

GLI ABSTRACTS DI ALCUNE PUBBLICAZIONI SCIENTIFICHE RECENSITE NELL'ANNO 2007 DA MEDLINE, LA PIÙ IMPORTANTE BASE DI DATI DELLA LETTERATURA BIOMEDICA MONDIALE.

Come si può vedere, la ricerca nel campo dell'agopuntura è molto attiva ed è orientata nei settori più disparati della scienza biomedica. Chi fosse interessato a reperire tutti i lavori scientifici pubblicati in letteratura recensita dal 1966 ad oggi, può connettersi all'indirizzo Web:

<http://www.ncbi.nlm.nih.gov/Pubmed>

da cui avrà accesso diretto e gratuito alla consultazione di Medline.
La parola chiave (keyword) da utilizzare nelle ricerche è:

Acupuncture

ABSTRACTS 2007

J Clin Oncol. 2007 Dec 10;25(35):5584-90.

Randomized, controlled trial of acupuncture for the treatment of hot flashes in breast cancer patients.

Deng G, Vickers A, Yeung S, Cassileth B.

Memorial Sloan-Kettering Cancer Center, 1429 First Ave, New York, NY 10021, USA.

dengg@mskcc.org

PURPOSE: To determine the immediate and long-term effects of true acupuncture versus sham acupuncture on hot flash frequency in women with breast cancer. **PATIENTS AND METHODS:** Seventy-two women with breast cancer experiencing three or more hot flashes per day were randomly assigned to receive either true or sham acupuncture. Interventions were given twice weekly for 4 consecutive weeks. Hot flash frequency was evaluated at baseline, at 6 weeks, and at 6 months after initiation of treatment. Patients initially randomly assigned to the sham group were crossed over to true acupuncture starting at week 7. **RESULTS:** The mean number of hot flashes per day was reduced from 8.7 (standard deviation [SD], 3.9) to 6.2 (SD, 4.2) in the true acupuncture group and from 10.0 (SD, 6.1) to 7.6 (SD, 5.7) in the sham group. True acupuncture was associated with 0.8 fewer hot flashes per day than sham at 6 weeks, but the difference did not reach statistical significance (95% CI, -0.7 to 2.4; P = .3). When participants in the sham acupuncture group were crossed over to true acupuncture, a further reduction in the frequency of hot flashes was seen. This reduction in hot flash frequency persisted for up to 6 months after the completion of treatment. **CONCLUSION:** Hot flash frequency in breast cancer patients was reduced following acupuncture. However, when compared with sham acupuncture, the reduction by the acupuncture regimen as provided in the current study did not reach statistical significance. We cannot exclude the possibility that a longer and more intense acupuncture intervention could produce a larger reduction of these symptoms.

Publication Types: Randomized Controlled Trial, Research Support, N.I.H., Extramural
PMID: 18065731

J Vet Med Sci. 2007 Nov;69(11):1163-5.

Effects of electroacupuncture on intraocular pressure and hemodynamic parameters in isoflurane anesthetized dogs.

Kim MS, Yoo JH, Seo KM, Jeong SM.

Department of Large Animal Clinical Sciences, College of Veterinary Medicine, University of Florida, Florida 32610-0105, USA.

The effects of electroacupuncture (EA) on intraocular pressure (IOP) and hemodynamic parameters were evaluated in isoflurane anesthetized 10 (5 males, 5 females) normal mongrel dogs (8.1-9.8 kg, 6-8 years old). After determination of baseline IOP and hemodynamic parameters (cardiac index, systolic arterial pressure, diastolic arterial pressure, heart rate and systemic vascular resistance index), EA was applied at 3 acupoints (LI-4, LIV-3 and GB-37) for 20 min. After the EA treatment, IOP was significantly decreased in the both eyes ($p < 0.05$). However, there were not significant differences in hemodynamic parameters between those of before and after EA treatment. From these results, the EA treatment at LI-4, LIV-3 and GB-37 would be considered one of the valuable methods for the IOP treatment in dogs.

Publication Types: Clinical Trial
PMID: 18057831

Anesthesiology. 2007 Dec;107(6):903-8.

Monitoring of neuromuscular blockade at the P6 acupuncture point reduces the incidence of postoperative nausea and vomiting.

Arnberger M, Stadelmann K, Alischer P, Ponert R, Melber A, Greif R.

Department of Anesthesiology, Inselspital, University Hospital Bern, Switzerland.

BACKGROUND: Electrical stimulation of the P6 acupuncture point reduces the incidence of postoperative nausea and vomiting (PONV). Neuromuscular blockade during general anesthesia can be monitored with electrical peripheral nerve stimulation at the wrist. The authors tested the effect of neuromuscular monitoring over the P6 acupuncture point on the reduction of PONV. **METHODS:** In this prospective, double-blinded, randomized control trial, the authors investigated, with institutional review board approval and informed consent, 220 women undergoing elective laparoscopic surgery anesthetized with fentanyl, sevoflurane, and rocuronium. During anesthesia, neuromuscular blockade was monitored by a conventional nerve stimulator at a frequency of 1 Hz over the ulnar nerve ($n = 110$, control group) or over the median nerve ($n = 110$, P6 group) stimulating at the P6 acupuncture point at the same time. The authors evaluated the incidence of nausea and vomiting during the first 24 h. **RESULTS:** No differences in demographic and morphometric data were found between both groups. The 24-h incidence of PONV was 45% in the P6 acupuncture group versus 61% in the control group ($P = 0.022$). Nausea decreased from 56% in the control group to 40% in the P6 group ($P = 0.022$), but emesis decreased only from 28% to 23% ($P = 0.439$). Nausea decreased substantially during the first 6 h of the observation period ($P = 0.009$). Fewer subjects in the acupuncture group required ondansetron as rescue therapy (27% vs. 39%; $P = 0.086$). **CONCLUSION:** Intraoperative P6 acupuncture point stimulation with a conventional nerve stimulator during surgery significantly reduced the incidence of PONV over 24 h. The efficacy of P6 stimulation is similar to that of commonly used antiemetic drugs in the prevention of PONV. Publication Types: Comparative Study, Randomized Controlled Trial. Research Support, Non-U.S. Gov't
PMID: 18043058

BMC Complement Altern Med. 2007 Nov 3;7:35.

Acupuncture in the treatment of rheumatoid arthritis: a double-blind controlled pilot study.

Tam LS, Leung PC, Li TK, Zhang L, Li EK.

The Department of Medicine & Therapeutics, The Prince of Wales Hospital, The Chinese University of Hong Kong, Hong Kong, China.

tamls_813@yahoo.com

BACKGROUND: In planning a randomized controlled trial of acupuncture, we conducted a pilot study using validated outcome measures to assess the feasibility of the protocol, and to obtain preliminary data on efficacy and tolerability of 3 different forms of acupuncture treatment as an adjunct for the treatment of chronic pain in patients with Rheumatoid arthritis (RA). **METHODS:** The study employs a randomized, prospective, double-blind, placebo-controlled trial to evaluate the effect of electroacupuncture (EA), traditional Chinese acupuncture (TCA) and sham acupuncture (Sham) in patients with RA. All patients received 20 sessions over a period of 10 weeks. Six acupuncture points were chosen. Primary outcome is the changes in the pain score. Secondary outcomes included the changes in the ACR core disease measures, DAS 28 score and the number of patients who achieved ACR 20 at week 10. **RESULTS:** From 80 eligible patients, 36 patients with mean age of 58 +/- 10 years and disease duration of 9.3 +/- 6.4 years were recruited. Twelve patients were randomized to each group. Twelve, 10 and 7 patients from the EA, TCA and Sham group respectively completed the study at 20 weeks ($p < 0.03$); all except one of the premature dropouts were due to lack of efficacy. At week 10, the pain score remained unchanged in all 3 groups. The number of tender joints was significantly reduced for the EA and TCA groups. Physician's global score was significantly reduced for the EA group and patient's global score was significantly reduced for the TCA group. All the outcomes except patient's global score remained unchanged in the Sham group. **CONCLUSION:** This pilot study has allowed a number of recommendations to be made to facilitate the design of a large-scale trial, which in turn will help to clarify the existing evidence base on acupuncture for RA.

TRIAL REGISTRATION: ClinicalTrials.gov NCT00404443.

Publication Types: Controlled Clinical Trial, Randomized Controlled Trial. Research Support, Non-U.S. Gov't
PMID: 17980044

Acta Obstet Gynecol Scand. 2007;86(12):1447-52.

Does acupuncture used in nulliparous women reduce time from prelabour rupture of membranes at term to active phase of labour? A randomised controlled trial.

Selmer-Olsen T, Lydersen S, Mørkved S.

Department of Obstetrics and Gynaecology, St. Olavs Hospital, Trondheim University Hospital, Norway.

tone.selmer-olsen@stolav.no

BACKGROUND: To assess if acupuncture influences the onset of labour and the need for induction after prelabour rupture of membranes (PROM) in nulliparous women. Further, to investigate a possible effect of acupuncture on the woman's wellbeing. **METHODS:** In a randomised controlled trial (RCT), 106 nulliparous women with PROM were allocated to an acupuncture group (AG) or a control group (CG). The outcome measures were time from PROM to onset of active phase of labour, and rate of inductions if labour was absent after 2 days. The women's self-reported wellbeing was registered on a Visual Analogue Scale (VAS). **RESULTS:** There was no statistically significant difference between the 2 groups regarding time from PROM to active phase (median times in AG versus CG: 15 versus 20.5 h, $p=0.34$). Additionally, there was no difference between the 2 groups in the need for induction. We found no significant differences in self-reported wellbeing, but the women receiving acupuncture considered their treatment to be more positive than the controls ($p=0.003$). No adverse effects were reported. **CONCLUSIONS:** Acupuncture treatment used in nulliparas after PROM showed no significant effect in reducing time to active labour or in reducing rate of inductions. There was no change in wellbeing as a result of acupuncture, but it was considered positive to receive this kind of treatment while waiting for labour to begin.

Publication Types: Randomized Controlled Trial. Research Support, Non-U.S. Gov't
PMID: 17963050

Cochrane Database Syst Rev. 2007 Oct 17;(4):CD006030.

Acupuncture for glaucoma.

Law SK, Li T.

BACKGROUND: Glaucoma is a multifactorial optic neuropathy in which there is an acquired loss of retinal ganglion cells at levels beyond normal age-related loss and corresponding atrophy of the optic nerve. Although there are many existing treatments, glaucoma is a chronic condition. Some patients may seek complementary or alternative medicine such as acupuncture to supplement their regular treatment. The underlying plausibility of acupuncture is that disorders related to the flow of Chi (the traditional Chinese concept translated as vital force or energy) can be prevented or treated by stimulating the relevant points on the body surface. **OBJECTIVES:** The objective of this review was to assess the effectiveness and safety of acupuncture in people with glaucoma. **SEARCH STRATEGY:** We searched the Cochrane Central Register of Controlled Trials (CENTRAL), MEDLINE, EMBASE, LILACS, ZETOC, CINAHL, AMED (Allied and Complementary Medicine Database), TCMLARS (Traditional Chinese Medical Literature Analysis and Retrieval System), CBM (Chinese Biological Database), the Chinese Acupuncture Trials Register and the National Center for Complementary and Alternative Medicine web site (<http://nccam.nih.gov/>) in February 2006. We ran update searches of CENTRAL, MEDLINE, EMBASE, LILACS and ZETOC in July 2007. We also handsearched Chinese medical journals at Peking Union Medical College Library in April 2007. **SELECTION CRITERIA:** We planned to include randomized and quasi-randomized clinical trials in which one arm of the study involved acupuncture treatment. **DATA COLLECTION AND ANALYSIS:** Two authors independently evaluated the search results against the inclusion and exclusion criteria. Discrepancies were resolved by discussion. **MAIN RESULTS:** We found no randomized clinical trials and subsequently no meta-analysis was conducted. Evidence was limited to a few case series of small sample size. **AUTHORS' CONCLUSIONS:** At this time, it is impossible to draw reliable conclusions from the available data to support the use of acupuncture for the treatment of glaucoma. Since most glaucoma patients currently cared for by ophthalmologists do not use non-traditional therapy, the clinical practice decisions will have to be based on physician judgement and patients' value given this lack of data in the literature.

Publication Types: Review
PMID: 17943876

Cochrane Database Syst Rev. 2007 Oct 17;(4):CD002914.

Acupuncture for Bell's palsy.

He L, Zhou MK, Zhou D, Wu B, Li N, Kong SY, Zhang DP, Li QF, Yang J, Zhang X.

West China Hospital, Sichuan University, Department of Neurology, Wai Nan Guo Xue Xiang #37, Chengdu, Sichuan, China, 610041.

hlwsy@hotmail.com

BACKGROUND: Bell's palsy or idiopathic facial palsy is an acute facial paralysis due to inflammation of the facial nerve. A number of studies published in China have suggested acupuncture is beneficial for facial palsy. **OBJECTIVES:** The objective of this review was to examine the efficacy of acupuncture in hastening recovery and reducing long-term morbidity from Bell's palsy. **SEARCH STRATEGY:** We searched the Cochrane Neuromuscular Disease Group Trials Register, MEDLINE (January 1966 to April 2006), EMBASE (January 1980 to April 2006), LILACS (from January 1982 to April 2006) and the Chinese Biomedical Retrieval System (January 1978 to April 2006) for randomised controlled trials using 'Bell's palsy' and its synonyms, 'idiopathic facial paralysis' or 'facial palsy' as well as search terms including 'acupuncture'. Chinese journals in which we thought we might find randomised controlled trials or controlled clinical trials relevant to our study were handsearched. We reviewed the bibliographies of the randomised trials and contacted the authors and known experts in the field to identify additional published or unpublished data. **SELECTION CRITERIA:** We included all randomised or quasi-randomised controlled trials involving acupuncture in the treatment of Bell's palsy irrespective of any language restrictions. **DATA COLLECTION AND ANALYSIS:** Two review authors identified potential articles from the literature search and extracted data independently using a data extraction form. The assessment of methodological quality included allocation concealment, patient blinding, differences at baseline of the experimental groups and completeness of follow-up. Two review authors assessed quality independently. All disagreements were resolved by discussion between the review authors. **MAIN RESULTS:** Six studies including a total of 537 participants met the inclusion criteria. Five of them used acupuncture while another one used acupuncture combined with drugs. No trials reported on the outcomes specified for this review. Harmful side effects were not reported in any of the trials. Flaws in study design or reporting (particularly uncertain allocation concealment and substantial loss to follow-up) and clinical differences between trials prevented conclusions about the efficacy of acupuncture. **AUTHORS' CONCLUSIONS:** The quality of the included trials was inadequate to allow any conclusion about the efficacy of acupuncture. More research with high quality trials is needed.

Publication Types: Review

PMID: 17943775

Clin Exp Obstet Gynecol. 2007;34(3):137-8.

A matched controlled study to evaluate the efficacy of acupuncture for improving pregnancy rates following in vitro fertilization-embryo transfer.

Wang W, Check JH, Liss JR, Choe JK.

The University of Medicine and Dentistry of New Jersey, Robert Wood Johnson Medical School at Camden, Cooper Hospital University Medical Center Department of Obstetrics and Gynecology, Division of Reproductive Endocrinology & Infertility, Camden NJ, USA.

PURPOSE: To determine if acupuncture performed during the follicular phase and luteal phase but not on the day of embryo transfer could improve the outcome following IVF-ET compared to controls. **METHODS:** Acupuncture was started biweekly from day 5 of the follicular phase through the luteal phase but not on the day of the transfer. Controls were matched according to age, same number of previous failed IVF cycles and same type of embryo transfer (fresh or frozen). **RESULTS:** The clinical and ongoing (delivered pregnancy rates per transfer) for 32 women undergoing IVF-ET and acupuncture was 40.6% and 37.5%, respectively vs 53.1% and 43.7% for controls. The median number of previous failed IVF cycles was three. **CONCLUSIONS:** Acupuncture performed twice weekly during the follicular and luteal phase does not seem to improve pregnancy rates following IVF-ET.

Publication Types: Clinical Trial. Controlled Clinical Trial

PMID: 17937084

Emerg Med. 2007 Oct;25(8):887-93.

Prehospital analgesia with acupressure at the Baihui and Hegu points in patients with radial fractures: a prospective, randomized, double-blind trial.

Lang T, Hager H, Funovits V, Barker R, Steinlechner B, Hoerauf K, Kober A.

Department of Anesthesiology and General Intensive Care, Medical University of Vienna, A-1090 Vienna, Austria.

thomas.lang@meduniwien.ac.at

BACKGROUND: Pain during transportation is a common phenomenon in emergency medicine. As acupressure has been deemed effective for pain management by the National Institutes of Health, we conducted a study to evaluate its effectiveness in prehospital patients with isolated distal radial fracture. **METHODS:** This was a prospective, randomized, double-blind study. Thirty-two patients were enrolled. Acupressure was performed either at "true" points or at "sham" points. Vital signs and pain and anxiety scores were recorded before and after the acupressure treatment. Normally distributed values were compared using the Student t test. **RESULTS:** Pretreatment scores for pain and anxiety were similar in the 2 groups (47.6 +/- 8.9 vs 51.2 +/- 8.7 visual analog scale [VAS] score for pain, 52.4 +/- 6.0 vs 47.5 +/- 9.3 VAS score for anxiety). At the hospital, patients in the true-points group had significantly lower pain (36.6 +/- 11.0 vs 56.0 +/- 13.3 VAS score, $P < .001$) and anxiety scores (34.9 +/- 22.2 vs 53.4 +/-

19.7 VAS score, $P = .022$). CONCLUSION: Acupressure in the prehospital setting effectively reduces pain and anxiety in patients with distal radial trauma.

Publication Types: Randomized Controlled Trial. Research Support, Non-U.S. Gov't
PMID: 17920972

Arch Phys Med Rehabil. 2007 Oct;88(10):1276-83.

Acupuncture for chronic shoulder pain in persons with spinal cord injury: a small-scale clinical trial.

Dyson-Hudson TA, Kadar P, LaFontaine M, Emmons R, Kirshblum SC, Tulsy D, Komaroff E. Kessler Medical Rehabilitation Research and Education Center, West Orange, NJ 07052, USA. tdyson-hudson@kmrrec.org

OBJECTIVE: To determine the efficacy of acupuncture in the treatment of chronic musculoskeletal shoulder pain in subjects with spinal cord injury (SCI). DESIGN: Randomized, double blind (participants, evaluator), placebo (invasive sham) controlled trial. SETTING: Clinical research center. PARTICIPANTS: Seventeen manual wheelchair-using subjects with chronic SCI and chronic musculoskeletal shoulder pain. INTERVENTIONS: Participants were randomly assigned to receive 10 treatments of either acupuncture or invasive sham acupuncture (light needling of nonacupuncture points). MAIN OUTCOME MEASURE: Changes in shoulder pain intensity were measured using the Wheelchair User's Shoulder Pain Index. RESULTS: Shoulder pain decreased significantly over time in both the acupuncture and the sham acupuncture groups ($P=.005$), with decreases of 66% and 43%, respectively. There was no significant difference between the 2 groups ($P=.364$). There was, however, a medium effect size associated with the acupuncture treatment. CONCLUSIONS: There appears to be an analgesic effect or a powerful placebo effect associated with both acupuncture and sham acupuncture. There was a medium treatment effect associated with the acupuncture, which suggests that it may be superior to sham acupuncture. This observation, along with the limited power, indicates that a larger, more definitive randomized controlled trial using a similar design is warranted.

Publication Types: Randomized Controlled Trial Research Support, Non-U.S. Gov't Research Support, U.S. Gov't, Non-P.H.S.

PMID: 17908569

Acupunct Med. 2007 Sep;25(3):100-6.

Are reviews based on sham acupuncture procedures in fibromyalgia syndrome (FMS) valid?

Lundeberg T, Lund I.

Rehabilitation Medicine, UniversityClinic, Danderyds Hospital, Stockholm, Sweden.

thomas.lundeberg@ds.se

In recent reviews regarding the efficacy of acupuncture in fibromyalgia syndrome (FMS) it has been concluded that acupuncture has no specific effect since the control procedure (superficial needling and/or needling away from 'specific' points) had similar effects. These conclusions may be questioned since superficial needling and/or needling away from specific trigger points is not inert. Also, manual acupuncture or mild electroacupuncture (EA) may not be sufficient to activate the endogenous pain inhibiting system. Patients with FMS suffer from allodynia, fatigue and muscle ache, which is partly explained by peripheral and central sensitisation. Sensitisation results in augmented and altered stimulus responses whereby light stimulation of the skin has as strong an effect as regular needling on the pain inhibitory system in FMS. Central sensitisation in FMS is also associated with expanded receptive fields of central neurons resulting in a larger topographic distribution of the pain. This would suggest that control procedures using needling away from the 'specific site' might have as strong an effect as needling within the most painful area. Also, repeated nociceptive input from muscles (as obtained by de qi) results in expansion of receptive fields which in turn may result in activation of descending pain inhibition outside the stimulated myotome. Sensitisation to pain, such as in FMS, may also be related to abnormalities in descending efferent pathways. As there is likely to be an imbalance between excitatory and inhibitory systems in FMS, stronger stimulation may therefore be needed to activate the descending pain inhibitory system. In studies using mild manual acupuncture or weak EA stimulation optimal pain inhibition may therefore not have been obtained. When conducting studies on acupuncture, the clinical condition or syndrome needs to be taken into account and the control procedure designed accordingly.

Publication Types: Review

PMID: 17906605

Acupunct Med. 2007 Sep;25(3):87-99.

Acupuncture--self-appraisal and the reward system.

Lundeberg T, Lund I, Näslund J.

Rehabilitation Medicine, UniversityClinic, Danderyds Hospital, Stockholm, Sweden.

thomas.lundeberg@ds.se

Acupuncture is an ancient therapy with a variety of different explanatory models. A cascade of physiological effects has been reported, both in the peripheral and the central nervous system, following the insertion of a needle or light tapping of the skin. Clinical trials testing the specific claims of

acupuncture have generally tried to focus on testing the efficacy of applying specific techniques and/or specified points. However, different conditions may respond differently to different modes of stimulation. Recently, it was demonstrated that both superficial and deep needling (with de qi/Hibiki) resulted in amelioration of patellofemoral pain and unpleasantness. The pleasurable aspect of the acupuncture experience has largely been ignored as it has been considered secondary to its pain alleviating effects. This aspect of acupuncture treatment is likely to be related to activation of self-appraisal and the reward system. When a patient seeks a therapist there are expectations of a specific effect. These expectations are partly based on self-relevant phenomena and self-referential introspection and constitute the preference. Also, when asked about the effect of the treatment, processes that orientate pre-attentive anticipatory or mnemonic information and processes that mediate self-reflection and recollection are integrated together with sensory detection to enable a decision about the patient's perception of the effect of acupuncture treatment. These 'self-appraisal' processes are dependent on two integrated networks: a ventral medial prefrontal cortex-paralimbic-limbic 'affective' pathway and a dorsal medial prefrontal cortex-cortical-hippocampal 'cognitive' pathway. The limbic structures are implicated in the reward system and play a key role in most diseases and illness responses including chronic pain and depression, regulating mood and neuromodulatory responses (eg sensory, autonomic, and endocrine). The pleasurable and neuromodulatory aspects of acupuncture as well as 'placebo needling' may partly be explained by the activation or deactivation of limbic structures including the hippocampus, amygdala, and their connections with the hypothalamus. In patients with patellofemoral pain, the effects of superficial and deep needling remained for six months. These long term pain-alleviating effects have been attributed to activation of pain inhibiting systems in cortical and subcortical pathways. When considering long term effects the cortical-cerebellar system needs to be taken into account. The cortical-cerebellar system is probably central to the development of neural models that learn and eventually stimulate routinely executed (eg motor skills) and long term (eg pain alleviation) cognitive processes. These higher order cognitive processes are initially mediated in prefrontal cortical loci but later shift control iteratively to internal cerebellar representations of these processes. Possibly part of the long term healing effects of acupuncture may be attributed to changes in the cerebellar system thereby sparing processing load in cortical and subcortical areas. As cortical and subcortical structures are activated and/or de-activated following stimulation of receptors in the skin, disregarding site, 'placebo or sham needling' does not exist and conclusions drawn on the basis that it is an inert control are invalid. 'Self' may be seen as a shifting illusion, ceaselessly constructed and deconstructed, and the effect of acupuncture may reflect its status (as well as that of the therapist).

Publication Types: Review

PMID: 17906602

Acupunct Med. 2007 Sep;25(3):65-71.

Acupuncture for mild to moderate emotional complaints in pregnancy--a prospective, quasi-randomised, controlled study.

Bosco Guerreiro da Silva J.

Medical School of São José do Rio Preto, Brazil.

jbgsilva@hotmail.com

BACKGROUND: The aim of this study was to describe the effects of acupuncture under real life conditions, in the treatment of emotional complaints during pregnancy. **METHODS:** A group of 51 conventionally treated pregnant women (with counselling by their physicians and nurses) was allocated by chance into two groups to be either treated or not by acupuncture. Both groups (28 in the study group and 23 in the control group) presented emotional complaints such as anxiety, depression and irritability. They reported the severity of symptoms using a Numerical Rating Scale (NRS) from 0 to 10; and they rated how much the symptoms disturbed five aspects of their lives: mood, sleep, relationships, social activities, sexual life and joy of living. Traditional acupuncture was used. In order to facilitate protocols we used pre-programmed points. Up to four points were permitted as optional points. **RESULTS:** Three women from the acupuncture group and four from the control group dropped out of the study. Over the study period, the NRS scores of intensity of emotional distress decreased by at least half in 15/25 (60%) of patients in the study group and in 5/19 (26%) of those in the control group ($P=0.013$). The impact of the distress on three out of the five aspects of life was significantly less in the acupuncture group when compared with the control group ($P<0.05$). **CONCLUSIONS:** Emotional complaints are very common in pregnancy and medication is always a risk. In this study, acupuncture seems to be an efficacious means of reducing symptoms and improving the quality of life of women with emotional complaints during pregnancy. Large randomised studies are recommended to confirm these results.

Publication Types: Clinical Trial

PMID: 17906599

Physiol Meas. 2007 Oct;28(10):N77-86. Epub 2007 Sep 18.

Microcirculatory characteristics of acupuncture points obtained by laser Doppler flowmetry.

Hsiu H, Huang SM, Chao PT, Jan MY, Hsu TL, Wang WK, Wang YY.

Department of Electrical Engineering, Yuan Ze University, Taoyuan, Taiwan, Republic of China.

hhsiu@saturn.yzu.edu.tw

Acupuncture points (acupoints) form part of the meridian system that constitutes the most fundamental concept in oriental medicine, but their physiological basis has not been clarified. In this study we employed laser Doppler flowmetry (LDF) to extract the microcirculatory characteristics of acupoints and their surrounding tissues, and we interpreted the results from the viewpoint of microcirculatory physiology. Three groups of measurements were performed focusing on the following two important acupoints in oriental medicine in healthy volunteers (n = 13 for group A and n = 9 for groups B and C, respectively): Hoh-Ku (Li4, on the hand) and Ching-Ku (B64, on the foot). The two groups of measurements around Hoh-Ku (Groups A and B) were so designed as to examine the effect of the direction of the nonacupoint away from the acupoint, whereas comparison between the Hoh-Ku and the Ching-Ku measurements was to verify whether the phenomenon was consistent in the upper and the lower extremities. We found that the mean LDF signals were significantly larger at the acupoints than in their surrounding tissues (all p < 0.05), which indicates a larger blood supply into the microvascular beds of acupoints. The results indicate that the physical properties of the vascular structure of acupoints may affect the perfusion resistance, and thereby modulate the microcirculatory perfusion in accordance with tissue needs. This finding facilitates the localization of acupoints, helps in identifying the connection between microcirculatory physiology and responses to acupoint stimulation, and introduces an objective research method for understanding the mechanisms that underlie oriental medicine.

Publication Types: Clinical Trial. Research Support, Non-U.S. Gov't
PMID: 17906382

Chin J Integr Med. 2007 Sep;13(3):228-30.

Clinical observation on treatment of depression by electro-acupuncture combined with Paroxetine.

Zhang GJ, Shi ZY, Liu S, Gong SH, Liu JQ, Liu JS.

Department of Psychology, Hospital of Traditional Chinese Medicine of Shiyan City, Hubei, 442012, China.

OBJECTIVE: To observe the clinical efficacy and adverse reactions of Paroxetine combined with electro-acupuncture (EA) in treating depression. **METHODS:** Forty-two patients with depression were randomly assigned to the observation group (22 patients) treated with EA combined with Paroxetine, and the control group (20 patients) treated with Paroxetine alone, and the therapeutic course for both groups was 6 weeks. The therapeutic efficacy and adverse reactions were evaluated with scores by Hamilton depression scale (HAMD) and treatment emergent symptoms scale (TESS), respectively. **RESULTS:** HAMD scores determined at the end of the 1st, 2nd, 4th, and 6th week of the treatment course were significantly lower in the observation group than those in the control group (P<0.05). The significant improvement rate evaluated at the end of the 6-week treatment was remarkably higher in the observation group than that in the control group (72.7% vs 40.0%). No significant difference of TESS scores was found between the two groups. **CONCLUSION:** EA combined with Paroxetine has better clinical efficacy than that of Paroxetine alone, with milder adverse reaction and quicker initiation of effect.

Publication Types: Randomized Controlled Trial
PMID: 17898957

Arch Intern Med. 2007 Sep 24;167(17):1892-8.

German Acupuncture Trials (GERAC) for chronic low back pain: randomized, multicenter, blinded, parallel-group trial with 3 groups.

Haake M, Müller HH, Schade-Brittinger C, Basler HD, Schäfer H, Maier C, Endres HG, Trampisch HJ, Molsberger A.

Orthopaedic Department, University of Regensburg, Bad Abbach, Germany.

BACKGROUND: To our knowledge, verum acupuncture has never been directly compared with sham acupuncture and guideline-based conventional therapy in patients with chronic low back pain. **METHODS:** A patient- and observer-blinded randomized controlled trial conducted in Germany involving 340 outpatient practices, including 1162 patients aged 18 to 86 years (mean +/- SD age, 50 +/- 15 years) with a history of chronic low back pain for a mean of 8 years. Patients underwent ten 30-minute sessions, generally 2 sessions per week, of verum acupuncture (n = 387) according to principles of traditional Chinese medicine; sham acupuncture (n = 387) consisting of superficial needling at nonacupuncture points; or conventional therapy, a combination of drugs, physical therapy, and exercise (n = 388). Five additional sessions were offered to patients who had a partial response to treatment (10%-50% reduction in pain intensity). Primary outcome was response after 6 months, defined as 33% improvement or better on 3 pain-related items on the Von Korff Chronic Pain Grade Scale questionnaire or 12% improvement or better on the back-specific Hanover Functional Ability Questionnaire. Patients who were unblinded or had recourse to other than permitted concomitant therapies during follow-up were classified as nonresponders regardless of symptom improvement. **RESULTS:** At 6 months, response rate was 47.6% in the verum acupuncture group, 44.2% in the sham acupuncture group, and 27.4% in the conventional therapy group. Differences among groups were as follows: verum vs sham, 3.4% (95% confidence interval, -3.7% to 10.3%; P = .39); verum vs conventional therapy, 20.2% (95% confidence

interval, 13.4% to 26.7%; $P < .001$); and sham vs conventional therapy, 16.8% (95% confidence interval, 10.1% to 23.4%; $P < .001$). CONCLUSIONS: Low back pain improved after acupuncture treatment for at least 6 months. Effectiveness of acupuncture, either verum or sham, was almost twice that of conventional therapy.

Publication Types: Multicenter Study Randomized Controlled Trial. Research Support, Non-U.S. Gov't
PMID: 17893311

Clin J Pain. 2007 Oct;23(8):714-9.

Should we recruit patients or healthy volunteers for acupuncture studies of chronic pain?

White P, Lewith G, Prescott P.

School of Health Professions and Rehabilitation Sciences, University of Southampton, Highfield, UK.

pjw1@soton.ac.uk

OBJECTIVE: The aim of this study was to compare the results of healthy volunteers with patients in chronic pain, in terms of acupuncture needle sensation. The search for a credible mechanism that underpins the effect of acupuncture in pain has recently involved the use of brain imaging techniques in an attempt to identify the neural correlates involved in pain control. Such studies have usually enrolled healthy participants rather than patients. This practice might be inappropriate as we are unsure if we can generalize from healthy volunteers to patients in chronic pain. METHOD: This paper describes a comparison of data obtained from 2 small randomized controlled studies, 1 involving patients with chronic pain and the other which recruited healthy volunteers. Both studies used real acupuncture and a nonpenetrating "placebo" needle in a crossover design. The outcome studied in this paper was a comprehensive needling sensation questionnaire. RESULTS: There was a difference in the sensations experienced by patients as compared with healthy volunteers. Patients tended to feel much stronger sensation. Neither group differed in distinguishing between real and placebo needling. However, patients were more likely to state that both needles were real, whereas healthy participants were more likely to suggest that neither were real. DISCUSSION: It is concluded that if the nature of the sensation felt is of importance, then it might be inappropriate to recruit healthy volunteers in lieu of patients and a larger study is required to clarify this.

Publication Types: Randomized Controlled Trial. Research Support, Non-U.S. Gov't
PMID: 17885351

Med J Aust. 2007 Sep 17;187(6):337-41.

Acupuncture for persistent allergic rhinitis: a randomised, sham-controlled trial.

Xue CC, An X, Cheung TP, Da Costa C, Lenon GB, Thien FC, Story DF.

Division of Chinese Medicine, School of Health Sciences, World Health Organization Collaborating Centre for Traditional Medicine, RMIT University, Melbourne, VIC, Australia.

charlie.xue@rmit.edu.au

OBJECTIVE: To investigate the effectiveness and safety of acupuncture in persistent allergic rhinitis (PAR) DESIGN: Randomised, single-blind, sham-controlled trial conducted from May 2004 to February 2005. PARTICIPANTS AND INTERVENTION: 80 patients with PAR (age, 16-70 years) were randomly assigned to receive real or sham acupuncture. After a 1-week baseline period, participants were treated twice weekly for 8 weeks and followed up for another 12 weeks. MAIN OUTCOME MEASURES: Nasal obstruction, sneezing, rhinorrhoea and nasal itch were each self-assessed daily on a 5-point scale, and scores were aggregated weekly. The sum of the symptom scores (total nasal symptom score, TNSS) was also determined. A secondary outcome was use of PAR relief medication. RESULTS: After 8 weeks' treatment, the weekly mean difference in TNSS from baseline was greater with real (-17.2; 95% CI, -24.6 to -9.8) than with sham acupuncture (-4.2; 95% CI, -11.0 to 2.7) ($P = 0.01$). The decrease in individual symptom score was also greater with real acupuncture for rhinorrhoea ($P < 0.01$) but not the other symptoms. At the end of follow-up, the greater difference in TNSS from baseline in the real acupuncture group was still apparent: real, -21.0 (95% CI, -29.1 to -12.9) versus sham, - 2.3 (95% CI, -10.2 to 5.6) ($P = 0.001$). Moreover, the differences from baseline in all four individual symptom scores were greater for the real than for the sham group ($P < 0.05$). Real and sham acupuncture were both well tolerated. CONCLUSION: Our findings suggest that acupuncture is effective in the symptomatic treatment of PAR. TRIAL REGISTRATION: Australian Government Therapeutic Goods Administration CTN 034/2004.

Publication Types: Randomized Controlled Trial.

PMID: 17874980

Expert Rev Neurother. 2007 Sep;7(9):1121-34.

Role of acupuncture in the treatment of migraine.

Endres HG, Diener HC, Molsberger A.

Ruhr University Bochum, Department of Medical Informatics, Statistics & Epidemiology, D-44801 Bochum, Germany.

heinz.endres@ruhr-uni-bochum.de

Since the last Cochrane review of acupuncture and headache in 2001, which found methodological and/or reporting shortcomings in the majority of the studies, several large, randomized trials on the effectiveness of acupuncture as a treatment for headache have been published. Following a brief overview of the pathophysiology of migraine and possible action mechanisms of acupuncture, we look at current studies on acupuncture and migraine and discuss the results. From these results and our own studies on acupuncture and migraine, we conclude that a 6-week course of acupuncture is not inferior to a 6-month prophylactic drug treatment, but that specific Chinese point selection, point stimulation and needling depth are not as important as had been thought. The review suggests that acupuncture should be integrated into existing migraine therapy protocols.

Publication Types: Meta-AnalysisReview

PMID: 17868011

Climacteric. 2007 Oct;10(5):371-80.

Acupuncture in managing menopausal symptoms: hope or mirage?

Alfhaily F, Ewies AA.

Department of Obstetrics and Gynaecology, Ipswich Hospital NHS Trust, Suffolk, UK.

There is an increased interest amongst women in seeking alternatives for hormone replacement therapy because of their fear of side-effects. It is claimed that acupuncture is effective for curing menopausal symptoms, and to be a safe treatment in the hands of well-trained and qualified practitioners. About one million acupuncture treatments are given in the National Health Service and two million privately each year in England for various indications. However, because its mechanism of action is not fully understood in physiological terms, acupuncture is considered by many clinicians to be of no value. This article reviews the currently available evidence as regards the effectiveness and safety of acupuncture in treating menopausal symptoms.

Publication Types: Review

PMID: 17852139

Clin Rehabil. 2007 Aug;21(8):719-28.

Effects of acupuncture and sham acupuncture in addition to physiotherapy in patients undergoing bilateral total knee arthroplasty--a randomized controlled trial.

Tsang RC, Tsang PL, Ko CY, Kong BC, Lee WY, Yip HT.

Physiotherapy Department, Queen Mary Hospital, Hong Kong, China.

tsangccr@ha.org.hk

OBJECTIVE: To compare the acute effects of acupuncture with sham acupuncture on knee pain, range of motion and ambulation in patients with knee osteoarthritis undergoing bilateral total knee arthroplasty, when added to a standard postoperative physiotherapy programme. **DESIGN:** Prospective patient- and assessor-blinded randomized controlled trial. **SETTING:** Acute inpatient physiotherapy department. **PATIENTS:** Thirty patients (24 women and 6 men) undergoing bilateral total knee arthroplasty were included for final analysis in the study. **INTERVENTIONS:** Both groups received a standard postoperative physiotherapy programme. Each patient was also given either 10 sessions of acupuncture or sham acupuncture within two weeks. **MAIN OUTCOME MEASURES:** The primary outcome measures were the levels of pain at rest and at maximum after exercise measured by the numeric pain rating scale. Other outcome measures included active and passive ranges of knee motion measured by standard goniometer, and ambulation measured by the timed up-and-go test. **RESULTS:** Thirty-six patients were recruited at the start of the study with 18 patients allocated to the acupuncture group and another 18 patients to the sham acupuncture group. On postoperative day 15, there were 30 patients with complete data; three patients in each group dropped out from the study. The mean differences (95% confidence interval (CI)) in overall averages of postoperative mean pain levels were 0.4 (-0.6 to 1.3) and -0.8 (-2.0 to 0.4) at rest and at maximum respectively. There were no significant differences in the active and passive ranges of knee motion and the time for the timed up-and-go test between the two groups. **CONCLUSION:** There is no difference between the acute effects of acupuncture and sham acupuncture in addition to standard postoperative physiotherapy programme in patients with knee osteoarthritis undergoing bilateral total knee arthroplasty.

Publication Types: Randomized Controlled Trial.

PMID: 17846072

Integr Cancer Ther. 2007 Sep;6(3):251-7.

The neuroimmune basis of anti-inflammatory acupuncture.

Kavoussi B, Ross BE.

Southern California University of Health Sciences, College of Acupuncture and Oriental Medicine, Whittier, CA, USA.

kavoussi@ucla.edu

This review article presents the evidence that the antiinflammatory actions of acupuncture are mediated via the reflexive central inhibition of the innate immune system. Both laboratory and clinical evidence have recently shown the existence of a negative feedback loop between the autonomic nervous system

and the innate immunity. There is also experimental evidence that the electrical stimulation of the vagus nerve inhibits macrophage activation and the production of TNF, IL-1beta, IL-6, IL-18, and other proinflammatory cytokines. It is therefore conceivable that along with hypnosis, meditation, prayer, guided imagery, biofeedback, and the placebo effect, the systemic anti-inflammatory actions of traditional and electro-acupuncture are directly or indirectly mediated by the efferent vagus nerve activation and inflammatory macrophage deactivation. In view of this common physiological mediation, assessing the clinical efficacy of a specific acupuncture regimen using conventional double-blind placebo-controlled trials inherently lacks objectivity due to (1) the uncertainty of ancient rules for needle placement, (2) the diffuse noxious inhibitory control triggered by control-needling at irrelevant points, (3) the possibility of a dose-response relationship between stimulation and effects, and (4) the possibility of inadequate blinding using an inert sham procedure. A more objective assessment of its efficacy could perhaps consist of measuring its effects on the surrogate markers of autonomic tone and inflammation. The use of acupuncture as an adjunct therapy to conventional medical treatment for a number of chronic inflammatory and autoimmune diseases seems plausible and should be validated by confirming its cholinergic activity.

Publication Types: Review

PMID: 17761638

Oncol Nurs Forum. 2007 Jul;34(4):813-20.

Acupressure for chemotherapy-induced nausea and vomiting: a randomized clinical trial.

Dibble SL, Luce J, Cooper BA, Israel J, Cohen M, Nussey B, Rugo H.

**Institute for Health and Aging, School of Nursing, University of California, San Francisco, USA.
sue.dibble@gmail.com**

PURPOSE/OBJECTIVES: To compare differences in the chemotherapy-induced nausea and vomiting (CINV) among three groups of women (acupressure, placebo acupressure, and usual care) undergoing chemotherapy for breast cancer. **DESIGN:** A multicenter, longitudinal, randomized clinical trial throughout one cycle of chemotherapy. **SETTING:** Ten community clinical oncology programs associated with the M.D. Anderson Cancer Center and nine independent sites located throughout the United States. **SAMPLE:** 160 women who were beginning their second or third cycle of chemotherapy for breast cancer treatment and had moderate nausea intensity scores with their previous cycles. **METHODS:** Subjects were randomized to one of three groups: acupressure to P6 point (active), acupressure to SI3 point (placebo), or usual care only. Subjects in the acupressure group were taught to apply an acupressure wrist device by research assistants who were unaware of the active acupressure point. All subjects completed a daily log for 21 days containing measures of nausea and vomiting and recording methods (including antiemetics and acupressure) used to control these symptoms. **MAIN RESEARCH VARIABLES:** Acute and delayed nausea and vomiting. **RESULTS:** No significant differences existed in the demographic, disease, or treatment variables among the treatment groups. No significant differences were found in acute nausea or emesis by treatment group. With delayed nausea and vomiting, the acupressure group had a statistically significant reduction in the amount of vomiting and the intensity of nausea over time when compared with the placebo and usual-care groups. No significant differences were found between the placebo and usual-care groups in delayed nausea or vomiting. **CONCLUSIONS:** Acupressure at the P6 point is a value-added technique in addition to pharmaceutical management for women undergoing treatment for breast cancer to reduce the amount and intensity of delayed CINV. **IMPLICATIONS FOR NURSING:** Acupressure is a safe and effective tool for managing delayed CINV and should be offered to women undergoing chemotherapy for breast cancer.

Publication Types: Multicenter Study Randomized Controlled Trial. Research Support, N.I.H., Extramural
PMID: 17723973

J Altern Complement Med. 2007 Jul-Aug;13(6):669-76.

Auricular acupuncture treatment for insomnia: a systematic review.

Chen HY, Shi Y, Ng CS, Chan SM, Yung KK, Zhang QL.

**School of Chinese Medicine, Hong Kong Baptist University, Hong Kong.
hoiyong@gmail.com**

OBJECTIVES: To review trials on the efficacy and safety of auricular acupuncture (AA) treatment for insomnia and to identify the most commonly used auricular acupoints for treating insomnia in the studies via a frequency analysis. **DATA SOURCES:** The international electronic databases searched included: (1) AMED; (2) the Cochrane library; (3) CINAHL; (4) EMBASE; and (5) MEDLINE. Chinese electronic databases searched included: (1) VIP Information; (2) CBMdisc; and (3) CNKI. **STUDY SELECTION:** Any randomized controlled trials using AA as an intervention without using any co-interventions for insomnia were included. Studies using AA versus no treatment, placebo, sham AA, or Western medicine were included. **DATA EXTRACTION:** Two (2) independent reviewers were responsible for data extraction and assessment. The efficacy of AA was estimated by the relative risk (RR) using a meta-analysis. **RESULTS:** Eight hundred and seventy eight (878) papers were searched. Six (6) trials (402 treated with AA among 673 participants) that met the inclusion criteria were retrieved. A meta-analysis showed that AA was chosen with a higher priority among the treatment subjects than among the controls ($p < 0.05$). The

recovery and improvement rates produced by AA was significantly higher than those of diazepam ($p < 0.05$). The rate of success was higher when AA was used for enhancement of sleeping hours up to 6 hours in treatment subjects ($p < 0.05$). The efficacy of using Semen vaccariae ear seeds was better than that of the controls ($p < 0.01$); while magnetic pearls did not show statistical significance ($p = 0.28$). Six (6) commonly used auricular acupoints were Shenmen (100%), Heart (83.33%), Occiput (66.67%), Subcortex (50%), Brain and Kidney (each 33.33%, respectively). CONCLUSIONS: AA appears to be effective for treating insomnia. Because the trials were low quality, further clinical trials with higher design quality, longer duration of treatment, and longer follow-up should be conducted.

Publication Types: Research Support, Non-U.S. Gov't Review
PMID: 17718650

J Altern Complement Med. 2007 Jul-Aug;13(6):603-16.

Neuroimaging acupuncture effects in the human brain.

Dhond RP, Kettner N, Napadow V.

Massachusetts General Hospital/Massachusetts Institute of Technology/Harvard Medical School, Athinoula A. Martinos Center for Biomedical Imaging, Charlestown, MA 02129, USA.

polly@nmr.mgh.harvard.edu

Acupuncture is an ancient East Asian healing modality that has been in use for more than 2000 years. Unfortunately, its mechanisms of action are not well understood, and controversy regarding its clinical efficacy remains. Importantly, acupuncture needling often evokes complex somatosensory sensations and may modulate the cognitive/affective perception of pain, suggesting that many effects are supported by the brain and extending central nervous system (CNS) networks. Modern neuroimaging techniques such as functional magnetic resonance imaging, positron emission tomography, electroencephalography, and magnetoencephalography provide a means to safely monitor brain activity in humans and may be used to help map the neurophysiological correlates of acupuncture. In this review, we will summarize data from acupuncture neuroimaging research and discuss how these findings contribute to current hypotheses of acupuncture action.

Publication Types: Research Support, N.I.H., Extramural Review
PMID: 17718643

J Gerontol Nurs. 2007 Aug;33(8):23-8; quiz 30-1.

Auricular acupuncture for insomnia: duration and effects in Korean older adults.

Kim KB, Sok SR.

College of Nursing Science, Kyung Hee University, Seoul, Korea.

This study examined the duration and effects of auricular acupuncture on insomnia in a sample of 28 Korean older adults. The design was a group, pretest-posttest, repeated-measures study. Measures were the Sleep State Tool and the Sleep Satisfaction Tool. The effects of auricular acupuncture on insomnia among Korean older adults were significant. The duration effects of auricular acupuncture were maintained for 2 weeks. Clinicians should consider providing auricular acupuncture as an alternative method for improving quality of sleep in older adults.

Publication Types: Controlled Clinical Trial Research Support, Non-U.S. Gov't
PMID: 17718375