

This feature presents a personal selection of some significant articles that were listed in Medline from July to September 1999. Readers need to be aware that abstracts written by authors themselves may sometimes give a positive 'slant' to the paper which is not strictly based on the findings. Where authors' addresses are included in the database, we have given them here so that readers who wish for a reprint can request it directly. Alternatively, a number of journals now publish on the world wide web and some articles may be downloaded in pdf versions.

ACUPUNCTURE/ACUPRESSURE

Branco K, Naeser MA

Institution: Acupuncture Healthcare Services, Westport, Massachusetts, USA.

Carpal tunnel syndrome: clinical outcome after low-level laser acupuncture, microamps transcutaneous electrical nerve stimulation, and other alternative therapies – an open protocol study. *Journal of Alternative & Complementary Medicine* 1999; 5(1): 5–26

Objective: Outcome for carpal tunnel syndrome (CTS) patients (who previously failed standard medical/surgical treatments) treated primarily with a painless, non-invasive technique utilizing red-beam, low-level laser acupuncture and microamps transcutaneous electrical nerve stimulation (TENS) on the affected hand; secondarily, with other alternative therapies. *Design:* Open treatment protocol, patients diagnosed with CTS by their physicians. *Setting:* Treatments performed by licensed acupuncturist in a private practice office. *Subjects:* Total of 36 hands (from 22 women, nine men), ages 24–84 years, median pain duration, 24 months. Fourteen hands failed 1–2 surgical release procedures. *Intervention/treatment:* Primary treatment: red-beam, 670 nm, continuous wave, 5 mW, diode laser pointer (1–7 J per point), and microamps TENS (<900 microA) on affected hands. Secondary treatment: infrared low-level laser (904 nm, pulsed, 10 W) and/or needle acupuncture on deeper acupuncture points; Chinese herbal medicine formulas and supplements, on case-by-case basis. Three treatments per week, 4–5 weeks. *Outcome measures:* Pre- and post-treatment Melzack pain scores; profession and employment status recorded. *Results:* Post-treatment, pain significantly reduced ($P < 0.0001$), and 33 of 36 hands (91.6%) no pain, or pain reduced by more than 50%. The 14 hands that failed surgical release, successfully treated. Patients remained employed, if not retired. Follow-up after 1–2 years with cases less than age 60, only two of 23 hands (8.3%) pain returned, but successfully retreated within a few weeks. *Conclusions:* Possible mechanisms for effectiveness include increased adenosine triphosphate (ATP) on cellular level, decreased inflammation, temporary increase in serotonin. There are potential cost-savings with this treatment (current estimated cost per case, \$12 000;

this treatment, \$1000). Safe when applied by licensed acupuncturist trained in laser acupuncture; supplemental home treatments may be performed by patient under supervision of acupuncturist.

Easthope G, Gill GF, Beilby JJ, Tranter BK

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Acupuncture in Australian general practice: patient characteristics. *Medical Journal of Australia* 1999; 170(6): 259–262

Objective: To ascertain the incidence of acupuncture claims and the characteristics of patients claiming for acupuncture. *Design:* Secondary analysis of Health Insurance Commission data on claims for acupuncture performed by a medical practitioner. *Participants:* A summary of all Medicare acupuncture claims for financial years 1984–85 to 1996–97 and a random sample of patients claiming a Medicare rebate in calendar year 1996. *Main outcome measures:* Claims for acupuncture by patients' State, sex, age, and the socioeconomic disadvantage index of patients' residences. *Results:* Between 1984–85 and 1996–97 the number of acupuncture claims increased, but declined as a proportion of total Medicare claims. In 1996, 1.16% of patients claimed for acupuncture, which constituted 0.5% of all Medicare claims. Adjusting for age and socioeconomic disadvantage, women were more likely than men to claim for acupuncture (odds ratio, 1.40; 95% confidence interval, 1.36–1.45). This sex difference is proportionately greater than that for all medical services. Propensity to claim for acupuncture increased with age, peaking at 65–69 years, then declining. Acupuncture claims were more likely in areas just above those assessed as having the greatest social disadvantage. *Conclusion:* The number of acupuncture claims has increased since 1984. As a proportion of all Medicare claims, acupuncture has remained stable since declining in 1991–92. This suggests that acupuncture is now an established complementary medical practice.

Kho HG, Sweep CG, Chen X, Rabsztyrn PR, Meuleman EJ

Institution: Institute of Anesthesiology, University Hospital Nijmegen, The Netherlands.

The use of acupuncture in the treatment of erectile dysfunction. International Journal of Impotence Research 1999; 11(1): 41–46

The efficacy of acupuncture as a mono-therapy was evaluated in a pilot study of 16 patients suffering from erectile dysfunction (ED). In nine patients no organic co-morbidity was encountered. In a period of 4 weeks, acupuncture treatment was performed twice a week for a total of eight sessions. Each treatment session consisted of puncture of the same eight acupoints, four of which were connected to a Swiss made constant current Doltron ESA 600 stimulator. Low-frequency electrical stimulation (5 Hz and 10 mA) was applied to these four acupoints, whereas no stimulation was applied to the other four points. After 30 min, the electrical stimulation was terminated and all needles removed. Blood samples were drawn according to a fixed time schedule, to study the profile of a number of stress hormones, for example, adrenocorticotrophic hormone, antidiuretic hormone and cortisol, the gonadotrophins follicle stimulating hormone and leutinizing hormone, and the sex steroid testosterone and its binding globulin, within the treatment period. Based on a diary of both patient and partner, and an interview 1 month after the end of treatment, the changes of sexual activity were evaluated over a period of 12 weeks, starting from the 4 weeks prior to the treatment, the 4 weeks during the treatment period and the 4 weeks after the treatment. An improvement of the quality of erection was experienced by 15% of patients, while 31% reported an increase in their sexual activity. No changes in the profiles of hormones were detected. The use of acupuncture as a mono-therapeutic modality in ED, did not influence the profile of the stress and sex hormones, but did improve the quality of erection and restored the sexual activity with an overall effect of 39%. No definite conclusions can be drawn from this pilot study. A controlled and blinded study including more patients will be needed before any definitive conclusion can be reached.

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Evaluation of acupuncture for pain control after oral surgery: a placebo-controlled trial. Archives of Otolaryngology – Head & Neck Surgery 1999; 125(5): 567–572

Background: Acupuncture is increasingly being used by the general population and investigated by conventional medicine; however, studies of its effects on pain still lack adequate control procedures. **Objectives:** To evaluate the (1) efficacy of Chinese acupuncture in treating postoperative oral surgery pain, (2) validity of a placebo-controlled

procedure, and (3) effects of psychological factors on outcomes. **Design:** Randomized, double-blind, placebo-controlled trial. **Setting:** Dental School Outpatient Clinic, University of Maryland at Baltimore. **Participants:** Thirty-nine healthy subjects, aged 18 to 40 years, assigned to treatment ($n=19$) and control ($n=20$) groups. **Main outcome measures:** Patients' self-reports of time until moderate pain, time until medication use, total pain relief, pain half gone, and total pain medication consumption. **Results:** Mean pain-free postoperative time was significantly longer in the acupuncture group (172.9 minutes) than in the placebo group (93.8 minutes) ($P=0.01$), as was time until moderate pain ($P=0.008$). Mean number of minutes before requesting pain rescue medication was significantly longer in the treatment group (242.1 minutes) than in the placebo group (166.2 minutes) ($P=0.01$), as was time until medication use ($P=0.01$). Average pain medication consumption was significantly less in the treatment group (1.1 tablets) than in the placebo group (1.65 tablets) ($P=0.05$). There were no significant between-groups differences on total-pain-relief scores or pain-half-gone scores ($P>0.05$). Nearly half or more of all patients were uncertain of or incorrect about their group assignment. Outcomes were not associated with psychological factors in multivariate models. **Conclusions:** Acupuncture is superior to the placebo in preventing postoperative dental pain; non-insertion placebo procedure is valid as a control.

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The use of nonpharmacologic techniques to prevent postoperative nausea and vomiting: a meta-analysis. Anesthesia & Analgesia 1999; 88(6): 1362–1369

We assessed the efficacy of non-pharmacologic techniques to prevent postoperative nausea and vomiting (PONV) by systematic review. These studies included acupuncture, electroacupuncture, transcutaneous electrical nerve stimulation, acupoint stimulation, and acupressure. Of the 24 randomized trials retrieved by a search of articles indexed on the MEDLINE and EMBASE databases (1980–1997), 19 were eligible for meta-analysis. The primary outcomes were the incidence of nausea, vomiting, or both 0–6 hours (early efficacy) or 0–48 hours (late efficacy) after surgery. The pooled relative risk (RR) and numbers needed to treat (NNT) were calculated. In children, no benefit was found. Some results in adults were significant. Non-pharmacologic techniques were similar to antiemetics in preventing early vomiting (RR = 0.89 [95% confidence interval 0.47–1.67]; NNT = 63 [10–infinity]) and late vomiting (RR = 0.80 [0.35–1.81]; NNT = 25 [5–infinity]) in adults. Non-pharmaco-

logic techniques were better than placebo at preventing early nausea (RR = 0.34 [0.20–0.58]; NNT = 4 [3–6]) and early vomiting in adults (RR = 0.47 [0.34–0.64]; NNT = 5 [4–8]). Non-pharmacologic techniques were similar to placebo in preventing late vomiting in adults (RR = 0.81 [0.46–1.42]; NNT = 14 [6–infinity]). Using non-pharmacologic techniques, 20–25% of adults will not have early PONV compared with placebo. It may be an alternative to receiving no treatment or first-line antiemetics. *Implications:* This systematic review showed that non-pharmacologic techniques were equivalent to commonly used antiemetic drugs in preventing vomiting after surgery. Non-pharmacologic techniques were more effective than placebo in preventing nausea and vomiting within 6 hours of surgery in adults, but there was no benefit in children.

Medici TC

Acupuncture and bronchial asthma. [German]
Forschende Komplementarmedizin 1999; 6 Suppl 1: 26–28

The 66 randomized patients with mild bronchial asthma who took part in this study were divided into there nearly equal groups. Group one was treated with true acupuncture during the first and the fourth month (up to week 16). Group two was treated similarly but needled at non-acupuncture points. The third group served as a control. All patients were allowed to maintain their normal asthma medication with the recommendation to keep the regimen unchanged until week 20, i.e. 4 weeks after termination of the specific treatment. The changes in peak flow variability up to week 16 served as main outcome criterion. Additional parameters included several spirometric analyses as well as various markers in blood and sputum that are specific for the allergic inflammatory reaction of the upper respiratory tract. The values measured showed considerable individual variability. This impeded the demonstration of efficacy. In conclusion it can be stated that there was a consistent, positive yet unspecified effect of the needling in both treated groups which can be interpreted as a trend in affecting the asthmatic condition. This effect could have been more pronounced or even clinically relevant for certain individuals had one considered a separate analysis of the data of each patient.

Montakab H

Acupuncture and insomnia. [German]
Forschende Komplementarmedizin 1999; 6 Suppl 1:29–31

40 patients with primary difficulties in either falling asleep or remaining asleep were diagnosed according to the traditional Chinese medicine, allocated to specific diagnostic subgroups and treated individually by a practitioner in his private practice. The patients were randomized into two groups one

receiving true acupuncture, the other needled at non-acupuncture points for 3–5 sessions at weekly intervals. The outcome of the therapy was assessed in several ways, first and foremost by an objective measurement of the sleep quality by polysomnography in a specialized sleep laboratory, performed once before and once after termination of the series of treatments. Additional qualitative results were obtained from several questionnaires. The objective measurement showed a statistically significant effect only in the patients who received the true acupuncture. The subjective, qualitative assessment was better in the proper treatment group than in the control group but was not calculated statistically for methodological reasons. Based on the results of this study, it can be concluded that true and individualized acupuncture indeed shows efficacy in primary sleep disorders. However, a direct influence by the therapist cannot be excluded.

Shenkman Z, Holzman RS, Kim C, Ferrari LR, DiCanzio J, Highfield ES, Van Keuren K, Kaptchuk T, Kenna MA, Berde CB, Rockoff MA

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Acupressure-acupuncture antiemetic prophylaxis in children undergoing tonsillectomy
Anesthesiology 1999; 90(5): 1311–1316

Background: Acupuncture or acupressure at the Nei-Guan (P.6) point on the wrist produces antiemetic effects in awake but not anesthetized patients. The authors studied whether a combined approach using preoperative acupressure and intra- and postoperative acupuncture can prevent emesis following tonsillectomy in children. *Methods:* Patients 2–12 years of age were randomly assigned to study or placebo groups. Two Acubands with (study) and two without (placebo) spherical beads were applied bilaterally on the P.6 points; non-bead- and bead-containing Acubands, respectively, were applied on the sham points. All Acubands were applied before any drug administration. After anesthetic induction, acupuncture needles were substituted for the beads and remained in situ until the next day. All points were covered with opaque tape to prevent study-group identification. A uniform anesthetic technique was used; postoperative pain was managed initially with morphine and later with acetaminophen and codeine. Emesis, defined as retching or vomiting, was assessed postoperatively. Ondansetron was administered only after two emetic episodes at least 2 minutes apart. Droperidol was added if emesis persisted. *Results:* One hundred patients were enrolled in the study. There were no differences in age, weight, follow-up duration, or perioperative opioid administration between groups. Retching occurred in 26% of the study patients and in 28% of the placebo patients; 51 and

55%, respectively, vomited; and 60 and 59%, respectively, did either. There were no significant differences between the groups. Redness occurred in 8.5% of acupuncture sites. **Conclusion:** Perioperative acupressure and acupuncture did not diminish emesis in children following tonsillectomy.

Takeuchi H, Jawad MS, Eccles R.

Institution: Common Cold Centre, Cardiff University, Wales, UK. @TX1:**The effects of nasal massage of the “yingxiang” acupuncture point on nasal airway resistance and sensation of nasal airflow in patients with nasal congestion associated with acute upper respiratory tract infection.** American Journal of Rhinology 1999; 13(2): 77–79

The aim of our study was to determine whether nasal massage of the ‘yingxiang’ acupuncture point in patients with nasal congestion had any effect on nasal airway resistance (NAR) measured by posterior rhinomanometry and sensation of nasal airflow measured on a visual analog scale (VAS). Twenty patients were randomized into two groups; one group self massaged the yingxiang point for 30 seconds, while the other group acted as control group without nasal massage. NAR and VAS were measured at baseline, and at 2 and 10 minutes after massage. At the end of the study, patients were asked to score any change in their nasal congestion. There was no statistically significant difference between the two groups in percentage change in NAR or VAS from baseline at any time during the study, although the massage group showed trends toward decongestion and relief from congestion. At the end of the study, more patients in the massage group than the control group felt their nasal congestion was improved ($P < 0.005$). It is interesting that all three measures (NAR, VAS, and end question) showed that the nasal massage group had greater relief from nasal congestion than the control group. The results of this study, when taken together, indicate that nasal massage may provide some relief from nasal congestion and that further studies involving a larger patient population are warranted to determine whether nasal massage has a significant effect on NAR.

White AR, Ernst E

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A systematic review of randomized controlled trials of acupuncture for neck pain.

Rheumatology (Oxford) 1999; 38(2): 143–147

Objective: To establish whether there is evidence for or against the efficacy of acupuncture in the treatment of neck pain. **Methods:** A systematic literature review was undertaken of studies that compared needle or laser acupuncture with a control

procedure for the treatment of neck pain. Two reviewers independently extracted data concerning study methods, quality and outcome. **Results:** Overall, the outcomes of 14 randomized controlled trials were equally balanced between positive and negative. Acupuncture was superior to waiting-list in one study, and either equal or superior to physiotherapy in three studies. Needle acupuncture was not superior to indistinguishable sham control in four out of five studies. Of the eight high-quality trials, five were negative. **Conclusions:** In conclusion, the hypothesis that acupuncture is efficacious in the treatment of neck pain is not based on the available evidence from sound clinical trials. Further studies are justified.

ANTHROPOSOPHY

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Atopy in children of families with an anthroposophic lifestyle. Lancet 1999; 353(9163): 1485–1488

Background: Increased prevalence of atopic disorders in children may be associated with changes in types of childhood infections, vaccination programmes, and intestinal microflora. People who follow an anthroposophic way of life use antibiotics restrictively, have few vaccinations, and their diet usually contains live lactobacilli, which may affect the intestinal microflora. We aimed to study the prevalence of atopy in children from anthroposophic families and the influence of an anthroposophic lifestyle on atopy prevalence. **Methods:** In a cross-sectional study, 295 children aged 5–13 years at two anthroposophic (Steiner) schools near Stockholm, Sweden, were compared with 380 children of the same age at two neighbouring schools in terms of history of atopic and infectious diseases, use of antibiotics and vaccinations, and social and environmental variables. Skin-prick tests were done for 13 common allergens, and we took blood samples from children and their parents for analysis of allergen-specific serum IgE-antibodies. **Findings:** At the Steiner schools, 52% of the children had had antibiotics in the past, compared with 90% in the control schools. 18% and 93% of children, respectively, had had combined immunisation against measles, mumps, and rubella, and 61% of the children at the Steiner schools had had measles. Fermented vegetables, containing live lactobacilli, were consumed by 63% of the children at Steiner schools, compared with 4.5% at the control schools. Skin-prick tests and blood tests showed that the children from Steiner schools had lower prevalence of atopy than controls (odds ratio 0.62 [95% CI

0.43–0.91)). There was an inverse relation between the number of characteristic features of an anthroposophic lifestyle and risk of atopy (p for trend=0.01). *Interpretation:* Prevalence of atopy is lower in children from anthroposophic families than in children from other families. Lifestyle factors associated with anthroposophy may lessen the risk of atopy in childhood.

HERBAL MEDICINE

Brinkeborn RM, Shah DV, Degenring FH

Institution: Elisabeth Hospital, Wallingatan, Uppsala, Sweden.

Echinaforce and other Echinacea fresh plant preparations in the treatment of the common cold. A randomized, placebo controlled, double-blind clinical trial. *Phytomedicine* 1999; 6(1): 1–6

The aim of this randomized, double-blind, placebo controlled study was to investigate the efficacy and safety of different doses and preparations of Echinacea purpurea in the treatment of common cold. 246 of 559 recruited healthy, adult volunteers caught a common cold and took three times daily two tablets of either Echinaforce (Echinacea purpurea-preparation from 95% herba and 5% radix), Echinacea purpurea concentrate (same preparation at seven times higher concentration), special Echinacea purpurea radix preparation (totally different from that of Echinaforce) or placebo until they felt healthy again but not longer than 7 days. The primary endpoint was the relative reduction of the complaint index defined by 12 symptoms during common cold according to the doctor's record. Echinaforce and its concentrated preparation were significantly more effective than the special Echinacea extract or placebo. All treatments were well tolerated. Among the Echinacea groups the frequency of adverse events was not significantly higher than in the placebo group. Therefore, Echinacea concentrate as well as Echinaforce represent a low-risk and effective alternative to the standard symptomatic medicines in the acute treatment of common cold.

Grimm W, Muller HH

Institution: Department of Medicine and Medical Center for Methodology and Health Research, Institute of Medical Biometry and Epidemiology, Philipps-University of Marburg, Germany.

A randomized controlled trial of the effect of fluid extract of Echinacea purpurea on the incidence and severity of colds and respiratory infections. *American Journal of Medicine* 1999; 106(2): 138–143

Purpose: Fluid extracts of Echinacea purpurea are widely used for the prevention and treatment of colds

and respiratory infections, although the clinical efficacy of this agent has not been proven. *Patients and methods:* A total of 109 patients with a history of more than three colds or respiratory infections in the preceding year were randomly assigned to receive 4 mL fluid extract of Echinacea purpurea or 4 mL placebo-juice twice a day in a double-blind manner (one patient withdrew his consent before taking the first dose of the allocated medication; thus, only 108 patients were included for analysis). The incidence and severity of colds and respiratory infections were determined during 8 weeks of follow-up, based on patient reported symptoms together with findings on physical exam. The severity of each infection was graded by the investigators. Relative risks (RR) and 95% confidence intervals (CI) were estimated. **RESULTS:** During the 8-week treatment period, 35 (65%) of 54 patients in the Echinacea group and 40 (74%) of 54 patients in the placebo group had at least one cold or respiratory infection [RR = 0.88; 95% CI (0.60, 1.22)]. The average number of colds and respiratory infections per patient was 0.78 in the Echinacea group, and 0.93 in the placebo group [difference = 0.15; 95% CI (–0.12, 0.41), P = 0.33]. Median duration of colds and respiratory infections was 4.5 days in the Echinacea group and 6.5 days in the placebo group (95% CI: –1, +3 days; P = 0.45). There were no significant differences between treatment groups in the number of infections in each category of severity. Side effects were observed in 11 patients (20%) of the Echinacea group and in seven patients (13%) of the placebo group (P = 0.44). *Conclusion:* Treatment with fluid extract of Echinacea purpurea did not significantly decrease the incidence, duration or severity of colds and respiratory infections compared to placebo.

Jones TK, Lawson BM

Institution: Department of Pediatrics, University of Washington School of Medicine, Seattle, USA.

Profound neonatal congestive heart failure caused by maternal consumption of blue cohosh herbal medication. *Journal of Pediatrics* 1998; 132(3 Pt 1): 550–552

A newborn infant whose mother ingested an herbal medication, blue cohosh, to promote uterine contractions presented with acute myocardial infarction associated with profound congestive heart failure and shock. The infant remained critically ill for several weeks, although he eventually recovered. Other causes of myocardial infarction were carefully excluded. Blue cohosh, *Caulophyllum thalictroides*, contains vasoactive glycosides and an alkaloid known to produce toxic effects on the myocardium of laboratory animals. We believe this represents the first described case of deleterious human fetal effects from maternal consumption of blue cohosh.

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Saw palmetto extracts for treatment of benign prostatic hyperplasia: a systematic review. JAMA 1998; 280(18): 1604–1609

Objective: To conduct a systematic review and, where possible, quantitative meta-analysis of the existing evidence regarding the therapeutic efficacy and safety of the saw palmetto plant extract, *Serenoa repens*, in men with symptomatic benign prostatic hyperplasia (BPH). *Data sources:* Studies were identified through the search of MEDLINE (1966–1997), EMBASE, Phytodok, the Cochrane Library, bibliographies of identified trials and review articles, and contact with relevant authors and drug companies. *Study selection:* Randomized trials were included if participants had symptomatic BPH, the intervention was a preparation of *S repens* alone or in combination with other phytotherapeutic agents, a control group received placebo or other pharmacological therapies for BPH, and the treatment duration was at least 30 days. *Data extraction:* Two investigators for each article (T.J.W., A.I., G.S., and R.M.) independently extracted key data on design features, subject characteristics, therapy allocation, and outcomes of the studies. *Data synthesis:* A total of 18 randomized controlled trials involving 2939 men met inclusion criteria and were analyzed. Many studies did not report results in a method that permitted meta-analysis. Treatment allocation concealment was adequate in nine studies; 16 were double-blinded. The mean study duration was 9 weeks (range, 4–48 weeks). As compared with men receiving placebo, men treated with *S repens* had decreased urinary tract symptom scores (weighted mean difference [WMD], –1.41 points [scale range, 0–19] [95% confidence interval (CI), –2.52 to –0.30] [*n* = 1 study]), nocturia (WMD, –0.76 times per evening [95% CI, –1.22 to –0.32] [*n* = 10 studies]), and improvement in self-rating of urinary tract symptoms; risk ratio for improvement (1.72 [95% CI, 1.21–2.44] [*n* = 6 studies]), and peak urine flow (WMD, 1.93 mL/s [95% CI, 0.72–3.14] [*n* = 8 studies]). Compared with men receiving finasteride, men treated with *S repens* had similar improvements in urinary tract symptom scores (WMD, 0.37 International Prostate Symptom Score points [scale range, 0–35] [95% CI, –0.45 to 1.19] [*n* = 2 studies]) and peak urine flow (WMD, –0.74 mL/s [95% CI, –1.66 to 0.18] [*n* = 2 studies]). Adverse effects due to *S repens* were mild and infrequent; erectile dysfunction was more frequent with finasteride (4.9%) than with *S repens* (1.1%;

P < .001). Withdrawal rates in men assigned to placebo, *S repens*, or finasteride were 7%, 9%, and 11%, respectively. *Conclusions:* The existing literature on *S repens* for treatment of BPH is limited in terms of the short duration of studies and variability in study design, use of phytotherapeutic preparations, and reports of outcomes. However, the evidence suggests that *S repens* improves urologic symptoms and flow measures. Compared with finasteride, *S repens* produces similar improvement in urinary tract symptoms and urinary flow and was associated with fewer adverse treatment events. Further research is needed using standardized preparations of *S repens* to determine its long-term effectiveness and ability to prevent BPH complications.

NUTRITIONAL THERAPIES

Li D, Sinclair A, Wilson A et al.

Institution: Department of Food Science, RMIT University, Melbourne, Victoria, Australia.

Effect of dietary alpha-linolenic acid on thrombotic risk factors in vegetarian men. American Journal of Clinical Nutrition 1999; 69(5): 872–882

Background: Vegetarians have lower platelet and plasma concentrations of n-3 polyunsaturated fatty acids (PUFAs) than do omnivores. We recently showed that male vegetarians have higher platelet aggregability than do omnivores. *Objective:* We investigated whether male vegetarians (*n* = 17) who consumed an increased amount of dietary alpha-linolenic acid (ALA) showed any changes in their tissue profile of PUFAs, plasma thromboxane concentrations, platelet aggregability, or hemostatic factors. *Design:* During the study, all subjects maintained their habitual vegetarian diets except that a proportion of dietary fat was replaced with vegetable oils and margarines that were provided. Initially, all subjects consumed a low-ALA diet (containing safflower oil and safflower oil-based margarine) for 14 d; they then consumed either a moderate-ALA diet (containing canola oil and canola oil-based margarine) or a high-ALA diet (containing linseed oil and linseed oil-based margarine) for 28 d. Blood samples were collected at day 0 (baseline), day 14, and day 42. *Results:* Eicosapentaenoic acid, docosapentaenoic acid, total n-3 PUFAs, and the ratio of n-3 to n-6 PUFAs were significantly increased (*P* < 0.05), whereas the ratio of arachidonic acid to eicosapentaenoic acid was decreased (*P* < 0.05), in platelet phospholipids, plasma phospholipids, and triacylglycerols after either the moderate-ALA or high-ALA diet compared with the low-ALA diet. No significant differences were observed in thrombotic risk factors. *Conclusion:* ALA from vegetable oils (canola and linseed) has a beneficial effect on n-3 PUFA

concentrations of platelet phospholipids and plasma lipids in vegetarian males.

Wilson AK, Ball MJ

Institution: School of Nutrition and Public Health, Deakin University, Melbourne, Australia.

Nutrient intake and iron status of Australian male vegetarians. *European Journal of Clinical Nutrition* 1999; 53(3): 189–194

Objective: The study was designed to investigate the iron intake and status of Australian, male vegetarians aged between 20 and 50 years. *Design:* Cross-sectional comparison of male vegetarians and age/sex matched omnivores. *Setting:* Free-living community subjects. *Subjects:* 39 ovo-lacto vegetarians, 10 vegans and 25 omnivores were recruited by local advertisement. *Outcome measures:* A 12-day semiquantitative dietary record to assess iron and zinc intake. Iron status was assessed by measurement of serum ferritin and haemoglobin concentrations. *Results:* Mean (s.d.) daily iron intakes of both the ovo-lacto vegetarians (20.4 (7.7) mg/day) and vegans (22.9 (6.2) mg/day), were significantly higher than the omnivores' intake of 15.8 (4.5) mg/day. Ovo-lacto vegetarians and vegans had significantly ($P < 0.001$ and $P < 0.05$, respectively) lower serum ferritin concentrations than omnivores: mean (s.d.): 64 (46.9), 65 (49.9) and 121 (72.5) ng/ml, respectively. Significantly more ovo-lacto vegetarians and vegans than omnivores had serum ferritin concentrations below 25 ng/ml and below 12 ng/ml ($P < 0.05$). A higher proportion of omnivores had concentrations above 200 ng/ml ($P < 0.05$). The differences in serum ferritin concentrations between the vegetarians and omnivores remained significant even after exclusion of iron supplement users. *Conclusion:* Australian male vegetarians had iron intakes higher than those of omnivores and above recommended levels, but their iron status was significantly lower.

REFLEXOLOGY

Kesselring A

Foot reflexology massage: a clinical study.

[German]. *Forschende Komplementarmedizin* 1999; 6 Suppl 1:38–40

The aim of the study was to investigate the possible usefulness of foot reflexology on the recovery after a surgical intervention. 130 patients participated in the study. They underwent abdominal surgery under full anesthesia for different, but exclusively gynecological reasons. Foot reflexology investigated in this study was applied only for a few days for each patient. The following parameters were recorded: the subjective, self-assessed, general condition, pain intensity, movement of the bowels, micturition and sleep, beginning on the day before

operation until day 10. Two other treatments served as controls, a simple massage of the foot or a personal conversation. The simple massage turned out to be a relaxing, positive experience, whereas foot reflexology had various effects, some of them were even negative. The conclusion was that foot reflexology is not recommended for acute, abdominal postsurgical situations in gynecology because it can occasionally trigger abdominal pain. This project is one of the few studies planned, conducted and performed by the nursing staff.

Launso L, Brendstrup E, Arnberg S

Institution: Department of Social Pharmacy, Royal Danish School of Pharmacy, Copenhagen, Denmark.

An exploratory study of reflexological treatment for headache. *Alternative Therapies in Health & Medicine* 1999; 5(3): 57–65

Context: Headache is the most frequently reported symptom among Danish adults, and studies in various European countries indicate migraine headache prevalence rates similar to those in Denmark. *Objective:* An exploratory study of reflexological treatment for headache was conducted from 1993 to 1994 to examine which patients with headache underwent a course of reflexological treatment, why patients sought reflexological treatment, what previous experience patients had with medication for headache, and what outcomes patients experienced from reflexological treatment. *Design:* Prospective and exploratory study using random sampling and the following data collection methods: headache diaries, registration schemes for practitioners, questionnaires, and qualitative interviews. *Setting:* Denmark. *Patients:* 220 patients with migraine and/or tension headache. *Intervention:* Patients were treated for a maximum of 6 months by 78 reflexologists systematically drawn from the membership lists of five alternative therapist associations. *Main outcome measures:* A diagnosis of each patient's type of headache at the outset of treatment was made by a consulting physician according to the International Headache Society Classification (1988). *Results:* At 3-month follow-up, 81% of patients reported that they were helped by the treatments or were cured of their headache problems. Nineteen per cent of those who had formerly taken drugs to control their headaches were able to stop medication support following participation in the study. *Conclusions:* Reflexological treatment seems to improve patients' general well-being, energy level, ability to interpret their own body signals, and ability to understand the reasons for headache. However, these relationships may be due to other factors in the treatment environment. Additional studies are necessary to determine the proximate cause of reflexology's therapeutic benefits.

MIND AND BODY

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Clinical hypnosis versus cognitive behavioral training for pain management with pediatric cancer patients undergoing bone marrow aspirations. *International Journal of Clinical & Experimental Hypnosis* 1999; 47(2): 104–116

A randomized controlled trial was conducted to compare the efficacy of clinical hypnosis versus cognitive behavioral (CB) coping skills training in alleviating the pain and distress of 30 pediatric cancer patients (age 5 to 15 years) undergoing bone marrow aspirations. Patients were randomized to one of three groups: hypnosis, a package of CB coping skills, and no intervention. Patients who received either hypnosis or CB reported less pain and pain-related anxiety than did control patients and less pain and anxiety than at their own baseline. Hypnosis and CB were similarly effective in the relief of pain. Results also indicated that children reported more anxiety and exhibited more behavioral distress in the CB group than in the hypnosis group. It is concluded that hypnosis and CB coping skills are effective in preparing pediatric oncology patients for bone marrow aspiration.

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Medical hypnosis and orthopedic hand surgery: pain perception, postoperative recovery, and therapeutic comfort. *International Journal of Clinical & Experimental Hypnosis* 1999; 47(2): 144–161

Orthopedic hand-surgery patients experience severe pain postoperatively, yet they must engage in painful exercises and would care shortly after surgery; poor patient involvement may result in loss of function and disfigurement. This study tested a hypnosis intervention designed to reduce pain perception, enhance postsurgical recovery, and facilitate rehabilitation. Using a quasi-experimental research design, 60 hand-surgery patients received either usual treatment or usual treatment plus hypnosis. After controlling for gender, race, and

pretreatment scores, the hypnosis group showed significant decreases in measures of perceived pain intensity (PPI), perceived pain affect (PPA), and state anxiety. In addition, physician's ratings of progress were significantly higher for experimental subjects than for controls, and the experimental group had significantly fewer medical complications. These results suggest that a brief hypnosis intervention may reduce orthopedic hand-surgery patients' postsurgical PPI, PPA, and anxiety; decrease comorbidity; and enhance postsurgical recovery and rehabilitation. However, true experimental research designs with other types of controls must be employed to determine more fully the contribution of hypnosis to improved outcome.

YOGA

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Lipid profile of coronary risk subjects following yogic lifestyle intervention. *Indian Heart Journal* 1999; 51(1): 37–40

The effect of yogic lifestyle on the lipid status was studied in angina patients and normal subjects with risk factors of coronary artery disease. The parameters included the body weight, estimation of serum cholesterol, triglycerides, HDL, LDL and the cholesterol – HDL ratio. A baseline evaluation was done and then the angina patients and risk factors subjects were randomly assigned as control ($n = 41$) and intervention (yoga) group ($n = 52$). Lifestyle advice was given to both the groups. An integrated course of yoga training was given for four days followed by practice at home. Serial evaluation of both the groups was done at four, 10 and 14 weeks. Dyslipidemia was a constant feature in all cases. An inconsistent pattern of change was observed in the control group of angina ($n = 18$) and risk factor subjects ($n = 23$). The subjects practising yoga showed a regular decrease in all lipid parameters except HDL. The effect started from four weeks and lasted for 14 weeks. Thus, the effect of yogic lifestyle on some of the modifiable risk factors could probably explain the preventive and therapeutic beneficial effect observed in coronary artery disease.