis can help to reduce both the pain and fear associated with medical and dental procedures.

THE USE OF IMAGERY SUGGESTIONS DURING ADMINISTRATION OF LOCAL ANESTHETIC IN PEDIATRIC DENTAL PATIENTS. ASDC J Dent Child. 2000 Jul-Aug;67(4):263-7, 231 Peretz B, Bimstein E.

This authors of this study asked children between three and sixteen years old (who were going to receive an injection to control the pain) to select some sort of pleasant image or memory and then to visualize this image or memory when they were getting the needle. The authors concluded that using techniques (which harnessed the power of the children's visual imagination) can help to reduce pain-related stress.

HYPNOSIS IN THE TREATMENT OF DENTAL FEAR AND PHOBIA. Dent Clin North Am. 1988 Oct;32(4):745-61. Forgione AG.

This study found that hypnosis is a powerful behavioural modification technique that can be used to help patients overcome the fears and phobias they have about dental treatments. It also concluded that even those health-care professionals who had no intention of using hypnosis, should at least have some familiarity with it, so that they don't accidentally deliver negative and counterproductive suggestions to those undergoing dental treatment.

PSYCHIC ASPECTS OF THE OVERACTIVE GAG REFLEX (GAGGING) IN CONNECTION WITH A CLINICAL CASE. Fogorv Sz. [A Hungarian Journal] 2002 Oct;95(5):199-203 Gaspar J, Fejerdy L, Fabian TK. Semmelweis Egyetem, Fogorvostudományi Kar, Fogpotlastani Klinika, Budapest.

This study examined a clinical case of a patient who gagged during dental treatment for no physical reason. It concluded that hypnosis could play a valuable role in helping these patients to overcome the gag reflex.

HYPNOTHERAPY AND FERTILITY, BIRTH ETC.,

HYPNOSIS FOR PAIN RELIEF IN LABOUR AND CHILDBIRTH: A SYSTEMATIC REVIEW. British Journal of Anaesthesia. 2004 Oct;93(4):505-

11. Epub 2004 Jul 26. Cyna AM, McAuliffe GL, Andrew MI.

This study reviewed a number of studies where hypnosis was used during pregnancy and childbirth. It found that even though the standards and techniques varied, women who used hypnosis required significantly less pain medication. This study also found that women who used hypnosis reported having less severe labour pains.

EVIDENCE-BASED CLINICAL HYPNOSIS IN OBSTETRICS, LABOR AND DELIVERY, AND PRETERM LABOR. *Int Journal of Clinical and Experimental Hypnosis*, Vol. 55, No. 3, July 2007. Brown D, and Hammond DC.

This paper reviews various academic studies conducted on the use of hypnosis in labour and delivery. The authors report that the use of hypnosis has been proven to shorten Stage 1 and 2 of labour, while also leading to a significant reduction in the use of medication to control the pain. The authors also note that hypnosis has been used to significantly prolong the length of pregnancy when an expectant mother goes into labour too early.

IMPACT OF HYPNOSIS DURING EMBRYO TRANSFER ON THE OUTCOME OF IN VITRO FERTILIZATION-EMBRYO TRANSFER: A CASE-CONTROL STUDY. *Fertility and Sterility*. 2006 Mar 25; Levitas E, Parmet A, Lunenfeld E, Bentov Y, Burstein E, Friger M, Potashnik G.

This study compared two groups of women undergoing embryo transfer at an Israeli fertility clinic. Ninety-eight women used hypnosis to help them during this process and 96 acted as the control group and followed the normal procedures. Those who received hypnosis had a 30.2% implantation rate compared with only 14.4% in the control group. This study concluded that not only did hypnosis help to double the rate of embryonic implantation, but it also helped to improve the subject's attitude towards fertility treatment.

INFERTILITY AND PREGNANCY LOSS: HYPNOTIC INTERVENTIONS FOR REPRODUCTIVE CHALLENGES. *Healing from within: The use of hypnosis in women's health care* (pp. 191-212)2000. Mikesell, Susan G. (edited by Hornyak, Lynne M. & Green, Joseph P.

This study reports on the use of hypnosis and imagery-based techniques to help women feel more empowered when dealing with miscarriages

and infertility. Based on 15 years of experience in this field, the author concludes that hypnosis can really help at three points in the infertility process. First, it can bring a greater acceptance of the diagnosis. Second, it can help the patient cope more easily with infertility treatments. And third, it can help them to deal with any miscarriages.

HYPNOSIS IN POST-ABORTION DISTRESS: AN EXPERIMENTAL CASE STUDY. Contemporary Hypnosis, Vol. 19(2): 85-99. Walters VJ, Oakley DA.

This study reports on a case where hypnosis was used to help a 23-year-old woman deal with the emotional ramifications that arose as a result of an abortion she had. The authors followed a three-stage program that was developed to help people deal with Post-Traumatic Stress Disorder (PTSD). The subject was given pre and post therapy questionnaires and monitored on a weekly basis throughout the therapy. She experienced a significant improvement in her mental health and over-all well-being as a direct result. The report concludes that hypnosis may be particularly effective in helping women overcome post-abortion distress.

THE USE OF HYPNOSIS TO IMPROVE PAIN MANAGEMENT DURING VOLUNTARY INTERRUPTION OF PREGNANCY: AN OPEN RANDOMIZED PRELIMINARY STUDY. Contraception 2007 Jan;75(1):52-8. Marc I, Rainville P, Verreault R, Vaillancourt L, Masse B, Dodin S.

Thirty women undergoing first-trimester surgical abortions at a hospital in Quebec City were broken into two groups. One group received the standard treatment and the other received hypnosis along with the standard treatment. In addition to working with a hypnotist, the second group were also given pain control suggestions 20 minutes before, and throughout their surgical procedure. The women in both groups were given the option of using nitrous oxide during the procedure. This study found that only 36% of those who used hypnosis requested nitrous oxide, compared to 87% of those in the control group. Furthermore, they found that this reduction in the use of nitrous oxide, did not lead to any increase in anxiety or pain.

HYPNOTHERAPY AND GLAUCOMA

THE EFFECTS OF HYPNOSIS ON INTRAOCULAR PRESSURE IN NORMAL AND GLAUCOMATOUS SUBJECTS. Psychosomatic Medi-

cine, Vol. XX(4), 1958. Berger AS, Simel PJ.

Four individuals suffering from glaucoma were recruited to study the effects that direct suggestion hypnosis would have on the intraocular pressure in their eyes. Upon emerging, the authors found that there was a significant drop in pressure in one or both eyes in all four subjects. These subjects also reported improvements in their life from feeling more relaxed and sleeping better, to having less tearing in their eyes.

HYPNOTHERAPY AND HEALING AFTER SURGERY

THE EFFECTIVENESS OF ADJUNCTIVE HYPNOSIS WITH SURGICAL PATIENTS: A META-ANALYSIS. *Anesth Analg.* 2002 Jun;94(6):1639-45. Montgomery GH, David D, Winkel G, Silverstein JH, Bovbjerg DH.

This research paper reviewed 20 studies involving the use of hypnosis with surgical patients. It found that regardless of the hypnotic techniques used, those who received hypnosis “had better outcomes than 89% of the patients in control groups.” The authors of this study conclude that this research “strongly” supports the idea that hypnosis should be used with all surgical patients.

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.

Eighteen patients who were due to have surgery to reduce the size of their breasts were randomly assigned to one of three groups. The first group (the control group) received standard care; the second group received 8 “supportive” sessions (to make sure that the outcome was not simply the result of the extra attention paid to the patients); while the third group received 8 hypnosis sessions that focused on accelerating the healing of their surgical wounds. Digital photographs were taken and various objective techniques were used to measure the rate of healing. The researchers found that during the 7 weeks following surgery, those who were in the hypnosis group healed significantly faster than those in the other two groups. This study concluded that hypnosis can significantly accelerate the healing of surgical wounds.

HYPNOSIS WITH CONSCIOUS SEDATION INSTEAD OF GENERAL

ANAESTHESIA? APPLICATIONS IN CERVICAL ENDOCRINE SURGERY. *Acta Chir Belg.* 1999 Aug;99(4):151-8. Meurisse M, Defechereux T, Hamoir E, Maweja S, Marchettini P, Gollogly L, Degauque C, Joris J, Faymonville ME.

Between 1994 and 1997, 216 cervical endocrine surgeries were performed using hypnosis in the Department of Surgery at the University of Liege in Belgium. The results of this group was then compared with 121 similar surgeries where General Anesthesia was used. Only 2 patients (1%) in the hypnosis group ended up requiring General Anesthesia to complete their surgeries. Every patient who received hypnosis described their experience as "very pleasant." They also reported feeling less pain and required significantly less medication after the surgery to control the pain than did those who were in the control group. They also spent significantly less time recovering in hospital and returned to work and an active life significantly quicker. The authors conclude that there are significant "physiological, psychological and economic benefits" when using hypnosis for surgical patients. They also noted that the use of hypnosis helped the hospital and the health-care system save a substantial amount of money.

SUGGESTION, RELAXATION, AND HYPNOSIS AS ADJUNCTS IN THE CARE OF SURGERY PATIENTS: A REVIEW OF THE LITERATURE. *Am J Clin Hypn.* 1991 Jan;33(3):172-86. Blankfield RP.

This paper reviewed 16 studies where suggestion, relaxation and hypnosis were used to help patients recover from surgery. It concluded that these techniques can speed recovery, improve healing, shorten the time spent in hospital and help patients recover psychologically and emotionally.

BRIEF PRESURGERY HYPNOSIS REDUCES DISTRESS AND PAIN IN EXCISIONAL BREAST BIOPSY PATIENTS. *International Journal of Clinical and Experimental Hypnosis*, Vol. 50(1) Jan. 2002:17-32. Montgomery GH, Weltz CR, Seltz M, Bovbjerg DH.

This study wanted to determine the effect that a brief hypnosis session before surgery, would have on a patient's post-surgical feelings of pain and distress. Twenty women who were going to have excisional breast biopsies were randomly assigned to either a control or a hypnosis group. The authors concluded that those in the hypnosis group had a significant reduction in their post-surgical feelings of pain and distress.

HYPNOTHERAPY AND HEALING FRACTURED BONES

USING HYPNOSIS TO ACCELERATE THE HEALING OF BONE FRACTURES: A RANDOMIZED CONTROLLED PILOT STUDY. *Altern Ther Health Med.* 1999 Mar;5(2):67-75. Ginandes CS, Rosenthal DI.

In this study, 11 subjects who had fractured bones were randomly assigned to a control or a hypnosis group. All subjects received the standard care for orthopedic patients (which included clinical assessments and radiographs over the 12 weeks following the fracture). Radiographs taken at 6 weeks showed that the hypnosis group were healing much faster than the control group (it was estimated that it took the control group another 2 ½ weeks to achieve the same level of healing). Other assessments also revealed that those who had used hypnosis required less medication for the pain, had a significant improvement in the mobility of their ankle, and had an easier time descending stairs than did those in the control group. The authors concluded that hypnosis can accelerate the healing of fractured bones.

HYPNOTHERAPY AND HIV/AIDS

HYPNOTIZABILITY AND IMMUNOLOGICAL RESPONSE TO PSYCHOLOGICAL INTERVENTION IN HIV. *Contemporary Hypnosis Vol* 21(3);126 – 135. Laidlaw TM, Kerstein R, Bennett BM, Naito A, Dwivedi P, Gruzelier J.

Twenty-two subjects who were HIV positive, were put into two groups. Thirteen were given 4 weekly hypnosis training sessions (2 hours each) and told to practice self-hypnosis on a daily basis, while 9 subjects (the control group) were given similar training in a Japanese healing art called Johrei. None of the participants had ever used any anti-viral medication. This study concluded that the most important factor in predicting a successful outcome, was hypnotizability. This was because those who were highly hypnotizable ended up with significantly higher the levels of CD4+ t-lymphocytes when compared to those who were not hypnotizable.

HYPNOSIS FOR TERMINAL END STAGE AIDS: EASING THE PASSAGE TO DEATH. *Int Conf AIDS.* 2002 Jul 7-12; 14: abstract no. WePeF6812. Marcus JD.

This paper discusses the many ways that hypnosis can be used to improve the quality of life for AIDS patients who are in the terminal stage of this illness. The most important being that it can help to relieve their pain and suffering. This in turn has a ripple effect because it reduces feelings of stress, tension and anxiety. And since these emotions have been proven to impair the functioning of the immune system, this can help them to live longer. Hypnosis can also be used to help them to deal more directly with their emotional distress. And when these patients are taught to do self-hypnosis, this can be particularly empowering because it teaches them that they have more control over their physiological and psychological states than they had previously believed. This in turn gives them a greater feeling of control over what is happening to them, so they no longer feel so helpless.

THE USE OF HYPNOSIS WITH ASYMPTOMATIC HIV INFECTED PEOPLE. *Int Conf AIDS*. 1989 Jun 4-9; 5: 784. Gochros JS.

This author of this paper reports on the use of hypnosis in their clinical practice to help those who are HIV positive “cope with interpersonal relationships and such issues as anxiety, fear of death and dying, sense of powerlessness and loss, and reaction to stigmatization.” Based on their observations and feedback from those involved, the author concluded that hypnosis was particularly effective when it came to relieving stress and learning how to develop the necessary coping skills for dealing with this illness. The author also noted that it can be very counterproductive if the hypnotist implies that hypnosis can heal the patient of HIV, or prevent HIV from turning into AIDS.

HYPNOSIS FOR THE CONTROL OF HIV/AIDS-RELATED PAIN. *International Journal of Clinical and Experimental Hypnosis*, Vol. 50(2) April 2002;170-188 Langenfeld MC, Cipani E, Borckardt JJ.

Five adults suffering from AIDS were recruited for a 12-week study to determine if hypnosis could help them deal more effectively with the pain associated with their illness. By the end of the study, 4 of them had been able to significantly reduce the amount of medication they needed to manage their pain.

HYPNOTHERAPY AND HYPERTENSION

PILOT STUDY OF THE EFFECT OF SELF-HYPNOSIS ON THE MED-

ICAL MANAGEMENT OF ESSENTIAL HYPERTENSION. *Stress and Health*. Vol. 15(4):243-247. Raskin R, Raps C, Luskin F, Carlson R, Cristal R.

This study involved patients who were hospitalized due to hypertension. After their blood pressure was lowered and they left the hospital, most patients would often require an increase in their medication just to keep their blood pressure down. As a result, this study divided these patients into three groups: one served as a control and were simply monitored without any intervention; a second received attention and the opportunity to relax; while the third was taught self-hypnosis. When they were followed up, the group who were taught self-hypnosis were found to have the lowest blood pressure of all. In addition to this, no one in the hypnosis group required an increase in their medication, unlike those in the other two groups.

EFFECTIVENESS OF HYPNOSIS IN REDUCING MILD ESSENTIAL HYPERTENSION: A 1-YEAR FOLLOW-UP. *International Journal of Clinical and Experimental Hypnosis*. Jan, 2007. Vol. 55(1)1. Gay MC.

Thirty participants who were suffering from mild essential hypertension were randomly assigned to either a control group (which did not receive any treatment) or a hypnosis group (where each person received 8 individually-tailored hypnosis sessions). The results of the study demonstrated that not only did hypnosis reduce blood pressure in the short-term, but when the subjects were followed-up, this effect lasted into both the medium and the long term.

CEREBRAL RHEOGRAPHIC VARIATIONS BY HYPNOSIS. *International Society of Hypnosis, 9th International Congress of Hypnosis and Psychosomatic Medicine*. Galeazzi L, Bernardi L.

Studies show that people suffering from hypertension have an increased blood flow in the left cerebral hemisphere of their brain. When hypertensive subjects were hypnotized, it was found that they were able to significantly reduce this flow of blood. This had a ripple effect and led to a lowering of diastolic blood pressure and a lowering of vascular resistance throughout the rest of the body.

THE USE OF HYPNOSIS AND BIOFEEDBACK PROCEDURES FOR ESSENTIAL HYPERTENSION. *International Journal of Clinical and*

Experimental Hypnosis, Oct. 1977. Vol. 25(4):335-347. Friedman H, Taub HA.

This study looked at the effect that combining hypnosis and biofeedback would have on the diastolic blood pressure in those suffering from essential hypertension. Subjects were randomly assigned to one of four groups. One served as a control, the second only received hypnosis, the third only received biofeedback, and the fourth received both hypnosis and biofeedback. Upon completion, it was found that there were no improvements in either the control group or those who had received the combination of hypnosis and biofeedback. And while those who had only received biofeedback improved, they did not improve as much as those who only received hypnosis.

A SIX-MONTH FOLLOW-UP OF THE USE OF HYPNOSIS AND BIOFEEDBACK PROCEDURES IN ESSENTIAL HYPERTENSION. *Am J Clin Hypn.* 1978 Jan;20(3):184-8. Friedman H, Taub HA.

This was a follow-up of the previous study [see above] where subjects who were suffering from essential hypertension were randomly assigned to four groups (a control group, one that only received hypnosis, one that only received biofeedback, and one that received both biofeedback and hypnosis). Six months later it was found that those who had only received hypnosis had maintained the reduction in their blood pressure, unlike those in the biofeedback group.

HYPNOTHERAPY AND IMMUNE SYSTEM

HYPNOSIS IS A MODULATOR OF CELLULAR IMMUNE DISREGULATION DURING ACUTE STRESS. *Journal of Consulting and Clinical Psychology.* Vol 69(4), Aug 2001, 674-682. Kiecolt-Glaser JK, Marucha PT, Atkinson C, Glaser R.

This study involved 33 medical and dental students who were selected because they were hypnotizable. Initial samples of their blood were taken during a period of low stress. Then they were then split into two groups: one serving as the control group, and the other receiving training in hypnosis for relaxation. The group that received training in hypnosis, on average, did not show the same decrease in interleukin 1 (which plays an important inflammatory role against infections) as the control group. It was also noted that those who practiced hypnosis the most had the highest levels of CD3+ and CD4+ T-lymphocytes. (which are major

components of the adaptive immune response). This study concluded that hypnosis can help reduce the negative effect that highly stressful situations have on our immune system.

SELF-HYPNOSIS AND EXAM STRESS: COMPARING IMMUNE AND RELAXATION-RELATED IMAGERY FOR INFLUENCES ON IMMUNITY, HEALTH AND MOOD. *Contemporary Hypnosis Vol18 (2):73 – 86.* Gruzelier J, Levy J, Williams J, Henderson D.

Medical School students were recruited for this research project to study the effect that training in self-hypnosis has on mood, health and the functioning of the immune system during exam time. They were broken into two groups where they were trained in 3 weekly group sessions and then given a self-hypnosis audio-recording and encouraged to listen to it at home. The control group received 'relaxation-related-imagery' training, while the study group received 'immune-related-imagery' training. The participants then had samples of their blood taken during exam time to determine the levels of various lymphocytes (a type of white blood cells that are an important part of the body's immune system). Those students who had received the 'immune-related-imagery' reported lower levels of viral illnesses, such as colds and the flu, than those who had received the 'relaxation-related-imagery.' The 'immune-related-imagery' group also did not experience the same lowering of the levels in their lymphocytes as the other group did. This study concluded that self-hypnosis can improve the functioning of the immune system and lead to improvements in well-being.

INDIVIDUAL DIFFERENCES IN PERSONALITY, IMMUNOLOGY AND MOOD IN PATIENTS UNDERGOING SELF-HYPNOSIS TRAINING FOR THE SUCCESSFUL TREATMENT OF A CHRONIC VIRAL ILLNESS, HSV-2. *Contemporary Hypnosis Vol. 19(4):149 – 166.* Gruzelier J, Champion A, Fox P, Rollin M, McCormack, Catalan SP, Barton S, Henderson D.

This study examined the effects of self-hypnosis training among patients who were suffering from severe and chronic outbreaks of the herpes simplex virus and genital herpes. They were assessed both before and after a six-week training program where it was found that self-hypnosis cut the rate of recurrence by almost 50% in the group as a whole, and that it benefited 65% of those involved. Those who responded well also showed an increase in the ability of their natural killer cells (NKC) to kill the herpes virus. It was also found that the more hypnotizable a subject was, the more they responded to this treatment.

MONOCYTE CHEMOTACTIC ACTIVITY IN SERA AFTER HYPNOTICALLY INDUCED EMOTIONAL STATES. *Scandinavian Journal of Immunology* Vol 34(1); 1 – 79. Nielsen I, Eldrup E, Schade-Larsen C, Gotliebsen K.

A number of studies have shown that both psychological and emotional factors can affect the functioning of the immune system. As a result, the researchers involved in this study wanted to find out the effect that certain emotional states, when induced by hypnosis, will have on the immune system. They selected 11 highly hypnotizable subjects, put them into a deep trance and then gave them suggestions to relive previous moments in their life when they experienced intense bouts of anger or depression. At the end of the hypnosis session they were then given suggestions to experience feelings of happiness. Blood samples were taken before the hypnosis session, after each emotional state and when the session was over. The authors found that the chemotactic activity (the movement of a microorganism in response to chemical stimulation) that occurred when the subjects were in a depressed state was significantly lower than it was when they were in the angry state. They also found that the chemotactic activity in both of these emotional states (angry and depressed) was significantly lower than it was in the 'happy' state.

MODULATION OF TYPE 1 IMMEDIATE AND TYPE IV DELAYED IMMUNOREACTIVITY USING DIRECT SUGGESTION AND GUIDED IMAGERY DURING HYPNOSIS. *Allergy Volume* 44(8): 537 – 542. Zachariae R, Bjerring P, Arendt-Nielsen L.

Eight highly hypnotizable volunteers were recruited for this study. It was found that when the members of this group were hypnotized and given suggestions to decrease their reaction to a histamine prick test, there was a significant reduction in flare-ups when compared to a control group. This study confirmed numerous anecdotal reports that hypnotic suggestions can decrease allergic skin reactions.

CAN RELAXATION TRAINING AND HYPNOTHERAPY MODIFY THE IMMUNE RESPONSE TO STRESS, AND IS HYPNOTIZABILITY RELEVANT? *Contemporary Hypnosis* Vol.13 (2);100 – 108 Johnson VC, Walker LG, Heys SD, Whiting PH, Eremin O.

Twenty-four healthy subjects were assigned to either relaxation training that involved hypnosis or to a control group. The subjects were brought

back three times where they were given various psychological tests and had samples of their blood and urine collected. On their second visit (20 days after the first) they gave samples of their blood and urine before and after they were exposed to a “stressor.” Those who had received the hypnotic relaxation training had a better immune response (as measured by “lymphocyte responsiveness and IL-1 secretion”) than the other group. However, after further analysis it was found that among the members of this group, there was a direct correlation between those whose immune systems performed the best and those who had the highest scores on the Creative Imagination Scale (one of the tests often used to assess hypnotizability).

HYPNOTHERAPY AND MENOPAUSE AND HOT FLASHES

HYPNOSIS FOR THE MANY FACES OF MENOPAUSE: ENHANCING NORMAL DEVELOPMENT AND TREATING TRAUMA-RELATED DISRUPTIONS. Halas, Mary A [From the book *Healing from Within: The Use of Hypnosis in Women’s Health Care*. Hornyak, Lynne M. (Ed); Green, Joseph P. (Ed). 2000; 213-232].

This paper explores the various ways that menopause manifests itself within women, with a particular emphasis on the effects that traumatic events which happened earlier in life, can play on the subsequent development of menopausal symptoms. The author then explains how hypnosis can be used to help those who are overly affected by menopause by doing such things as: changing deeply-held negative-beliefs at the subconscious level; reconstructing a more realistic sense of the self; learning to see how the various symptoms that arise might really be signals that there is some sort of unfinished business that needs to be resolved; and by helping to reframe thoughts and reinterpret bodily experiences.

MIND CONTROL OF MENOPAUSE. *Womens Health Issues*. 2003 Mar-Apr;13(2):74-8. Younus J, Simpson I, Collins A, Wang X.

This pilot study had two purposes: firstly, to explore the effect that hypnosis has on hot flashes and the quality of life of those suffering from hot flashes; and secondly, to explore the effect it has on the level of fatigue and tiredness that is experienced by these woman. Ten healthy women and four breast cancer patients who were suffering from recurring hot flashes were recruited for this study. They were asked to keep a diary to record their hot flashes. The authors of this study found that hypnosis

significantly reduced the number, severity and length of the hot flashes, while also significantly improving the quality of the subject's lives. However, while they found that hypnosis led to better sleep and reduced insomnia among their subjects, this change was not statistically significant.

RANDOMIZED TRIAL OF A HYPNOSIS INTERVENTION FOR TREATMENT OF HOT FLASHES AMONG BREAST CANCER SURVIVORS.

Journal of Clinical Oncology, Nov. 2008, Vol 26(31):5022-5026. Elkins G, Marcus, Stearns JV, Perfect M, Rajab MH, Ruud C, Palamara L, Keith T.

This study involved 60 woman who were chosen because they had survived breast-cancer (and now had no detectable signs of this disease) and who had experienced at least 14 hot flashes each week for at least a month. They were randomly assigned to a control group (who received no treatment) and a group who received 5 weekly hypnosis sessions. Not only did the group who received hypnosis reduce the frequency and severity of their hot-flashes by 68%, they were less anxious and depressed and reported sleeping better than those in the control group.

HYPNOTHERAPY AND NON-CARDIAC CHEST PAIN

TREATMENT OF NON-CARDIAC CHEST PAIN: A CONTROLLED TRIAL OF HYPNOTHERAPY. Gut. 2006 October; 55(10): 1403–1408. Jones H, Cooper P, Miller V, Brooks N, Whorwell PJ.

No one really knows what causes (or even how to treat) non-cardiac chest pain (an angina-like chest pain). As a result, those suffering from it can experience extreme bouts anxiety and depression. This study involved 28 NCCP patients who were randomly assigned to two groups: one that received 12 hypnosis sessions over 17 weeks, and one that received placebo medication and supportive therapy over this same period. The results showed that 80% of those who received hypnosis had a significant improvement in their condition as compared to 23% in the control group. Those using hypnosis also reduced the amount of medication they were taking and reported a significant improvement in their general level of well-being.

HYPNOTHERAPY AND PAIN MANAGEMENT

HYPNOTIC TREATMENT OF CHRONIC PAIN. J Behav Med. 2006 Jan

11;:1-30. Jensen M, Patterson DR.

This paper reviewed various controlled trials involving the use of hypnosis to control pain. It concluded that hypnosis can provide a significantly greater reduction in pain than physical therapy, education, or the management of medications. It even found that the hypnotic treatment did not even have to be called 'hypnosis' for it to be effective.

PAIN MANAGEMENT: HYPNOSIS AND ITS PLACE IN MODERN PAIN MANAGEMENT - REVIEW ARTICLE. Niger Postgrad Med J. 2007 Sept;14(3):238-41. Amadasun FE.

This paper reviewed the various scientific studies that showed hypnosis was an effective treatment for pain management. It concluded that in spite of some of the "methodological flaws" involved in many of the studies, there was "sufficient clinical evidence of sufficient quality" to conclude that hypnosis is an effective treatment for chronic pain.

A META-ANALYSIS OF HYPNOTICALLY INDUCED ANALGESIA: HOW EFFECTIVE IS HYPNOSIS? Int J Clin Exp Hypn. 2000 Apr;48(2):138-53. Montgomery GH, DuHamel KN, Redd WH.

This paper reviewed 18 studies conducted on the use of hypnosis to relieve pain over a two-decade period. It concluded that hypnosis provided an effective way to help people deal with pain because it had a "moderate to large hypnoanalgesic effect." It further concluded that hypnosis should be more widely used in the treatment of pain.

HYPNOSEDATION: A VALUABLE ALTERNATIVE TO TRADITION ANAESTHETIC TECHNIQUES. Acta Chir Belg. 1999;99:141- 146. Faymonville ME, Meurisse M, Fissette J.

This paper reports on the anecdotal use of hypnosis in over 1650 surgeries that were performed in the Department of Anaesthesia and Intensive Care, at the University of Liège in Belgium. It confirmed that hypnose-dation combined with local anaesthesia can be used as an alternative to more traditional means of sedation.

PSYCHOLOGICAL APPROACHES DURING CONSCIOUS SEDATION. HYPNOSIS VERSUS STRESS REDUCING STRATEGIES: A PROSPECTIVE RANDOMIZED STUDY. Pain 1997, Dec;73(3)361-7. Fay-

monvillea ME, MambourgPH, Jorisa J, Vrijensc B, Fisseted J, Alberte A, Lamyf M.

Sixty patients patients who were going to have plastic surgery using local anesthetic and intravenous sedation (they could request midazolam and alfentanil if needed) where randomly placed into a control group where they were taught strategies for reducing stress, or into a group where they would receive hypnosis during the surgery. Their behaviour was monitored by a psychologist before, during, and after surgery where their levels of anxiety and pain, and feelings of being in control, were recorded. Not only did the group using hypnosis require significantly lower levels of midazolam and alfentanil than the control group. They reported experiencing significantly lower levels pain and anxiety; and a greater feeling of being in control during the entire process. Their vital signs were also found to be significantly more stable than those of the control group.

USE OF HYPNOSIS BEFORE AND DURING ANGIOPLASTY. *Am J Clin Hypn.* 1991 Jul;34(1):29-37. Weinstein EJ, Au PK.

Thirty-two subjects were recruited for this study. Sixteen were randomly assigned to be in the control group and 16 were hypnotized before they underwent an angioplasty (a procedure where a balloon is inserted into a vein and then inflated to help open the vein while the patient remains conscious and aware). This study found that the surgeons involved were able to keep the balloon inflated 25% longer with the hypnotized group. Forty-four percent of the control group also asked for more pain medication, compared with only 13% of the hypnotized group.

HYPNOTHERAPY AND THE SCIENCE BEHIND HYPNOTIC PAIN CONTROL

NALOXONE FAILS TO REVERSE HYPNOTIC ALLEVIATION OF CHRONIC PAIN. *Psychopharmacology (Berl).* 1983;81(2):140-3. Spiegel D, Albert LH.

Some researchers had previously believed that the reason hypnosis helps to reduce chronic pain was that it caused the body to produce endorphins (our natural pain killers). To test this theory, 6 patients suffering from chronic pain (caused by peripheral nerve irritation) were taught self-hypnosis to reduce their feelings of pain. They were then randomly given either a saline solution (a placebo) or naloxone (a drug that is known to block the effects of endorphins) and were tested for pain

at 5 minute intervals for an hour. If the analgesic effect of hypnosis was somehow caused by the internal production of endorphins, then naloxone would have caused the pain to return. However, the results of this study demonstrated that naloxone had no effect on the power of hypnosis to reduce pain. As a result, it was determined that endorphins are not involved in hypnotic pain control.

FMRI STUDY OF HYPNOSIS-INDUCED ANALGESIA. A paper presented to the 17th Meeting of the European Neurological Society, 2007. May TS.

This paper reports on a study involving 13 healthy subjects who underwent 'functional magnetic resonance imaging' (fMRI) of their brain while their left hand was subjected to a painful laser beam. The researchers found that there was a significant difference in the way their brains responded to pain while they were in a normal state, compared to when they were in a state of hypnosis. In both the normal and the hypnotic state the primary somatosensory cortex (the area in the brain that first receives the pain signals) had a noticeable reaction to the pain. When the subjects were in a normal state, this had a cascading effect on other parts of the brain involved in the perception of, and reaction to, pain (such as "the anterior cingulate gyrus"). However, when they were in a state of hypnosis, this cascading effect did not occur. This means that while in a state of hypnoanalgesia the brain registers the pain, however it does not pass these signals onto the other areas of the brain involved in perceiving, feeling and reacting to the pain.

FUNCTIONAL ANATOMY OF HYPNOTIC ANALGESIA: A PET STUDY OF PATIENTS WITH FIBROMYALGIA. European Journal of Pain. Vol. 3(1) 1999; 7-12. Wik G, Fischer H, Brag e B, Finer B, Fredrikson M.

In an attempt to understand what happens in the brain when a person is hypnotized and then given suggestions for pain relief, subjects were recruited who were suffering from the painful condition of fibromyalgia. PET (positron emission tomography) scans were then taken of their brains when they were resting and then when they were in a state of hypnotically-induced analgesia. The subjects all reported experiencing less pain when they were in the state of hypnosis, then they did when they were in a state of rest. The researchers also found that there were significant differences in the way the blood flowed through the brain in these two states. They found that during hypnotically-induced analgesia the 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." This study proved that

hypnosis leads to real physical changes in the brain.

HYPNOTHERAPY AND FIBROMYALGIA

(Also see the study immediately above).

CONTROLLED TRIAL OF HYPNOTHERAPY IN THE TREATMENT OF REFRACTORY FIBROMYALGIA. RHEUMATOL. 1991 Jan;18(1):72-5 . Haanen HC, Hoenderdos HT, van Romunde LK, Hop WC, Mallee C, Terwiel JP, Hekster GB.

Forty patients who were suffering from refractory fibromyalgia were randomly put into either a control group (where they received physical therapy) and a hypnosis group for 12 weeks. They were all reassessed again after 24 weeks. The group that received hypnosis reported feeling significantly better than the physical therapy group in terms of pain, sleeping patterns, and fatigue upon waking-up. The hypnosis group also reported experiencing significantly lower physical and mental levels of discomfort as determined by the Hopkins Symptom Checklist.

HYPNOTHERAPY AND BURNS

AN EXPERIMENTAL STUDY OF HYPNOSIS IN PAINFUL BURNS. American Journal of Clinical Hypnosis. Vol 21(1), Jul 1978, 3-12. Wake-man, R. John; Kaplan, Jerold Z.

This paper reports on the results of two studies conducted on burn patients and the effectiveness of hypnosis to help control the feelings of acute pain. Both studies showed that those who received hypnosis required significantly less medication than those who were in the control groups. It was also found that among those who were given hypnosis, those patients who were between 7 and 28-years-old required significantly less medication for pain than did those who were older. This study concluded that hypnosis and hypnotic ego-strengthening techniques can play an important role in helping burn patients cope with pain.

HYPNOTHERAPY AND TEMPOROMANDIBULAR DISORDERS (TMD)

MEDICAL HYPNOSIS FOR TEMPOROMANDIBULAR DISORDERS:

TREATMENT EFFICACY AND MEDICAL UTILIZATION OUTCOME ORAL SURGERY, ORAL MEDICINE, ORAL PATHOLOGY, ORAL RADIOLOGY & ENDODONTICS. 2000 Jul;90(1) :54-63. Simon EP, Lewis DM.

Twenty-eight patients who did not respond well to conventional treatments were recruited into a hypnosis treatment program. This study found that hypnosis has the potential to be a valuable tool in the treatment of TMD because these patients reported that they had a significant decrease in the frequency, duration and intensity of their pain, as well as an improvement in their ability function on a daily basis.

HYPNOTHERAPY AND MIGRAINES AND HEADACHES

MIGRAINE AND HYPNOTHERAPY. International Journal of Clinical & Experimental Hypnosis 1975; 23(1): 48-58. Anderson JA, Basker MA, Dalton R.

Forty-seven subjects were recruited and asked to report the number and severity of migraines they had each month for one year. Twenty-three subjects were treated with hypnosis (and taught self-hypnosis) and 24 were treated with the drug prochlorperazine (Stemetil). At the end of the study it was found that those who had been treated with hypnosis experienced significantly fewer blinding migraine attacks than did the medicated group. Furthermore, 10 of those who had been treated with hypnosis no longer experienced any migraines at all, compared to only 3 in the other group.

REVIEW OF THE EFFICACY OF CLINICAL HYPNOSIS WITH HEADACHES AND MIGRAINES. International Journal of Clinical and Experimental Hypnosis, Vol. 55(2) April 2007;207-219. Corydon Hammond.

A 12-member assessment team from National Institute of Health Technology (in the US) reviewed numerous studies on hypnosis and concluded that it met the criteria to be considered a well-established, effective treatment for headaches and migraines. Furthermore, they concluded that it had no side-effects and that it did not carry any risk of causing an adverse reaction.

COMPARISON OF SELF-HYPNOSIS AND PROPRANOLOL IN THE

TREATMENT OF JUVENILE CLASSIC MIGRAINE. *Pediatrics*. 1987 Apr;79(4):593-7. Olness K, MacDonald JT, Uden DL.

This study focused on children, 6 to 12 years of age, who were suffering from juvenile classic migraines. They were randomly placed into two groups. One group received a placebo for the first three months, while the other received propranolol. At the end of the three months they switched, so the group who had been receiving propranolol were then given the placebo, while those who had been given the placebo were switched to propranolol for a further three months. At the end of this initial 6-month period both groups were then taught self-hypnosis. The study found that the mean number of headaches experienced was 13.3 while taking the placebo, 14.9 while taking propranolol, and 5.8 when doing self-hypnosis.

TREATMENT OF CHRONIC TENSION-TYPE HEADACHE WITH HYPNOTHERAPY: A SINGLE-BLIND TIME CONTROLLED STUDY. *Headache*. 1991 Nov;31(10):686-9. Melis PM, Rooimans W, Spierings EL, Hoogduin CA.

This paper reports on a study where a special hypnotic technique was used to help patients cope with chronic-tension type headaches. When compared to a control group, the results showed that this hypnotic technique significantly reduced the intensity of the headaches. It also led to a significant reduction in the frequency of the headaches and a reduction in the general level of anxiety.

HYPNOTHERAPY AND OROFACIAL PAIN

HYPNOSIS IN THE MANAGEMENT OF PERSISTENT IDIOPATHIC OROFACIAL PAIN - CLINICAL AND PSYCHOSOCIAL FINDINGS. *Pain*. 2007 Aug 3, Abrahamsen R, Baad-Hansen L, Svensson P.

This study involved 41 people who were suffering from Persistent Idiopathic Orofacial Pain (PIOP). PIOP is a condition that involves persistent pain in the mouth and face which has no discernable underlying cause. The participants were randomly assigned to two groups: one that received five 1-hour hypnosis sessions and a control group that received five 1-hour relaxation sessions. The effectiveness of the treatments was measured in a number of ways. The most important was the Visual Analog Scale (VAS) where the subjects assessed their own level of pain three times a day on a scale of 0 (no pain) to 10 (agonizing pain). Subjects were also

assessed using the McGill Pain Questionnaire, a symptom check-list, SF-36 (a quality of life questionnaire with 8 categories scored on a scale of 0-100), the quality of sleep, and the use of medication for pain relief.

The VAS pain scores for group that used hypnosis decreased by 33.1%, while those of the control group only decreased by 3.2%. Furthermore it was found that those in the hypnosis group who were highly hypnotizable had a 55.0% decrease in the VAS scores, compared to a 17.9% decrease in those who were less susceptible to hypnosis. The researchers also found two other statistically significant differences between the two groups because those who used hypnosis had a significant change in their perception of the pain (as determined by the McGill Pain Questionnaire) and they used significantly less pain-relief medication. However, they found no significant differences between the two groups in terms of the symptom check list and the SF-36 scores. They concluded that hypnosis offers “clinically relevant pain relief,” for PIOP, especially for those who are highly hypnotizable. They also noted that a truly effective program should also involve training in stress-management and quality of life skills.

HYPNOTHERAPY AND POST TRAUMATIC STRESS DISORDER (PTSD)

HYPNOTHERAPY IN THE TREATMENT OF CHRONIC COMBAT-RELATED PTSD PATIENTS SUFFERING FROM INSOMNIA: A RANDOMIZED ZOLPIDEM-CONTROLLED CLINICAL TRIAL. *International Journal of Clinical and Experimental Hypnosis*, Vol. 56(3) July 2008;270-280. Eitan G, Abramowitz A, Barak Y, Ben-Avi I, Haim Y, Knobler A.

This Israeli study evaluated the benefits of treating PTSD with hypnosis. Thirty-two patients suffering from combat-related PTSD were randomly split into two groups. The control group received 10mg of Zolpidem each night for 14 nights, while the other group received four 1 ½ hour sessions of “symptom-oriented hypnotherapy” over this same period. All participants completed various questionnaires (among them were the Impact of Event Scale and the Beck Depression Inventory). After two weeks there was a significant difference between the two groups when rated by the Post-Traumatic Disorder Scale. This improvement was maintained at a 1 month follow-up. Furthermore it was noted that the group that received hypnosis were sleeping and coping with life much better than the control group.

THE VALUE OF HYPNOSIS IN THE TREATMENT OF CHRONIC PTSD WITH DISSOCIATIVE FUGUES IN A WAR VETERAN. *Contemporary Hypnosis* Vol. 18(1):4-13. Degun-Mather M.

This reports on on a case involving the use of hypnosis to successfully treat a British war veteran who had been suffering from chronic PTSD for 40 years; during which time he had also developed dissociative fugues (there were times he appeared to be fully aware of he actions, but upon recovery he was unable to remember what he was doing) and severe depression. He was eventually admitted to a psychiatric facility and when he was discharged he was treated using a three step program. First, he was treated with Cognitive -Behavioural-Hypnotherapy to stabilize his condition. Second, hypnotic regression techniques were used in order to allow him to safely re-experience the traumatic events that caused the PTSD and to re-evaluate them in a more objective light. Hypnotic dreams were also used to help process this material. During this step he recovered one memory of a traumatic event that proved crucial to his recovery. Third, hypnosis was used to help him to further reintegrate these memories and rehabilitate his life.

THE PSYCHODYNAMIC TREATMENT OF COMBAT NEUROSES (PTSD) WITH HYPNOSIS DURING WORLD WAR II. *Int J Clin Exp Hypn.* 2000 Jul;48(3):324-35; discussion 336-41. Watkins JG.

This study reports on a hypnotherapy program that was instituted during the Second World War to help military personnel who were suffering from what was called 'battle trauma' (now known as PTSD). These men were suffering from a combination of problems including hysteria, phobias, anxiety and various forms of dissociative experiences. Although the term was not in use then, it is now recognized that various 'hypnoanalytic techniques' were used, particularly during the attempt to create abreactions (the reviving of strong emotional memories). It was found that the process of using hypnosis to create abreactions did not retraumatize those involved, or lead to any psychotic episodes.

HYPNOTIC TREATMENT OF PTSD IN CHILDREN WHO HAVE COMPLICATED BEREAVEMENT. *Am J Clin Hypn.* 2005 Oct-2006 Jan;48(2-3):183-9. Iglesias A, Iglesias A.

This paper reports on two cases where children were suffering from Post Traumatic Stress Disorder (PTSD) as a result of the traumatic death of close relatives in rural Guatemala. The normal grieving process had been inhibited due to the horrific nature of these deaths and the chil-

dren's grief had become a pathological psychiatric disorder. Both children were only treated with a single session of hypnosis involving the Hypnotic Trauma Narrative (a protocol the authors developed specifically to help children deal with situations like this). There was a follow-up one week later and again after two months when the authors noted that the children's symptoms had cleared and they were now beginning to grieve in a normal fashion.

INDIRECT EGO-STRENGTHENING IN TREATING PTSD IN IMMIGRANTS FROM CENTRAL AMERICA. *Contemporary Hypnosis* Vol. 18(3):135-144. Gafner G, Benson S.

As a result of civil war in Central America many refugees escaped to America suffering from PTSD as a result of being tortured, raped and abused. This report focuses on the limitations of conventional therapy to help these individuals and it presents two ego-strengthening techniques involving indirect hypnosis that have proved helpful in treating this population.

HYPNOTIZABILITY AS A POTENTIAL RISK FACTOR FOR POSTTRAUMATIC STRESS: A REVIEW OF QUANTITATIVE STUDIES. *Int J Clin Exp Hypn*. 2008 Jul;56(3):334-56. Yard SS, DuHamel KN, Galynker II.

This report reviewed numerous academic studies to determine the relationship between hypnotizability and PTSD. It found six studies that showed a clear relationship between hypnotizability and PTSD. However, it noted that hypnotizability was only measured after the onset of symptoms. The authors speculate that a high level of hypnotizability might be a major risk factor in determining who is susceptible to PTSD. However, they noted that in order to prove this, one would need to measure an individual's level of hypnotizability before and after they experienced a traumatic event.

HYPNOSIS FOR COMPLEX TRAUMA SURVIVORS: FOUR CASE STUDIES. *Am J Clin Hypn*. 2009 Jan;51(3):263-71. Poon MW.

This report describes the use of hypnosis to help four Chinese women who were suffering from complex trauma. Two were victims of sexual abuse when they were children, the third had been raped and the fourth had been repeatedly battered by her husband. The hypnotic treatment involved three steps: "stabilization, trauma processing, and integration." Hypnosis was first used to help stabilize the victims. Then age regression

techniques were used to help them to remember the traumatic events that led to their condition (and to begin to distance themselves from these memories). Finally, hypnosis was used to help them integrate and consolidate the gains they had made. When their treatment was finished they were all assessed by various self-reported and objective measurements. These all indicated that they experienced a significant reduction in their symptoms as a direct result of this hypnotic treatment.

HYPNOTHERAPY AND SEXUAL DYSFUNCTION

IMPOTENCE: ACUPUNCTURE AND HYPNOTIC SUGGESTIONS IN THE TREATMENT OF NON-ORGANIC MALE SEXUAL DYSFUNCTION. Scand J Urol Nephrol. 1997 Jun;31(3):271-4. Aydin S, Ercan M, Caskurlu T, Tasci AI, Karaman I, Odabas O, Yilmaz Y, Agargun MY, Kara H, Sevin G.

This study involved 60 men who had some kind of a non-organic sexual dysfunction (that is, it did not have any physical cause). They were broken into three groups: 15 received acupuncture, 16 received hypnosis and 29 received a placebo. The group that received the placebo improved by 45%, the group that received acupuncture improved by 60% and the group that received hypnosis improved by 75%. And even though the acupuncture group did better than the placebo group, this was not enough for it to be considered a statistically significant improvement. The only treatment that was considered significantly better than the placebo was hypnosis.

EFFICACY OF TESTOSTERONE, TRAZODONE AND HYPNOTIC SUGGESTION IN THE TREATMENT OF NON-ORGANIC MALE SEXUAL DYSFUNCTION. Br J Urol. 1996 Feb;77(2):256-60. Aydin S, Odabas O, Ercan M, Kara H, Agargun MY.

Seventy-nine men who were suffering from a sexual dysfunction that did not have any physical cause were recruited for this study. Twenty men received testosterone, 21 received trazodone, 20 received hypnosis, and 18 were given a placebo. They were all assessed 4, 6 and 8 weeks later. The placebo group improved by 39%, the testosterone group by 60%, the trazodone group by 67% and the hypnosis group by 80%. The improvements in the testosterone and the trazodone groups were not considered to be statistically significant. Only hypnosis was found to be statistically more effective than the placebo.

THE HYPNOTHERAPEUTIC TREATMENT OF IMPOTENCE. *Va Med.* 1977 Jun;104(6):389-92. Ward WO.

This study focused on 50 men who received hypnosis for the treatment of impotence. They ranged in age from youth to middle-age (with the mean being 29.4-years-old). At the end of the therapy all of the men were able to perform sexually. The researchers were able to contact 66% of the participants during a follow-up and all but two claimed that they were still doing well. The researchers concluded that the use of a combination of hypnotic techniques involving direct suggestions (for ego-strengthening and developing a better self-image) and regression to uncover the cause of the impotence (which was found to be particularly effective) worked best and should be the "treatment of choice for psychogenic impotence."

HYPNOTHERAPY AND SKIN CONDITIONS

HYPNOSIS AS A TREATMENT FOR ATOPIC DERMATITIS IN ADULTS AND CHILDREN. *Br J Dermatol.* 1995 May;132(5):778-83. Stewart AC, Thomas SE.

This paper reports on the use of hypnosis to treat 18 adults and 20 children suffering from atopic dermatitis (a type of eczema) that did not respond to conventional treatments. These patients showed significant improvements (with 19 of the children showing immediate improvements). Where follow-ups were possible, it was found that this improvement lasted for at least two years.

HYPNOSIS IN DERMATOLOGY. *Arch Dermatol.* 2000 Mar;136(3):393-9, Shenefelt PD.

This study involved a review of the scientific research conducted on the use of hypnosis for the treatment of skin disorders. It found that there were a wide variety of skin disorders that could be improved and even cured by hypnosis. Among them were: "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."

APPLYING HYPNOSIS IN DERMATOLOGY: SINGLE OR A FEW CASE REPORTS. *Dermatology Nursing*. 2003;15(6) Shenefelt PD.

This paper examines the academic literature on the use of hypnosis to treat numerous skin conditions:

Acne Excoriee (excoriations are the scars that are formed when acne is picked): Here hypnosis was successfully used in 1959 to help two people stop picking their acne by giving the subjects post-hypnotic suggestions to say the word "scar" whenever they felt the urge to pick.

Alopecia Areata (hair loss): Researcher found that those who suffer from this condition usually react very badly to stress and suffer from underlying depression. Hypnosis has been used to treat these underlying problems which has led to an improvement in this condition.

Dyshidrotic Dermatitis (small blisters on the hand and feet): Two cases using hypnosis have been reported. One involved the use hypnosis to treat the condition itself and one involved the use of hypnosis to work on the underlying emotional issues. Both reduced the severity of this condition.

Herpes Simplex (cold and genital sores): Hypnosis has been used to reduce the frequency of outbreaks of herpes. Hypnosis has also been found to help treat the emotional triggers that often lead to outbreaks.

Hyperhidrosis (excessive sweating):Hypnosis has been reported to help alleviate this condition.

Lichen Planus (a rash that often forms on the wrists and ankles and around the mouth that looks like lichen):Hypnosis has been used to reduce the lesions caused by this disease.

Neurodermatitis (a form of eczema):There have been reports of the use of hypnosis to heal this condition. Follow-ups four years later showed that it had not returned.

Nummular Dermatitis (round or oval-shaped itchy lesions): One early researcher (1960) reported that hypnosis was used to reduce pruritus and heal the lesions.

Postherpetic Neuralgia (the pain that follows the outbreak of herpes zoster): Hypnosis has been successfully used to heal the pain that accompanies acute herpes zoster.

Pruritus (an itch or a sensation that makes someone want to scratch): Hypnosis has been successfully used to modify and improve this condition.

Rosacea (a condition that causes facial redness): Hypnosis has been able to reduce the vascular blush that accompanies this condition.

HYPNOTHERAPY AND SLEEPING DISORDERS

HYPNOSIS: AN ALTERNATIVE APPROACH TO INSOMNIA. Can Fam Physician. 1982 April; 28: 768–770. Paterson D.

The author of this paper divides sleep disorders into two categories: some originate in the body's central nervous system; while others are caused by secondary disorders such as pain, anxiety, depression and changes in lifestyle. He argues that the second group are far more likely to be successfully treated by hypnosis than the first.

HYPNOTHERAPY FOR SLEEP DISORDERS. Ann Acad Med Singapore. 2008 Aug;37(8):683-8. Ng BY, Lee TS.

This paper examines the research studies that deal with the use of hypnosis to help with sleep disorders. The authors note that hypnosis has helped people suffering from acute and chronic insomnia, as well as those suffering from recurring nightmares and sleep terrors. They also note that there is evidence hypnosis has helped those who were suffering from parasomnia (things such as bed-wetting and sleep walking). They conclude by stating that it is particularly difficult to study hypnosis using double-blind controlled studies because one of the most important requirements for a person to be able to enter into a deep enough state of hypnosis for this type of work to really be effective, is that they need to develop trust and confidence in the hypnotist.

HYPNOSIS FOR TREATMENT OF INSOMNIA IN SCHOOL-AGE CHILDREN: A RETROSPECTIVE CHART REVIEW. BMC Pediatrics. 2006, Vol. 6 (23). Anbar RD, MSlothower MP.

This study recruited 84 children and adolescents who were suffering from insomnia. By the end of the study 87% of them reported that hypnosis had helped them either significantly improve or completely resolve their

sleep problems.

THE TREATMENT OF PARASOMNIA DISORDERS WITH HYPNOSIS: A 5-YEAR FOLLOW-UP STUDY. *Clin Sleep Med* 2007;3(4):369-373. Hauri PJ, SilberMH, Boeve BF.

This study replicated a previous one that demonstrated that hypnosis could help those who were suffering from parasomnia (sleep disorders that include bed-wetting, sleep walking, night terrors and chronic movements). Thirty-six patients ranging from 6 to 71 years of age who all had "functionally autonomous" parasomnia (where the condition was self-sustaining) were treated with hypnosis. The authors found that one month after the treatment 45.4% of them were free of all symptoms. Eighteen months after treatment this had dropped to 42.2% and five years later it was down to 40.5%. The authors suggest that in light of these significant results, parasomnia should first be treated with hypnosis, before other remedies are tried.

HYPNOTHERAPY AND SMOKING CESSATION

A META-ANALYTIC COMPARISON OF THE EFFECTIVENESS OF SMOKING CESSATION METHODS. *Journal of Applied Psychology*. Vol 77(4), Aug 1992, 554-561. Viswesvaran C, Schmidt FL.

The Institute of Actuaries (in the US) commissioned the largest study ever done on smoking cessation. It statistically analyzed the results of 633 smoking cessation studies involving 71,806 participants. The authors of this study found that on average only one out of five people (20%) were able to successfully quit. However, when they examined the data in more detail, they found that among of all of the techniques used, hypnosis was the most effective.

They found that a single session of hypnosis was three times more effective than the nicotine gum and five times more effective than willpower alone (willpower was 6%; nicotine gum was 10% and a single hypnosis session was 30%). However, they also noted that ten percent of the hypnosis studies (primarily those involving multiple sessions of hypnosis) had success rates of between 60 and 90%.

FREEDOM FROM SMOKING: INTEGRATING HYPNOTIC METHODS AND RAPID SMOKING TO FACILITATE SMOKING CESSATION. *Int J*

Clin Exp Hypn. 2001 Jul;49(3):257-66. Babe J.

This study recruited 43 subjects who wished to quit smoking. The researchers combined hypnosis with with NLP smoking cessation techniques and found that 39 subjects (90%) reported that they remained smoke-free 6 months after the treatment.

CLINICAL HYPNOSIS FOR SMOKING CESSATION: PRELIMINARY RESULTS OF A THREE-SESSION INTERVENTION. *Int J Clin Exp Hypn.* 2004, Jan;52(1):73-81. Elkins GR, Rajab MH.

Twenty-one smokers who were referred to this study by their physicians for medical reasons, received three smoking cessation hypnosis sessions. At the end of the program 17 subjects (81%) reported that they had stopped smoking. A 12-month follow-up revealed that 10 of them (48%) remained smoke-free.

THE USE OF HYPNOSIS IN CONTROLLING CIGARETTE SMOKING. *Southern Medical Journal*, 1968 Sep;61(9):999-1002. Crasilneck HB, Hall JA.

This early study (1968) found that the majority of people who want to quite smoking for medical reasons, were able to do so after having four hypnosis sessions.

GENDER-RELATED DIFFERENCES IN HYPNOSIS-BASED TREATMENTS FOR SMOKING: A FOLLOW-UP META-ANALYSIS. *Am J Clin Hypn.* 2008 Jan;50(3):259-71. Green JP, Montgomery GH.

This paper analyzed the results of 24 studies conducted on the use of hypnosis to help people stop smoking. The authors found that hypnosis helped more men than women to quit smoking. However, even though it noted that the difference between the sexes was significant, it was also small. The authors concluded that smoking cessation sessions should be specifically tailored to the gender of the client.

USE OF SINGLE SESSION HYPNOSIS FOR SMOKING CESSATION. *Addictive Behaviors*, 1988, Vol. 13(2):205-208. Williams JM, Hall D.

This study involved 60 participants who were randomly assigned to one of three groups: one that received a placebo, one that received a single

hypnosis session and one that received no treatment. When they were followed-up at 4, 12, 24 and 48 weeks, the researchers found that significantly more members of the hypnosis group had quit smoking than the other two groups. They also found that among those still smoking, those who were in the hypnosis group were smoking significantly less than those in the other two groups.

HYPNOTHERAPY AND STROKES

PUSHING THE LIMITS OF RECOVERY: HYPNOTHERAPY WITH A STROKE PATIENT. *International Journal of Clinical and Experimental Hypnosis*, April 1989, Vol. 37(2):120-128. Holroyd J, Hill A. I

This study reported on how hypnosis was used to help a woman recover the use of her left arm following a stroke.

HYPNOSIS FOR REHABILITATION AFTER STROKE: SIX CASE STUDIES. *Contemporary Hypnosis* Vol. 23(4):173-180. Diamond SG, Davis OC, Schaechter JD, Howe RD.

This study reports on six cases where hypnosis was used to help rehabilitate victims of a stroke. The researcher selected physical activities that would challenge the participants. They used hypnosis to get the participants to remember engaging in this activity before the stroke and then they had the participants imagine they were engaging in this activity in the present. They also had the participants imagine they were engaging in this activity in the present and then actually do it while in a state of "active-alert hypnosis". Finally they alternated between having the participants engaging in this activity while in a state of "active-alert hypnosis" and in their normal state of wakeful awareness. The researchers noted qualitative improvements in all of the subjects. Among these were reduced spasticity in the paretic limb, along with a stronger grip and a wider range of movement. In addition to this the participants reported that their outlook and motivation had both improved. They also found it took less effort to use their paretic limb.

HYPNOTHERAPY AND WARTS

HYPNOTHERAPY FOR WARTS (VERRUCA VULGARIS): 41 CONSECUTIVE CASES WITH 33 CURES. *American Journal of Clinical Hypnosis*. 1992 Jul;35(1):1-10. Ewin DM.

This study looked at the use of direct suggestion in hypnosis to cure warts and noted that success rate varied from 27% to 55%. They found that all the children who were studied responded to this treatment, whereas this was not the case with adults. However, further investigation found that 80% of the adults (or 33 out of 41 participants) who failed to respond to direct suggestion in hypnosis, were cured when treated with hypnoanalysis. The authors noted that it was much harder to design a double-blind study involving hypnoanalytic techniques than those that simply involved direct suggestion in hypnosis.

EFFECTS OF HYPNOTIC, PLACEBO, AND SALICYLIC ACID TREATMENTS ON WART REGRESSION. *Psychosom Med.* 1990 Jan-Feb;52(1):109-14. Spanos NP, Williams V, Gwynn MI.

This study randomly assigned participants to one of four groups. They either received hypnotic suggestion, salicylic acid, a placebo, or no treatment (the control group). A follow-up 6 weeks later found that there was no significant difference between those who received no treatment (the control group), a placebo, or salicylic acid. Only those who had received hypnosis showed a significant reduction in warts compared to the control group.

HYPNOTHERAPY AND WEIGHT LOSS

HYPNOTHERAPY IN WEIGHT LOSS TREATMENT. *Journal of Consulting and Clinical Psychology.* Vol 54(4), Aug 1986, 489-492. Cochrane G, Friesen J.

This study examined how effective hypnosis was in helping women to lose weight. It recruited 60 women who were not dieting or involved in any other program and who were at least 20% overweight. It randomly assigned the women to a control group, to a group that only received hypnosis and to a group that received hypnosis along with audiotapes. It found that those who received hypnosis lost an average of 17 lbs compared to an average of 0.5 lbs in the control group (there was no difference between the hypnosis only and the hypnosis and audiotapes group).

THE POSSIBILITIES OF HYPNOTHERAPY IN THE TREATMENT OF OBESITY. *Am J Clin Hypn.* 1994 Apr;36(4):248-57. Vanderlinden J,

Vandereycken W.

This paper notes that the results of using of hypnosis to lose weight can vary. In order to maximize the effectiveness certain therapeutic techniques should be used. Among them are: "teaching relaxation, increasing self-control, encouraging physical exercise, altering self-esteem and body image, strengthening motivation, and exploring ambivalence for change." It then reports various cases where these techniques were successfully used to help clients lose weight.

EFFECTIVENESS OF HYPNOSIS AS AN ADJUNCT TO BEHAVIORAL WEIGHT MANAGEMENT. J Clin Psychol. 1985 Jan;41(1):35-41. Bolo-cofsky DN, Spinler D. Coulthard-Morris L.

This study examined the effectiveness of adding hypnosis to a behavioural management program to help people lose weight. It recruited 109 subjects and randomly split them into two groups, one which received only behavioural management and the other which received behavioural management plus hypnosis. Both groups had lost a significant amount of weight at the end of the 9-week program. However, when followed-up at 8 months and 2 years, the group that also received hypnosis had lost even more weight, while the group that hadn't, remained unchanged.

HYPNOTIC ENHANCEMENT OF COGNITIVE-BEHAVIORAL WEIGHT LOSS TREATMENTS: ANOTHER META-REANALYSIS. Journal of Consulting and Clinical Psychology, 64 (3), 517-519. Kirsch I.

This study analyzed the data for a number of studies that examined the effectiveness of combining hypnosis with cognitive behavioural therapy for weight loss. It found that those who received CBT only had a mean weight loss of 6 lbs, while those who received both hypnosis and CBT had a mean weight loss of 11.83 lbs. It further found that the difference between these two groups increased over time (to 6.33 lbs versus 14.88 lbs).

HYPNOTHERAPY AND OTHER INTERESTING SCIENTIFIC STUDIES

HYPNOTIC VISUAL ILLUSION ALTERS COLOR PROCESSING IN THE BRAIN. Am J Psychiatry. 2000 Aug;157(8):1279-84. Kosslyn SM, Thomp-

son WL, Costantini-Ferrando MF, Alpert NM, Spiegel D.

Eight highly hypnotizable subjects were recruited for this study. They were all given positron emission tomography scans (PET scans which record the flow of blood in throughout the brain) while they were shown colour and black-and-white images. The authors found that when the subjects were in a state of hypnosis and asked to perceive a black-and-white image as colour, the colour areas in their left and right hemisphere became active (rather than the black-and-white areas as should have been the case). They concluded that hypnosis is a real psychological state with “distinct neural correlates” and that it isn’t a matter of simply pretending and playing a role.

WHERE THE IMAGINAL APPEARS REAL: A POSITRON EMISSION TOMOGRAPHY STUDY OF AUDITORY HALLUCINATIONS. Proc Natl Acad Sci U S A 1998 Feb. Vol. 95(4):1956-1960. Szechtman H, Woody E, Bowers KS, Nahmias C.

Eight highly hypnotizable males who were able to hallucinate while in hypnosis were given PET scans (which measured the flow of blood in the different regions of their brains) while hearing a sound, while imagining that they heard the sound, and while hallucinating hearing the sound while in a state of deep hypnosis. There was a noticeable difference between when they heard the sound and when they simply imagined they heard the sound. However, when they were asked to hallucinate hearing the sound while in hypnosis, the blood flow patterns showed that their brain responded exactly the same way it would if they had really heard the sound. This showed that when in a state of hypnosis, auditory hallucinations are processed as if they were real by our brains.

HYPNOTHERAPY AND SOMETHING’S HAPPENING IN THE BRAIN

HYPNOTIC ALTERATION OF SOMASENSORY PERCEPTION. Am J Pschiatry 1989; 146:749-754. Spiegel D, Bierre P, J Rootenberg J.

Ten subjects who were highly hypnotizable and 8 subjects who were not that hypnotizable were recruited for this study. Electrodes were placed over their scalp to measure their electrical brain activity (using an EEG machine). They were then hypnotized and told to hallucinate that their arm was anesthetized. Their arm was then zapped a number of times with a small current and they were told to press a button every time they

felt this zap. Those who were highly hypnotizable pressed the button 38% of the time, while those who were not that hypnotizable pressed it 80% of the time. Within the highly hypnotizable group, their responses matched a reduction in the amplitude of their brain-waves, while those who were not that hypnotizable showed no such responses. This result suggested that hypnosis was more than simply pretending and that it involved some sort of a neurophysiological process and that hypnosis causes real changes in the brain.

HYPNOSIS INDUCES A CHANGED COMPOSITION OF BRAIN OSCILLATIONS IN EEG: A CASE STUDY. *Contemporary Hypnosis*, 2007, Vol. 24(1):3-18. Fingelkurts Alexander A, Fingelkurts Andrew A, Kallio S, Revonsuo A.

This is a case study of a man who was extremely hypnotizable. Electrodes were taped to his head and his brain-waves were recorded with an EEG (electroencephalogram) machine. The researchers found that when he was hypnotized, not only was there a dramatic change in the oscillations of his brain-waves in the prefrontal and right occipital regions of his brain, the readings also showed that the right-side of his brain became dominant. The results of this one case study suggest that hypnosis causes real and measurable changes to occur in the brain.