

NEWS SCIENTIFICHE 2010

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La parola chiave (keyword) da utilizzare nelle ricerche è:

Acupuncture

ABSTRACTS 2010

J Rehabil Med. 2010 May;42(5):463-8.

Dry needle stimulation of myofascial trigger points evokes segmental anti-nociceptive effects.

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OBJECTIVES: To test the hypothesis that dry needle stimulation of a myofascial trigger point (sensitive locus) evokes segmental anti-nociceptive effects.

DESIGN: Double-blind randomized controlled trial. **SUBJECTS:** Forty subjects (21 males, 19 females).

METHODS: Test subjects received intramuscular dry needle puncture to a right supraspinatus trigger point (C4,5); controls received sham intramuscular dry needle puncture. Pain pressure threshold (PPT) readings were recorded from right infraspinatus (C5,6) and right gluteus medius (L4,5S1) trigger points at 0 (pre-needling baseline), 1, 3, 5, 10 and 15 min post-needling and normalized to baseline values. The supraspinatus and infraspinatus trigger points are neurologically linked at C5; the supraspinatus and gluteus medius are segmentally unrelated. The difference between the infraspinatus and gluteus medius PPT values (PPTseg) represents a direct measure of the segmental anti-nociceptive effects acting at the infraspinatus trigger point.

RESULTS: Significant increases in PPTseg were observed in test subjects at 3 ($p = 0.002$) and 5 ($p = 0.015$) min post-needling, compared with controls.

CONCLUSION: One intervention of dry needle stimulation to a single trigger point (sensitive locus) evokes short-term segmental anti-nociceptive effects. These results suggest that trigger point (sensitive locus) stimulation may evoke anti-nociceptive effects by modulating segmental mechanisms, which may be an important consideration in the management of myofascial pain.

Zhongguo Zhen Jiu. 2010 Mar;30(3):209-12.

Effects of time factors on acupoint sticking therapy for preventing and treating bronchial asthma

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OBJECTIVES: To observe the influence of time factors on acupoint sticking therapy for preventing and treating bronchial asthma.

METHODS: Seventy-one cases were randomly divided into a dog days group ($n = 30$), a Sanjiu days group ($n = 21$) and a daily days group ($n = 20$). They were all treated with ginger moxibustion plus acupoint sticking of Chinese medicine at Dazhui (GV 14) and Feishu (BL 13) etc. This treatment was applied once at the beginning of the first dog days, the middle dog days and the last dog days respectively in the dog days group, and once at the beginning of the first nine days, the middle nine days and the last nine days in coldest days of winter respectively in the Sanjiu days group, and once every other 10 days during 30 days except the dog days or the Sanjiu days in the daily days group. Their therapeutic effects and quality of life and changes of serum level of interleukin 13 (IL-13) were observed.

RESULTS: The total effective rate of the dog days group was 83.3% (25/30), the Sanjiu days group and the daily days group were 61.9% (13/21) and 65.0% (15/20) respectively, with no significant differences among three groups (all $P > 0.05$). After treatment, there were no significant differences in quality of life and changes of serum level of IL-13 among three groups, but there were significant differences between before and after treatment ($P < 0.01$, $P < 0.001$).

CONCLUSION: Acupoint sticking is an effective therapy for bronchial asthma. It can be practiced in the whole year for the result of this study that medicines and acupoints are the leading factors of this therapy and the time factors have no influence on therapeutic effect.

Zhongguo Zhen Jiu. 2010 Mar;30(3):206-8.

Observation on therapeutic effect of electroacupuncture therapy for promoting consciousness of patients with coma

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OBJECTIVES: To observe the promoting consciousness effect of electroacupuncture therapy on the patients with long-term coma caused by severe craniocerebral trauma.

METHODS: Twenty-nine cases with coma more than 3 weeks and Glasgow Coma Scales (GCS) of 8 or less were divided into an observation group ($n = 15$) and a control group ($n = 14$). They were treated with the same western medicine. In addition to ordinary treatment, the observation group was treated with electroacupuncture at Baihui (GV 20), Shuigou (GV 26), Yongquan (KI 1) etc. for 30 min and the needles were retained for 30 min, once each day.

RESULTS: The average awake time and awake rate were 40.1 days and 73.3% (11/15) respectively in the observation group, which were higher than 51.8 days and 28.6% (4/14) in the control group.

CONCLUSION: Electroacupuncture therapy combine with western medicine is more effective in improving consciousness of patients in coma caused by severe craniocerebral trauma.

Zhongguo Zhen Jiu. 2010 Mar;30(3):195-9.

Effect of acupuncture at Baihui (GV 20) and Zusanli (ST 36) on the level of serum inflammatory cytokines in patients with depression

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OBJECTIVES: To investigate the immunologic mechanism of acupuncture at Baihui (GV 20) and Zusanli (ST 36) for treatment of depression.

METHODS: Eighty-four cases of depression patients were randomly divided into an electroacupuncture observation group (group A), an electroacupuncture control group (group B) and a medication control group (group C), 28 cases in each group. Baihui (GV 20) and Zusanli (ST 36) were used in the group A; Taichong (LR 3), Sanyinjiao (SP 6), Neiguan (PC 6) and Shenmen (HT 7) were used in the group B; and the group C was treated with oral administration of Fluoxetine. The scores of Hamilton Depression Scale (HAMD) were tested and the level of serum interleukin 1 (IL-1 beta), interleukin 6 (IL-6), and tumor necrosis factor alpha (TNF-alpha) were measured by Enzyme Linked Immunosorbent Assay (ELISA) before and after treatment.

RESULTS: Their scores of HAMD were obviously decreased after treatment in three groups (all $P < 0.01$). In the group A, 2 cases were cured, 19 cases were markedly effective, 5 cases were effective and 2 cases were ineffective. In the group B, 16 cases were markedly effective, 12 cases were effective. While in the group C, 1 case was cured, 17 cases were markedly effective, 7 cases were effective and 3 cases were ineffective. The grade distribution of clinical effect showed that the effect of group A was better ($P < 0.05$). The levels of serum IL-1 beta and IL-6 in the three groups were obviously decreased after treatment ($P < 0.05$, $P < 0.01$), while there was no significant difference between the level of serum TNF-alpha before and after treatment.

CONCLUSION: The effect of electroacupuncture observation group is superior to those of electroacupuncture control group and medication control group. All of these three methods can clear the inflammatory cytokines such as IL-1 beta and IL-6 away and improve the symptoms of depression.

Zhongguo Zhen Jiu. 2010 Mar;30(3):192-4.

Observation on therapeutic effect of acupoint sticking at Neiguan (PC 6) and Xinshu (BL 15) for treatment of bradycardia

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OBJECTIVES: To observe the therapeutic effect of acupoint sticking of Wuzhuyu (Evodia Rutaecarpa) for treatment of bradycardia.

METHODS: Sixty cases were randomly divided into an observation group and a control group, 30 cases in each group. The observation group was treated with acupoint sticking of Wuzhuyu (Evodia Rutaecarpa) at Neiguan (PC 6) and Xinshu (BL 15) once each day. The control group was treated with oral administration of Xinbao pills, 3 pills each time, thrice each day. The therapeutic effects and changes of 24 hours' holter were observed after 4 weeks.

RESULTS: After treatment, 24 hours' average heart rate was significantly improved in the two groups, with significant differences as compared with those before treatment (both $P < 0.01$) and with no significant difference between the two groups ($P > 0.05$). The total effective rate was 86.7% (26/30) in the observation group and 83.3% (25/30) in the control group, their therapeutic effect being similar.

CONCLUSION: Acupoint sticking of Wuzhuyu (Evodia Rutaecarpa) can significantly raise the levels of 24 hours' average heart rate in the patients of bradycardia. This therapy and Xinbao pills have similar therapeutic effect on the improvement of clinical symptom and heart rate levels.

Zhen Ci Yan Jiu. 2010 Feb;35(1):47-51.

Effect of electroacupuncture of different acupoints on electroretinogram and cerebral visual evoked potentials in healthy subjects

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OBJECTIVES: To observe the effect of electroacupuncture (EA) of different acupoints on electroretinogram (ERG) and cerebral visual evoked potentials (VEP) in healthy subjects so as to evaluate the relative specificity of the function of acupoints.

METHODS: A total of 33 healthy adult volunteers were observed in the present study. The subject was asked to lie on a testing bed for a while, two disk electrodes were respectively fixed to the suborbital region and the occiput (the crossing point, 5 cm apart from the right median line of the head and 5 cm above the ear), and the reference electrode was fixed to the medial side of the earlobe for recording ERG and cerebral VEP separately. The testing room was asked to keep faint light during the whole recording process. A flash stimulation (frequency 1 Hz) was applied to the subject's eye (with a distance of about 50 cm between the light source and the tested eye, and the other eye was covered by an eyepatch). EA (0.5 Hz, 0.2 ms and 3-4 V) was applied to Guangming (GB 37), Neiguan (PC 6) and Zusanli (ST 36) for 30 min respectively in different testing days (with the interval being 3 days at least). ERG and cerebral VEP were recorded by using Polygraphy (RM-6200).

RESULTS: Following EA of Guangming (GB 37), Neiguan (PC 6) and Zusanli (ST 36), the changing values (increase and decrease) of the amplitude of b waves of ERG and P100 waves of cerebral VEP were (19.68 +/- 12.61)% and (12.84 +/- 14.08)%, (6.09 +/- 14.06)% and (5.61 +/- 8.01)%, (2.39 +/- 3.52)% and (5.43 +/- 8.22)%, respectively, while those of b waves of ERG and P100 waves of cerebral VEP of GB 37 were significantly bigger than those of PC 6 and ST 36 ($P < 0.01$).

CONCLUSION: EA of Guangming (GB 37) can significantly change the amplitude of both ERG and cerebral VEP in volunteer subjects, which is markedly bigger than those of EA of Zusanli (ST 36) and Neiguan (PC 6), suggesting a relative specificity of the effect of EA of different acupoints.

Zhongguo Zhen Jiu. 2010 Jan;30(1):72-4.

Preventive effect of acupoint injection at neiguan (PC 6) on postoperative nausea and vomiting after laparoscopic gynecologic surgery

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OBJECTIVES: To investigate the method for preventing the postoperative nausea and vomiting (PONV) after laparoscopic gynecologic surgery.

METHODS: One hundred and twenty patients being for laparoscopic gynecologic surgery at I- II grade as American Society of anesthesiologists (ASA) were randomly divided into three groups, 40 cases in each group. Twenty minutes before the operation, the mixture of 2.5 mg Droperidol (1 mL) and 1 mL 0.9% sodium chloride solution was injected into the bilateral Neiguan (PC 6) in group I, and an intravenous injection with 1 mL Droperidol was used in group II, while there was no treatment carried out in group III. Twenty four hours after the operation, the frequency and degree of nausea and vomiting were observed and scored according to the criteria standard. **RESULTS:** The incidence rate of nausea was 10.0% (4/40) in group I, 57.5% (23/40) in group II, which was significantly different from 80.0% (32/40) in group III ($P < 0.01$, $P < 0.05$, respectively), while it was lower in group I than in group II ($P < 0.01$). The incidence rate of vomiting was 7.5% (3/40) in group I, 52.5% (21/40) in group II, which was significantly different from 75.0% (30/40) in group III ($P < 0.01$, $P < 0.05$ respectively), while it was lower in group I than in group II ($P < 0.01$). No complication, such as obvious drowsiness, anxiety and extracortical tract reaction, was observed among the three groups.

CONCLUSION: Acupoint injection at Neiguan (PC 6) with a small dose of Droperidol can effectively prevent the PONV after laparoscopic gynecologic surgery without other adverse effects.

Zhongguo Zhen Jiu. 2010 Jan;30(1):51-4.

Study on the manifestation of facial infrared thermography induced by acupuncture Guangming (GB 37) and Hegu (LI 4)

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OBJECTIVES: To manifest the specificity of acupoints **objectively** through observing the relationship of both Guangming (GB 37) and Hegu (LI 4) with the some areas of face.

METHODS: The patients with peripheral facial paralysis were divided into the Guangming (GB 37) group and Hegu (LI 4) group, and punctured respectively. Before and after treatment, the distribution and change of facial temperatures were measured with infrared thermography and the data on each area was comparatively analyzed.

RESULTS: After punctured at Guangming (GB 37), the temperature went up in the areas around the eyes of both health and affected sides, especially on the affected side, which was significantly different from the other facial areas (all $P < 0.05$). After punctured at Hegu (LI 4), the temperature obviously went up in the area around the mouth, which was significantly different from other areas of face, such as the areas of Yintang and health eye. The temperature in the area around the affected eye was significantly higher than that of the area around the health eye.

CONCLUSION: There is some close coordination between Guangming (GB 37) and eye area, as well as between Hegu (LI 4) and mouth area, suggesting the specificity of acupoints.

Zhongguo Zhen Jiu. 2010 Jan;30(1):43-5.

Effects of electroacupuncture of different frequencies for treatment of patients with refractory tennis elbow syndrome

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OBJECTIVES: To observe the different effects of electroacupuncture of different frequencies for treatment of patients with refractory tennis elbow syndrome.

METHODS: Eighty five patients with refractory tennis elbow syndrome were randomly divided into continuous wave group ($n=41$) and rarefaction wave group ($n=44$). The same acupoints were selected in both groups, and the major acupoints were the tenderness point around affected area in both groups. The Visual Analogue Scale (VAS) was used to evaluate the tenderness score of each patient in both groups. The effectiveness was evaluated by the tenderness score.

RESULTS: The effective rate was 82.9% in continuous wave group, and 84.1% in rarefaction wave group, with no significant difference in statistical analysis ($P > 0.05$). The healing rate was 56.8% in rarefaction wave group, better than 31.7% in continuous wave group ($P < 0.05$). The VAS scores were significantly reduced after electroacupuncture treatment in both groups (both $P < 0.001$). There was significant difference in decreasing the VAS score between two groups after treatment ($P < 0.05$), and the rarefaction wave group was better than the continuous wave group.

CONCLUSION: The electroacupuncture of rarefaction wave is better than the electroacupuncture of continuous wave, therefore, it is a better treatment for refractory tennis elbow syndrome.

Zhongguo Zhen Jiu. 2010 Jan;30(1):23-6.

Clinical observation on treatment of acupuncture for different stages of Bell's palsy

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OBJECTIVES: To observe the therapeutic effects of acupuncture for treatment of different stages of Bell's palsy, and explore the best intervention period.

METHODS: Forty cases of Bell's palsy patients were divided into three groups according to their onset time: an active stage group, a resting stage group and a recovery stage group. The scores were evaluated with Sunnybrook Facial Nerve Evaluation System and Facial Disability Index Questionnaire (FDI). All three groups were treated with acupuncture. Fengchi (GB 20), Dicang (ST 4), Jiache (ST 6), Qianzheng (Extra), Sibai (ST 2), Yangbai (GB 14) on the affected side and Hegu (LI 4) on the healthy side were selected as main points. Dazhui (GV 14), Chengjiang (CV 24), Shuigou (GV 26) and Cuanzhu (BL 2), Yuyao (EX-HN 4), Yifeng (TE 17), Tinghui (GB 2), Quanliao (SI 18), Xiaguan (ST 7), Yingxiang (LI 20) on the affected side were selected as adjuvant points. Operation: reducing was performed at Fengchi (GB 20), Hegu (LI 4) and Dazhui (GV 14), while mild tonification and mild purgation was performed at other points. The therapeutic effect was evaluated again by scoring after the clinical recovery or treatment of 20 times.

RESULTS: (1) Acupuncture was effective for the Bell's palsy in active stage, resting stage and recovery stage (all $P < 0.01$); (2) The obvious effective rate of acupuncture for treatment of Bell's palsy in the active stage group was obviously superior to those of resting stage group and recovery stage (both $P < 0.01$). (3) There was no significant difference of the obvious effective rate between the resting stage group and the recovery stage group ($P > 0.05$).

CONCLUSION: Acupuncture has a good therapeutic effect for treatment of Bell's palsy, and the therapeutic effect is most obvious with intervention of treatment in the active stage.

Zhongguo Zhen Jiu. 2010 Jan;30(1):18-21.

Influence of acupuncture on isoprostane in patients with Alzheimer's disease

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OBJECTIVES: To explore the clinical therapeutic effect of acupuncture on Alzheimer's disease (AD) and its mechanism.

METHODS: Twenty patients with Alzheimer's disease were treated by acupuncture with reinforcing kidney and activating blood method for 12 weeks and Baihui (GV 20), Shenshu (BL 23), Xuehai (SP 10) and Geshu (BL 17) were selected. The clinical therapeutic effect were assessed by comparing the scores of Alzheimer's Disease Assessment Scale-Cognitive Section (ADAS-Cog) and 8-IPF2alpha concentration in cerebrospinal fluid, blood and urine before and after treatment were detected by using enzyme linked immunosorbent assay.

RESULTS: After treatment, the effective rate was 90.0%. The score of ADAS-Cog was 35.70 +/- 14.70 before treatment and 31.45 +/- 4.08 after treatment, with a significant difference ($P < 0.001$). The concentration of 8-IPF2alpha in cerebrospinal fluid, blood and urine were all significantly decreased after treatment (all $P < 0.001$).

CONCLUSION: Acupuncture can improve the cognitive ability of AD patients and its possible mechanism may be relative to the decrease in lipid peroxidation in AD patients' brain.

Zhongguo Zhen Jiu. 2010 Jan;30(1):13-7.

Clinical observation on therapeutic effect of electroacupuncture on chronic prostatitis and detection of urethral sphincter EMG

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OBJECTIVES: To observe the clinical therapeutic effect of electroacupuncture for chronic prostatitis and investigate its mechanism.

METHODS: Forty-eight cases were randomly divided into an electroacupuncture group and a western medicine group, 24 cases in each group. The electroacupuncture group was treated by electroacupuncture and Guanyuan (CV 4), Zhongji (CV 3), Ciliao (BL 32) and Huiyang (BL 35) were selected as main acupoints. The western medicine group was treated by oral administration of Sparfloxacin tablets and Prostat tablets. The scores of NIH-CPSI, changes in uroflow rate-urethral sphincter EMG and their therapeutic effects were observed.

RESULTS: The total effective rate was 87.5% in the electroacupuncture group which was better than 62.5% in the western medicine group ($P < 0.05$). There were significant differences in the scores of NIH-CPSI and Q(max), Q(ave), TL value before and after treatment in the electroacupuncture group (all $P < 0.05$), and with a significant difference in the scores of NIH-CPSI and Q(max), Q(ave), TL value after treatment between the two groups (all $P < 0.05$).

CONCLUSION: Electroacupuncture based on syndrome differentiation has better therapeutic effect on chronic prostatitis than that of routine clinical medicine.

Zhongguo Zhen Jiu. 2010 Jan;30(1):10-2.

Effect of acupuncture on the activity of the peripheral blood T lymphocyte subsets and NK cells in patients with colorectal cancer liver metastasis

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OBJECTIVES: To study the effect of acupuncture on the immune function of patients with colorectal cancer liver metastasis.

METHODS: Sixty cases with colorectal cancer liver metastasis confirmed by pathology and mageology diagnosis were treated with acupuncture. Zusanli (ST 36), Sanyinjiao (SP 6), Neiguan (PC 6), Shangjuxu (ST 37), Hegu (LI 4), Taixi (KI 3), Taichong (LR 3), Yinlingquan (SP 9), Yanglingquan (GB 34), etc. were selected for acupuncture, and Shenque (CV 8), Guanyuan (CV 4), Qihai (CV 6), Zusanli (ST 36) were selected for moxibustion. The changes of CD(3), CD(4), CD(8) T cells and NK cells in value were examined with flow cytometry before and after treatment.

RESULTS: The value of T lymphocyte subsets such as CD(3), CD(4), and CD(8), as well as NK cells were obviously increased after treatment, and there were significant differences between them before and after treatment.

CONCLUSION: Acupuncture can improve the immune function of patients with colorectal cancer liver metastasis.

Acupunct Med. 2010 Mar;28(1):28-32.

Effect of acupuncture on salivary immunoglobulin A after a bout of intense exercise.

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In the field of athletics, acupuncture has been used for treatment of injury, reduction of fatigue and management of physical condition. However, there is little information on the effect of acupuncture on the immune function in response to exercise.

PURPOSE: The aim of this study was to examine the effect of acupuncture treatment on the mucosal immune function after a single period of intense exercise by measuring salivary immunoglobulin A (SIgA).

METHODS: 12 healthy men (23.6 +/- SEv 0.3 years) participated in this study with a crossover design. The subjects exercised on a bicycle equipped with an ergometer at 75% VO(2)max for 60 min. Acupuncture treatment was applied at LU6, LI4, ST36 and ST6, for 30 min after the exercise. The control treatment was rest without acupuncture and that the order of the treatment was randomised. We measured parameters including saliva flow rate, SIgA concentration, SIgA secretion rate, heart rate and plasma catecholamine concentration all before the exercise and at 1 h, 2 h, 3 h, 4 h and 24 h after the exercise. The visual analogue scale for self-perceived tiredness and the profile of mood states questionnaires were recorded before the exercise and at 24 h after the exercise.

RESULT: Intense exercise-induced decrease of SIgA levels was attenuated by the acupuncture treatment. In contrast, the subjective fatigue score and psychological measurement were not affected by the acupuncture.

CONCLUSION: Acupuncture treatment may attenuate the decrease in

Acupunct Med. 2010 Mar;28(1):25-7.

Short-term effect of acupuncture on intraocular pressure in healthy subjects.

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PURPOSE: To evaluate the short-term effect of acupuncture on the intraocular pressure (IOP) in healthy subjects.

METHODS: A randomised controlled double-blinded trial was performed. 48 healthy volunteers (94 eyes) were randomly allocated to three groups: acupuncture group-19 subjects (38 eyes) were submitted to a 20 min session of acupuncture (GB1, GB14 and BL1); sham group-14 subjects (27 eyes) were submitted to a 20 min session of acupuncture with needles inserted in false points; and control group-15 subjects (29 eyes) who underwent no intervention. All subjects had the IOP measured by a masked investigator using Goldmann applanation tonometry immediately before intervention, as well as 20 min and 24 h after.

RESULTS: The mean (SD) IOP in the acupuncture group was 17.9 (3.3) mm Hg at baseline, 16.4 (3.9) mm Hg at 20 min and 16.3 (3.3) mm Hg at 24 h. The mean (SD) IOP in the sham group was 18.6 (3.3) mm Hg at baseline, 17.7 (2.6) mm Hg at 20 min and 15.9 (3.6) mm Hg at 24 h. The mean (SD) IOP in the control group was 16.9 (3.5) mm Hg at baseline, 16.5 (3.8) mm Hg at 20 min and 15.8 (3.3) mm Hg at 24 h. There was no statistically significant difference in the IOP variation (post-intervention minus baseline measurements) between groups after 20 min ($p=0.13$) and 24 h ($p=0.21$).

CONCLUSION: Acupuncture in the studied points did not produce significant short-term effect on the IOP of healthy individuals in comparison with control groups.

Acupunct Med. 2010 Mar;28(1):21-4.

Is there any difference in human pupillary reaction when different acupuncture points are stimulated?

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OBJECTIVES: To determine if there is any difference in pupillary response among different acupuncture stimulation sites.

METHODS: The subjects were 14 healthy males who had no known eye diseases or abnormality in their pupils. They received five different interventions: no acupuncture stimulation (hereinafter 'no-stimulation') and acupuncture stimulation at four sites (TE5, ST7, CV12 and ST36). The Latin square design was used to allocate stimulation order. For all acupuncture stimulation interventions, a disposable acupuncture needle was inserted superficially at the acupuncture point. Gentle repetitive tapping stimulation was applied manually during the subject's exhalation phase of respiration, for 90 s. The pupil diameter was continuously measured for 2 min before stimulation, during stimulation and for 2 min after stimulation. Statistical analysis was conducted on serial changes in pupil diameter during acupuncture stimulation on each respective site and during non-stimulation session by analysis of variance and Fisher (least significant difference) multiple comparison, with linear analysis using a mixed model.

RESULTS: Pupil diameter reduction occurred at 30 s after stimulation on ST7 ($p=0.008$) and 60 s after stimulation ($p=0.014$) compared with pre-stimulation. The decrease of pupillary diameter occurred 60 s after stimulation on TE5 ($p=0.028$) compared with pre-stimulation. On ST36, CV12 and during the non-stimulation intervention, no significant change in the pupil diameter was observed.

CONCLUSIONS: Pupillary reaction varies depending on the different stimulation sites.

Altern Ther Health Med. 2010 Mar-Apr;16(2):18-29.

Acupuncture for essential hypertension.

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OBJECTIVES: To assess the efficacy of acupuncture for treatment of essential hypertension and the efficacy of acupuncture using prescription adhering to the principles of "syndrome differentiation."

DATA SOURCES: Medline, Embase, Cochrane Central Register, and China National Knowledge Infrastructure (September 2008).

STUDY SELECTION: Randomized, controlled trials comparing acupuncture with sham acupuncture, antihypertensive drugs, Chinese herbal medicine, or exercise in essential hypertension.

DATA EXTRACTION: Two reviewers independently assessed trials for inclusion, extracted data, assessed methodological quality, and extracted outcome data on blood pressure.

DATA SYNTHESIS: Treatment effects were summarized as mean differences with 95% confidence intervals. Twenty trials were included: three trials were relatively rigorous while others were methodologically suboptimal. Acupuncture arms achieved significant effect modification on blood pressure compared with control arms (19 comparisons: systolic blood pressure SBP: mean difference -4.23 mmHg, 95% confidence intervals -6.47 to -1.99; diastolic blood pressure DBP: -2.53, -3.99 to -1.08), with significant heterogeneity. In high-quality trials, blood pressure was significantly lower in treatments of acupuncture plus antihypertensive drug arms than in sham-acupuncture plus hypertensive drug arms (two comparisons: SBP: -5.72 mmHg, -8.77 to -2.68; DBP: -2.80, -5.07 to -0.54), with no significant heterogeneity. As for trials using prescription adhering to the principles of syndrome differentiation, we found a significant blood pressure reduction with acupuncture arms in comparison with control arms (11 comparisons: SBP: -6.46 mmHg, -8.04 to -4.87; DBP: -3.07, -4.17 to -1.96) with no significant heterogeneity. In contrast, in trials not using prescription adhering to the principles of syndrome differentiation, we found no significant reduction in blood pressure with acupuncture arms in comparison with control arms (eight comparisons: SBP: -1.55 mmHg, -5.39 to 2.29; DBP: -2.12, -4.97 to 0.73) with significant heterogeneity.

CONCLUSIONS: Because of the paucity of rigorous trials and the mixed results, these findings result in limited conclusions. More rigorously designed and powered studies are needed.

Zhongguo Zhen Jiu. 2010 Feb;30(2):107-9.

Clinical observation on acupuncture combined with medication for treatment of essential tremor

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OBJECTIVES: To observe the clinical therapeutic effect of acupuncture combined with western medicine for treatment of essential tremor. **METHODS:** Sixty cases of essential tremor were randomly divided into two groups, 30 cases in each group. The combined acupuncture and medication group was treated with acupuncture at Baihui (GV 20), Sishencong (EX-HN 1), Taixi (KI 3), etc. and oral administration of Propranolol; the medication group was treated with oral administration of Propranolol only. The comprehensive effects and the scores of tremor were observed after 30 days of treatment in the two groups.

RESULTS: The total effective rate of 90.0% (27/30) in the combined acupuncture and medication group was obviously higher than that of 56.7% (17/30) in the medication group ($P < 0.01$), the tremor score of the combined acupuncture and medication group was obviously better than that of the medication group ($P < 0.05$).

CONCLUSION: Acupuncture combined with oral administration of Propranolol has better therapeutic effect on essential tremor than that of oral administration of Propranolol only.

Zhongguo Zhen Jiu. 2010 Feb;30(2):97-101.

Clinical study on acupuncture for treatment of chronic functional constipation

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OBJECTIVES: To discuss the effect of acupuncture for treatment of chronic functional constipation (CFC).

METHODS: Ninety cases were treated with acupuncture. The following two groups of acupoints were used alternatively once every other day. The acupoints in the first group were Tianshu (ST 25), Qihai (CV 6), Shangjuxu (ST 37) etc., and Zhongliao (BL 33), Xialiao (BL 34), Dachangshu (BL 25) etc. in the second group, electroacupuncture was used at Zhongliao (BL 33), Xialiao (BL 34), Tianshu (ST 25) and Shangjuxu (ST 37), once a day, 10 times constituting one course. The defecation frequency, difficulty degree of defecation, defecation time, endless sensation of defecation, stool quality and awareness of defecation were observed and the Patient Assessment of Constipation Quality of Life (PAC-QOL) was evaluated by constipation patients' diaries.

RESULTS: The scores of defecation frequency, difficulty degree of defecation, defecation time, endless sensation of defecation, stool quality, awareness of defecation and PAC-QOL were obviously improved after treatment (all $P < 0.01$). The total effective rate was 67.7% (61/90). The effect of acupuncture for chronic functional constipation in different dynamic mechanism was different. The effect of slow transit constipation (STC) was better than that of spastic pelvic floor syndrome (SPFS) ($P < 0.05$), and the effect of constipation caused by irritable bowel syndrome (IBS-C) was better than that of SPFS and relaxant pelvic floor syndrome (RPFS) (both $P < 0.05$). Fifty-two cases were effectively followed up. Three cases were cured, 6 cases were remarkably effective, 23 cases were effective and 20 cases were ineffective after 1 month of treatment. Three cases were cured, 5 cases were remarkably effective, 16 cases were effective and 28 cases were ineffective after 3 months.

CONCLUSION: The effect of acupuncture for CFC with exact etiology, disease location and classification diagnosis is definite, but different dynamic mechanism has different effect. The treatment programs for SPFS and RPFS need to be optimized to improve the therapeutic effect.

Zhongguo Zhen Jiu. 2010 Feb;30(2):89-92.

Clinical evaluation on balanced muscular tension needling method for improving disabled function of stroke patients with spastic paralysis

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OBJECTIVES: To observe the effect of balanced muscular tension needling method for improving disabled function of stroke patients with spastic paralysis.

METHODS: One hundred and six cases with spastic paralysis were randomly divided into an observation group (54 cases) with balanced muscular tension needling method and a control group (52 cases) with routine acupuncture method. The observation group was treated by acupuncture at the side of extensor and flexor of limbs; while the control group was treated by acupuncture at Jianyu (LI 15), Quchi (LI 11), Waiguan (TE 5) etc. And the change of muscle strength, muscle tonus, muscle spasticity and range of joint motion were evaluated before and after treatment.

RESULTS: After 30 days of treatment, the total effective rate of 96.3% (52/54) in the observation group was superior to that of 84.6% (44/52) in the control group ($P < 0.01$). After treatment muscle strength, muscle tonus, muscle spasticity and range of joint motion were improved in the two groups, but the observation group was superior to the control group (all $P < 0.05$).

CONCLUSION: Balanced muscular tension needling method can significantly improve the muscle strength, muscle tonus, muscle spasticity and the range of joint motion of the stroke patients with spastic paralysis.

J Orofac Pain. 2010 Winter;24(1):106-12.

Short-term effects of dry needling of active myofascial trigger points in the masseter muscle in patients with temporomandibular disorders.

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AIMS: To investigate the effects of dry needling over active trigger points (TrPs) in the masseter muscle in patients with temporomandibular disorders (TMD).

METHODS: Twelve females, aged 20 to 41 years old (mean = 25, standard deviation +/- 6 years) diagnosed with myofascial TMD were recruited. Each patient attended two treatment sessions on two separate days and received one intervention assigned in a random fashion, at each visit: deep dry needling (experimental) or sham dry needling (placebo) at the most painful point on the masseter muscle TrP. Pressure pain threshold (PPT) over the masseter muscle TrP and the mandibular condyle and pain-free active jaw opening were assessed pre- and 5 minutes postintervention by an examiner blinded to the treatment allocation of the subject. A two-way repeated-measures analysis of variance (ANOVA) with intervention as the between-subjects variable and time as the within-subjects variable was used to examine the effects of the intervention.

RESULTS: The ANOVA detected a significant interaction between intervention and time for PPT levels in the masseter muscle ($F = 62.5$; $P < .001$) and condyle ($F = 50.4$; $P < .001$), and pain-free active mouth opening ($F = 34.9$; $P < .001$). Subjects showed greater improvements in all the outcomes when receiving the deep dry needling compared to the sham dry needling ($P < .001$).

CONCLUSION: The application of dry needling into active TrPs in the masseter muscle induced significant increases in PPT levels and maximal jaw opening when compared to the sham dry needling in patients with myofascial TMD.

Adv Exp Med Biol. 2010;662:455-60.

Effects of acupuncture on autonomic nervous function and prefrontal cortex activity.

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Acupuncture is helpful in treating various diseases, including autonomic nervous system (ANS) dysfunction caused by mental stress. On the other hand, the frontal lobe is suggested to play an important role in stress responses by modulating the ANS. The aim of the study was to evaluate the effects of acupuncture on ANS and frontal lobe activities. We investigated 18 normal adults. We measured the activity of prefrontal cortex (PFC) caused by real acupuncture (WHO-LI4) and sham acupuncture, employing optical topography. To evaluate ANS function, we analyzed heart rate variability (HRV). Analysis of HRV revealed a decrease of the LF/HF ratio, and an increase of the HF power by real acupuncture, indicating a shift to parasympathetic dominance. Acupuncture also caused cerebral blood oxygenation changes in both directions, that is, an increase and/or a decrease of oxyhemoglobin (Oxy-Hb) in the bilateral PFC. However, the Oxy-Hb change was not correlated with HRV parameters in the majority of cases. One of the possible explanations of the poor correlations might be that the PFC activity induced by acupuncture is not closely linked with ANS function.

Int J Neurosci. 2010 Feb;120(2):150-4.

Complementary acupuncture in Parkinson's disease: a spect study.

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We studied cerebral effects of complementary acupuncture in Parkinson's disease using single photon emission computed tomography (SPECT) measures of 99mTc-ECD and 99mTc-TRODAT-4, before and after five weeks of treatment. Ten patients were randomly assigned to receive levodopa alone (controls) or levodopa and complementary scalp electro-acupuncture. Before treatment, no hemispheric regional cerebral blood flow (rCBF) differences were found, whereas striatal dopamine transporter (DAT) activity was lower in the most affected hemisphere. Treatment with levodopa alone did not change rCBF, whereas it increased basal ganglion DAT activity in the most affected hemisphere. Patients who received levodopa and complementary acupuncture had increased rCBF in the frontal lobe, the occipital lobe, the basal ganglion, and the cerebellum in the most affected hemisphere as compared to baseline, but there were no changes in basal ganglia DAT levels. Thus, complementary acupuncture treatment in Parkinson's disease may affect rCBF but not basal ganglion DAT.

Plast Reconstr Surg. 2010 Mar;125(3):989-94.

The effect of electroacustimulation on postoperative nausea, vomiting, and pain in outpatient plastic surgery patients: a prospective, randomized, blinded, clinical trial.

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BACKGROUND: Current rates of postoperative nausea and vomiting experienced by outpatient surgery patients are as high as 20 to 30 percent. Electroacustimulation therapy has been demonstrated to be effective in controlling these symptoms, but trials identifying its efficacy in the outpatient surgery population are lacking.

METHODS: One hundred twenty-two patients undergoing surgical procedures at an outpatient surgery center were randomized to two treatment arms. The first arm received the standardized pharmacologic postoperative nausea and vomiting prevention typical for patients undergoing outpatient surgery, whereas in the second arm, the ReliefBand and pharmacologic measures were used. The ReliefBand is a U.S. Food and Drug Administration-approved electroacustimulation device. Electroacustimulation is a derivative of acupuncture therapy that uses a small electrical current to stimulate acupuncture points on the human body and is thought to relieve nausea, vomiting, and pain. Outcomes measured were pain and nausea symptoms, emetic events, the need for rescue medications, and the time to discharge.

RESULTS: The electroacustimulation arm reported statistically significant lower nausea scores at 30 minutes and 120 minutes postoperatively ($p < 0.05$). In addition, subgroup analysis demonstrated significant findings in favor of the experimental group, with anatomical subsets of surgical patients requiring less pain medication and shorter times from surgery to discharge when compared with the standard treatment. However, electroacustimulation did not have a significant effect on the amount of pain experienced by patients in any group.

CONCLUSION: The authors' study demonstrates that electroacustimulation offers added protection against symptoms of postoperative nausea and vomiting in an outpatient cosmetic surgery population, representing a safe and cost-effective addition to current pharmacologic preventive measures.

BJOG. 2010 Apr;117(5):509-21.

Acupuncture for primary dysmenorrhoea: a systematic review.

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BACKGROUND: The effectiveness of acupuncture in primary dysmenorrhoea is not fully understood.

OBJECTIVES: To assess the effectiveness of acupuncture for the symptomatic treatment of primary dysmenorrhoea from randomised controlled trials (RCTs).

SEARCH STRATEGY: Nineteen electronic databases, including English, Korean, Japanese and Chinese databases, were systematically searched for RCTs investigating acupuncture for primary dysmenorrhoea up to July 2008 with no language restrictions.

SELECTION CRITERIA: All RCTs that evaluated the effects of acupuncture compared with controls were included. Studies that assessed the effect of moxibustion or body acupressure were excluded.

DATA COLLECTION AND ANALYSIS: The study abstraction and quality assessment of all studies were undertaken following the detailed descriptions of these categories as described in the Cochrane Handbook for Systematic Reviews of Interventions.

MAIN RESULTS: Twenty-seven RCTs were systematically reviewed. Only nine of the 27 trials clearly described their methods of randomisation and none of the trials stated the methods of allocation concealment. Compared with pharmacological treatment or herbal medicine, acupuncture was associated with a significant reduction in pain. Three studies reported reduced pain within groups from baseline; however, two RCTs did not find a significant difference between acupuncture and sham acupuncture.

AUTHOR'S CONCLUSIONS: The review found promising evidence in the form of RCTs for the use of acupuncture in the treatment of primary dysmenorrhoea compared with pharmacological treatment or herbal medicine. However, the results were limited by methodological flaws. The evidence for the effectiveness of acupuncture for the treatment of primary dysmenorrhoea is not convincing compared with sham acupuncture. Further rigorous nonpenetrating placebo-controlled RCTs are warranted.

Obstet Gynecol. 2010 Mar;115(3):511-20.

Acupuncture for depression during pregnancy: a randomized controlled trial.

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OBJECTIVES: To estimate the efficacy of acupuncture for depression during pregnancy in a randomized controlled trial.

METHODS: A total of 150 pregnant women who met Diagnostic and Statistical Manual of Mental Disorders (Fourth Edition) criteria for major depressive disorder were randomized to receive either acupuncture specific for depression or one of two active controls: control acupuncture or massage. Treatments lasted 8 weeks (12 sessions). Junior acupuncturists, who were not told about treatment assignment, needled participants at points prescribed by senior acupuncturists. All treatments were standardized. The primary outcome was the Hamilton Rating Scale for Depression, administered by masked raters at baseline and after 4 and 8 weeks of treatment. Continuous data were analyzed using mixed effects models and by intent to treat.

RESULTS: Fifty-two women were randomized to acupuncture specific for depression, 49 to control acupuncture, and 49 to massage. Women who received acupuncture specific for depression experienced a greater rate of decrease in symptom severity ($P < .05$) compared with the combined controls (Cohen's $d = 0.39$, 95% confidence interval CI 0.01-0.77) or control acupuncture alone ($P < .05$; Cohen's $d = 0.46$, 95% CI 0.01-0.92). They also had significantly greater response rate (63.0%) than the combined controls (44.3%; $P < .05$; number needed to treat, 5.3; 95% CI 2.8-75.0) and control acupuncture alone (37.5%; $P < .05$; number needed to treat, 3.9; 95% CI 2.2-19.8). Symptom reduction and response rates did not differ significantly between controls (control acupuncture, 37.5%; massage, 50.0%).

CONCLUSION: The short acupuncture protocol demonstrated symptom reduction and a response rate comparable to those observed in standard depression treatments of similar length and could be a viable treatment option for depression during pregnancy.

CLINICAL TRIAL REGISTRATION: Clinicaltrials.gov, www.clinicaltrials.gov, NCT00186654.

Ann Thorac Surg. 2010 Mar;89(3):781-6.

Cardioprotective effects of electroacupuncture pretreatment on patients undergoing heart valve replacement surgery: a randomized controlled trial.

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BACKGROUND: Cardiac ischemia-reperfusion injury after cardiopulmonary bypass contributes to postoperative morbidity and mortality in patients with open-heart surgery. This randomized controlled trial was designed to address the protective effects of electroacupuncture (EA) pretreatment on myocardial injury in patients undergoing heart valve replacement surgery.

METHODS: Sixty patients with acquired heart valve disease were randomly allocated to the EA pretreatment group or the control group. Patients in the EA group received EA stimulus at bilateral Neiguan (PC 6), Lieque (LU 7), and Yunmen (LU 2) for 30 minutes each day for five consecutive days before surgery. Hemodynamic data, mechanical ventilation time, inotropic drug use in the intensive care unit, serum cardiac troponin I concentrations, morbidities, and mortalities were compared between the two groups. This trial is registered with ClinicalTrials.gov, number NCT00732459.

RESULTS: At 6 hours, 12 hours, and 24 hours after reperfusion, levels of serum cardiac troponin I were significantly decreased in the EA group (5.74 +/- 0.67, 6.22 +/- 0.66, and 5.21 +/- 0.58) compared with that in the control group (7.89 +/- 0.74, 8.34 +/- 1.08, and 7.57 +/- 0.89, $p < 0.05$). The EA pre-treatment significantly reduced overall serum troponin I release at 6 hours, 12 hours, and 24 hours after aortic cross-clamp removal. Meanwhile, EA pretreatment also reduced the inotrope score at 12 hours, 24 hours, and 48 hours after the intensive care unit arrival and shortened intensive care unit stay time ($p < 0.05$).

CONCLUSIONS: The present study demonstrated that EA pretreatment may alleviate cardiac ischemia-reperfusion injury in adult patients undergoing heart valve replacements. This simple and convenient treatment has the potential to be used in the clinic for reducing myocardial injury in patients with heart valve replacement surgery. 2010 The Society of Thoracic Surgeons. Published by Elsevier Inc. All rights reserved.

Stroke. 2010 Apr;41(4):e171-9.

Acupuncture in poststroke rehabilitation: a systematic review and meta-analysis of randomized trials.

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BACKGROUND AND PURPOSE: Acupuncture is a low-risk treatment with purported claims of effectiveness for poststroke rehabilitation. To comprehensively assess the efficacy of acupuncture in poststroke rehabilitation, we conducted a systematic review and meta-analysis of all randomized clinical trials of acupuncture for poststroke rehabilitation.

METHODS: We searched 7 English and 2 Chinese databases from inception to September 2009. Eligible studies included randomized clinical trials that evaluated the clinical efficacy of acupuncture in adult patients with disability after stroke. We extracted data on trial quality, protocol, and outcomes assessed. A summary OR was calculated based on pooled dichotomous

RESULTS. I(2) was used to infer heterogeneity and we conducted metaregression to determine if specific covariates explained heterogeneity. **RESULTS:** Thirty-five articles written in Chinese and 21 articles written in English were included. The overall quality of the studies was "fair" and most studies were small (median $n = 86$; range, 16 to 241). The majority (80%) of the studies reported a significant benefit from acupuncture; however, there was some evidence of publication bias. In 38 trials, data were available for meta-analysis and metaregression, yielding an OR in favor of acupuncture compared with controls (OR = 4.33, 95% CI: 3.09 to 6.08; $I^2 = 72.4\%$). Randomization, modes of delivery, method of control, study source country, and reporting of randomization may explain some of the heterogeneity observed between the studies.

CONCLUSIONS: Randomized clinical trials demonstrate that acupuncture may be effective in the treatment of poststroke rehabilitation. Poor study quality and the possibility of publication bias hinder the strength of this recommendation and argue for a large, transparent, well-conducted randomized clinical trial to support this claim and implement changes to clinical practice.

Chin Med J (Engl). 2010 Jan 20;123(2):165-72.

Immediate effects of acupuncture on gait patterns in patients with knee osteoarthritis.

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BACKGROUND: Acupuncture has been shown to be effective in pain relief and anesthesia, and has been suggested for treating various kinds of functional disabilities in traditional Chinese medicine, including knee osteoarthritis (OA). The study aimed to investigate the immediate effects of acupuncture on gait patterns in patients with knee OA.

METHODS: Twenty patients with bilateral medial knee OA were assigned evenly and randomly to a sham group and an experimental group. During the experiment, the experimental group underwent a 30-minute formula electro-acupuncture treatment while the sham group received a sham treatment. Before and after treatment, each subject was evaluated for their knee pain using visual analog scales (VAS) and then their performance of level walking using gait analysis. For all the obtained variables, the independent t-test was used for between-group comparisons, while paired t-test was used to investigate the before and after changes.

RESULTS: All the measured data before acupuncture treatment between the groups were not significantly different. The VAS scores were decreased significantly after acupuncture in both groups, and the mean change of the VAS values of the experiment group was 2 times greater than that of the sham group. After formula acupuncture stimulation, while no significant changes were found in all the gait variables in the sham group, the experimental group had significant increases in the gait speed, step length, as well as in several components of the joint angles and moments.

CONCLUSIONS: The results of the study suggest that significantly improved gait performance in the experimental group may be associated with pain relief after treatment, but the relatively small decrease of pain in the sham group was not enough to induce significant improvements in gait patterns. Gait analysis combined with the VAS can be useful for the evaluation of the effect of acupuncture treatment for patients with neuromusculoskeletal diseases and movement disorder.

Neurol Res. 2010 Feb;32 Suppl 1:10-7.

Electroacupuncture analgesia in rat ankle sprain pain model: neural mechanisms.

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OBJECTIVES: Acupuncture, an alternative medical therapy with a long history, is appealing because it can activate endogenous analgesic mechanisms by minimally invasive means. The mechanisms of acupuncture, however, are not well understood yet. The following sentence was removed from our original manuscript. One of the major problems impeding understanding of the acupuncture mechanism is lack of experimental models that mimic various forms of persistent pain that respond to acupuncture in humans.

METHODS: In this review, we summarize and discuss previous and recent findings regarding electroacupuncture-induced analgesia in an ankle sprain pain model and the potential underlying mechanisms of acupuncture.

RESULTS: A novel model of ankle sprain pain is introduced recently and the mechanism of electroacupuncture-induced analgesia in this model has been explored. The following sentence was removed from our original manuscript. This model provides a reproducible and quantifiable index of persistent pain at the ankle joint in rats. Acupuncture at a remote site produces long-lasting and powerful analgesia. The consistent analgesic effect of acupuncture in this model has allowed us to pursue the underlying neural mechanisms.

CONCLUSIONS: These studies provide insight into the mechanisms of acupuncture analgesia in one particular form of persistent pain, and hopefully will allow us to expand our knowledge to other painful conditions.

Neurol Res. 2010 Feb;32 Suppl 1:5-9.

Recent development of acupuncture on Parkinson's disease.

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OBJECTIVES: Parkinson's disease is a complex disease with multiple etiological factors involved in disease pathogenesis, and the molecular and cellular pathways for neurodegeneration are still elusive.

METHODS: We reviewed all the relevant laboratory findings regarding acupuncture mechanism on Parkinson's disease.

RESULTS: Acupuncture treatments in animal experiments have generated valuable mechanistic insights of Parkinson's disease and shown that acupuncture therapy is in fact a neuroprotective therapy which increases various neuroprotective agents such as brain-derived neurotrophic factor, glial cell line-derived neurotrophic factor and cyclophilin A. In addition, acupuncture therapy decreases cell death processes and attenuates oxidative stress to substantia nigra dopaminergic neurons.

DISCUSSION: These results suggest that early application of acupuncture therapy for Parkinson's disease patients may be helpful for the best efficacy of acupuncture treatment.

J Clin Oncol. 2010 Mar 1;28(7):1154-60.

Randomized, blinded, sham-controlled trial of acupuncture for the management of aromatase inhibitor-associated joint symptoms in women with early-stage breast cancer.

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PURPOSE Women with breast cancer (BC) treated with aromatase inhibitors (AIs) may experience joint symptoms that can lead to discontinuation of effective therapy. We examined whether acupuncture improves AI-induced arthralgias in women with early-stage BC.

METHODS We conducted a randomized, controlled, blinded study comparing true acupuncture (TA) versus sham acupuncture (SA) twice weekly for 6 weeks in postmenopausal women with BC who had self-reported musculoskeletal pain related to AIs. TA included full body/auricular acupuncture and joint-specific point prescriptions, whereas SA involved superficial needle insertion at nonacupoint locations. Outcome measures included the Brief Pain Inventory-Short Form (BPI-SF), Western Ontario and McMaster Universities Osteoarthritis Index (WOMAC), and Modified Score for the Assessment of Chronic Rheumatoid Affections of the Hands (M-SACRAH) obtained at baseline and at 3 and 6 weeks.

RESULTS Of 51 women enrolled, 43 women were randomly assigned and 38 were evaluable. Baseline characteristics were comparable between the two groups. Our primary end point was the difference in mean BPI-SF worst pain scores at 6 weeks, which was lower for TA compared with SA (3.0 v 5.5; $P < .001$). We also found differences between TA and SA in pain severity (2.6 v 4.5; $P = .003$) and pain-related interference (2.5 v 4.5; $P = .002$) at 6 weeks. Similar findings were seen for the WOMAC and M-SACRAH scores. The acupuncture intervention was well-tolerated.

CONCLUSION Women with AI-induced arthralgias treated with TA had significant improvement of joint pain and stiffness, which was not seen with SA. Acupuncture is an effective and well-tolerated strategy for managing this common treatment-related side effect.

Cochrane Database Syst Rev. 2010 Jan 20;(1):CD007221.

Acupuncture for uterine fibroids.

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BACKGROUND: Uterine fibroids (UFs) are benign growths within the uterine muscle and are present in 30% of women during their reproductive years. With the exception of hysterectomy, there are no effective medical and surgical treatments for women with uterine fibroids. Acupuncture is an ancient Chinese method which has been used for both the prevention and treatment of diseases for over three thousand years. There are many types of acupuncture used to manage UFs, with body acupuncture being the most commonly used. The literature reporting the benefits or harms of acupuncture for the management of UFs has not yet been systematically reviewed.

OBJECTIVES: To assess the benefits and harms of acupuncture in women with uterine fibroids

SEARCH STRATEGY: The following electronic databases were searched 21st May 2009: the Cochrane Central Register of Controlled Trials (CENTRAL); MEDLINE; EMBASE; AMED; the Menstrual Disorders and Subfertility Group's Specialised Register of Trials; Chinese Biomedical Literature Database (CBM); Traditional Chinese Medical Literature Analysis and Retrieval System (TCMLARS); Chinese Medical Current Contents (CMCC) and China National Knowledge Infrastructure (CNKI). Citation lists, experts in the field and grey literature were also referred to. No restrictions such as language were applied.

SELECTION CRITERIA: All randomised controlled trials (RCTs) comparing acupuncture management with placebo acupuncture, no management, Chinese medication, Western medication or other managements of uterine fibroids were considered for inclusion. Acupuncture management included either traditional acupuncture or ontemporary acupuncture, regardless of the source of stimulation (for example, body, electro, scalp, elongated, fire, hand, fine needle, moxibustion). Acupuncture management without needling was excluded.

DATA COLLECTION AND ANALYSIS: Two review authors assessed trial risk of bias according to our a priori criteria. No trials were included in this version of the review, therefore no data was collected.

MAIN RESULTS: No randomized double-blind controlled trials met the inclusion criteria.

AUTHORS' CONCLUSIONS: The effectiveness of acupuncture for the management of uterine fibroids remains uncertain. More evidence is required to establish the efficacy and safety of acupuncture for uterine fibroids. There is a continued need for well designed RCTs with long term follow up.

Cochrane Database Syst Rev. 2010 Jan 20;(1):CD006556.

Chinese herbal medicine for chronic neck pain due to cervical degenerative disc disease.

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BACKGROUND: Chronic neck pain with radicular signs or symptoms is a common condition. Many patients use complementary and alternative medicine, including traditional Chinese medicine, to address their symptoms.

OBJECTIVES: To assess the efficacy of Chinese herbal medicines in treating chronic neck pain with radicular signs or symptoms.

SEARCH STRATEGY: We electronically searched CENTRAL (The Cochrane Library 2009, issue 3), MEDLINE, EMBASE, CINAHL and AMED (beginning to October 1, 2009), the Chinese Biomedical Database and related herbal medicine databases in Japan and South Korea (1979 to 2007). We also contacted content experts and handsearched a number of journals published in China.

SELECTION CRITERIA: We included randomized controlled trials with adults with a clinical diagnosis of cervical degenerative disc disease, cervical radiculopathy or myelopathy supported by appropriate radiological findings. The interventions were Chinese herbal medicines, defined as products derived from raw or refined plants or parts of plants, minerals and animals that are used for medicinal purposes in any form. The primary outcome was pain relief, measured with a visual analogue scale, numeric scale or other validated tool.

DATA COLLECTION AND ANALYSIS: The data were independently extracted and recorded by two review authors on a pre-developed form. Risk of bias and clinical relevance were assessed separately by two review authors using the twelve criteria and the five questions recommended by the Cochrane Back Review Group. Disagreements were resolved by consensus.

MAIN RESULTS: All four included studies were in Chinese; two of which were unpublished. Effect sizes were not clinically relevant and there was low quality evidence for all outcomes due to study limitations and sparse data (single studies). Two trials (680 participants) found that Compound Qishe Tablets relieved pain better in the short-term than either placebo or Jingfukang; one trial (60 participants) found that an oral herbal formula of Huangqi ((Radix Astragali) 18 g, Dangshen (Radix Codonopsis) 9 g, Sanqi (Radix Notoginseng) 9 g, Chuanxiong (Rhizoma Chuanxiong) 12 g, Lujiao (Cornu Cervi Pantotrichum) 12 g, and Zhimu (Rhizoma Anemarrhenae) 12 g) relieved pain better than Mobicox or Methycobal and one trial (360 participants) showed that a topical herbal medicine, Compound Extractum Nucis Vomicae, relieved pain better than Diclofenac Diethylamine Emulgel.

AUTHORS' CONCLUSIONS: There is low quality evidence that an oral herbal medication, Compound Qishe Tablet, reduced pain more than placebo or Jingfukang and a topical herbal medicine, Compound Extractum Nucis Vomicae, reduced pain more than Diclofenac Diethylamine Emulgel. Further research is very likely to change both the effect size and our confidence in the results.

Cochrane Database Syst Rev. 2010 Jan 20;(1):CD004046.

Acupuncture for depression.

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BACKGROUND: There is interest from the community in the use of self help and complementary therapies for depression. This review examined the currently available evidence supporting the use of acupuncture to treat depression.

OBJECTIVES: To examine the effectiveness and adverse effects of acupuncture in the treatment for depression.

SEARCH STRATEGY: The following databases were searched: CCDAN-CTR, Cochrane Central Register of Controlled Trials (CENTRAL), MEDLINE (1966 to Dec 2008), EMBASE (1980 to Dec 2008), PSYINFO (1874 to Dec 2008), the Database of Abstracts of Reviews of Effectiveness (DARE), CINAHL (1980 to Dec 2008), Wan Fang database (to Dec 2008). The following terms were used: depression, depressive disorder, dysthymic disorder and acupuncture.

SELECTION CRITERIA: Inclusion criteria included all published and unpublished randomised controlled trials comparing acupuncture with sham acupuncture, no treatment, pharmacological treatment, other structured psychotherapies (cognitive behavioural therapy, psychotherapy or counselling), or standard care. The following modes of treatment were included: acupuncture, electro acupuncture or laser acupuncture. The participants included adult men and women with depression defined by clinical state description, or diagnosed by the Diagnostic and Statistical Manual (DSM-IV), Research Diagnostic Criteria (RDC), International Classification of Disease (ICD) or the Criteria for Classification and Diagnosis of Mental Diseases CCMD-3-R.

DATA COLLECTION AND ANALYSIS: Meta-analyses were performed using relative risk for dichotomous outcomes and standard mean differences for continuous outcomes, with 95% confidence intervals. Primary outcomes were reduction in the severity of depression, measured by self rating scales, or by clinician rated scales and an improvement in depression defined as remission versus no remission.

MAIN RESULTS: This review is an update and now contains data from 30 studies. Following recent searches, 23 new studies have been added and a further 11 trials were excluded (due to suboptimal doses of medication, no clinical outcomes, insufficient reporting). Thirty trials with 2,812 participants are included in the meta-analysis. There was a high risk of bias in the majority of trials. There was insufficient evidence of a consistent beneficial effect from acupuncture compared with a wait list control or sham acupuncture control. Two trials found acupuncture may have an additive benefit when combined with medication compared with medication alone. A subgroup of participants with depression as a co-morbidity experienced a reduction in depression with manual acupuncture compared with SSRIs (RR 1.66, 95%CI 1.03, 2.68) (three trials, 94 participants). The majority of trials compared manual and electro acupuncture with medication and found no effect between groups.

AUTHORS' CONCLUSIONS: We found insufficient evidence to recommend the use of acupuncture for people with depression. The results are limited by the high risk of bias in the majority of trials meeting inclusion criteria.

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Acupuncture for peripheral joint osteoarthritis.

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BACKGROUND: Peripheral joint osteoarthritis is a major cause of pain and functional limitation. Few treatments are safe and effective. **OBJECTIVES:** To assess the effects of acupuncture for treating peripheral joint osteoarthritis.

SEARCH STRATEGY: We searched the Cochrane Central Register of Controlled Trials (The Cochrane Library 2008, Issue 1), MEDLINE, and EMBASE (both through December 2007), and scanned reference lists of articles.

SELECTION CRITERIA: Randomized controlled trials (RCTs) comparing needle acupuncture with a sham, another active treatment, or a waiting list control group in people with osteoarthritis of the knee, hip, or hand.

DATA COLLECTION AND ANALYSIS: Two authors independently assessed trial quality and extracted data. We contacted study authors for additional information. We calculated standardized mean differences using the differences in improvements between groups.

MAIN RESULTS: Sixteen trials involving 3498 people were included. Twelve of the RCTs included only people with OA of the knee, 3 only OA of the hip, and 1 a mix of people with OA of the hip and/or knee. In comparison with a sham control, acupuncture showed statistically significant, short-term improvements in osteoarthritis pain (standardized mean difference -0.28, 95% confidence interval -0.45 to -0.11; 0.9 point greater improvement than sham on 20 point scale; absolute percent change 4.59%; relative percent change 10.32%; 9 trials; 1835 participants) and function (-0.28, -0.46 to -0.09; 2.7 point greater improvement on 68 point scale; absolute percent change 3.97%; relative percent change 8.63%); however, these pooled short-term benefits did not meet our predefined thresholds for clinical relevance (i.e. 1.3 points for pain; 3.57 points for function) and there was substantial statistical heterogeneity. Additionally, restriction to sham-controlled trials using shams judged most likely to adequately blind participants to treatment assignment (which were also the same shams judged most likely to have physiological activity), reduced heterogeneity and resulted in pooled short-term benefits of acupuncture that were smaller and non-significant. In comparison with sham acupuncture at the six-month follow-up, acupuncture showed borderline statistically significant, clinically irrelevant improvements in osteoarthritis pain (-0.10, -0.21 to 0.01; 0.4 point greater improvement than sham on 20 point scale; absolute percent change 1.81%; relative percent change 4.06%; 4 trials; 1399 participants) and function (-0.11, -0.22 to 0.00; 1.2 point greater improvement than sham on 68 point scale; absolute percent change 1.79%; relative percent change 3.89%). In a secondary analysis versus a waiting list control, acupuncture was associated with statistically significant, clinically relevant short-term improvements in osteoarthritis pain (-0.96, -1.19 to -0.72; 14.5 point greater improvement than sham on 100 point scale; absolute percent change 14.5%; relative percent change 29.14%; 4 trials; 884 participants) and function (-0.89, -1.18 to -0.60; 13.0 point greater improvement than sham on 100 point scale; absolute percent change 13.0%; relative percent change 25.21%). In the head-on comparisons of acupuncture with the 'supervised osteoarthritis education' and the 'physician consultation' control groups, acupuncture was associated with clinically relevant short- and long-term improvements in pain and function. In the head on comparisons of acupuncture with 'home exercises/advice leaflet' and 'supervised exercise', acupuncture was associated with similar treatment effects as the controls. Acupuncture as an adjuvant to an exercise based physiotherapy program did not result in any greater improvements than the exercise program alone. Information on safety was reported in only 8 trials and even in these trials there was limited reporting and heterogeneous methods.

AUTHORS' CONCLUSIONS: Sham-controlled trials show statistically significant benefits; however, these benefits are small, do not meet our pre-defined thresholds for clinical relevance, and are probably due at least partially to placebo effects from incomplete blinding. Waiting list-controlled trials of acupuncture for peripheral joint osteoarthritis suggest statistically significant and clinically relevant benefits, much of which may be due to expectation or placebo effects.

Chin J Integr Med. 2009 Dec;15(6):426-30.

Analysis on the effect of acupuncture in treating cervical spondylosis with different syndrome types.

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OBJECTIVE: To observe the clinical effect of acupuncture in treating cervical spondylosis with different syndrome types.

METHODS: One hundred and seventeen patients were randomized into the treated group: (59 cases), treated with normal acupuncture, and the control group (58 cases), treated with sham acupuncture, operated once every other day, 9 times in total (in 18 days) as one therapeutic course, and a succeeding 3-month follow-up study was carried out after terminating the therapy. The efficacy of treatment was evaluated with the Northwick Park Neck Pain Questionnaire (NPQ) and Visual Analogue Scale (VAS), and the scores gained in patients with different syndrome types were analyzed with a general linear model.

RESULTS: The NPQ and VAS: scores showed a linear decreasing tendency in both groups at the time of ending treatment and the 1st month of follow-up, but showed a secondary curve increasing tendency in the 3rd month of follow-up. Multivariate analysis showed the difference was of statistical significance ($P < 0.05$). However, the analysis through lead-in of syndrome type as an individual influencing factor showed that syndrome type exerts a significant influence on VAS score ($P < 0.05$), but has insignificant influence on the NPQ score ($P > 0.05$). **CONCLUSION:** Acupuncture shows: good immediate effect in treating cervical spondylosis, but its long-term effect is not satisfactory. The difference in syndrome type may have some impact on the effects of acupuncture in alleviating pain, but exerts no evident influence on the comprehensive effect.

J Altern Complement Med. 2010 Jan;16(1):59-68.

Gene expression profile of patients with phadiatop-positive and -negative allergic rhinitis treated with acupuncture.

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BACKGROUND: We assessed the therapeutic effect of acupuncture in patients with perennial allergic rhinitis. Acupuncture therapy corrects the equilibrium deviation using the bidirectional regulative actions in treating syndromes by inserting needles into acupoints.

OBJECTIVES: We studied the clinical outcomes and gene expression profiles of Phadiatop (Ph)-positive (+) and -negative (-) allergic rhinitis patients who were treated with acupuncture.

METHODS: Twenty-one (21) patients with allergic rhinitis 13 Ph(+), 8 Ph(-) received 8 courses of acupuncture treatment over 4 weeks. Blood samples of the patients were collected during the course of acupuncture for global analysis of gene expression profiles by Affymetrix human U133A chips. Patients completed the rhinoconjunctivitis quality of life questionnaire (RQLQ) before and after the therapy to objectively measure the therapeutic effect of acupuncture. The gene expression profile in patients with Ph(+) and Ph(-) allergic rhinitis treated before and after acupuncture was analyzed by unsupervised and supervised clustering methods.

RESULTS: The results of the RQLQ and the gene expression profiles were different between the Ph(+) and Ph(-) groups after receiving treatment with acupuncture. Activity, practical problems, and nasal symptoms showed significant improvement in the Ph(+) group versus the Ph(-) group. In addition, genes involved in active immune response, differential of Treg and cell apoptosis, were different in the Ph(+) and Ph(-) groups after acupuncture treatment.

CONCLUSIONS: Differential gene expression profiles of patients with Ph(+) and Ph(-) allergic rhinitis indicate the distinct physiologic responses after receiving acupuncture treatment in these two groups. Our results suggest that personalized medical treatment should be essential for acupuncture treatment in patients with allergic rhinitis.

World J Gastroenterol. 2010 Jan 7;16(1):104-11.

Electro-acupuncture to prevent prolonged postoperative ileus: a randomised clinical trial.

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AIM: To examine whether acupuncture can prevent prolonged postoperative ileus (PPOI) after intraperitoneal surgery for colon cancer. **METHODS:** Ninety patients were recruited from the Fudan University Cancer Hospital, Shanghai, China. After surgery, patients were randomized to receive acupuncture (once daily, starting on postoperative day 1, for up to six consecutive days) or usual care. PPOI was defined as an inability to pass flatus or have a bowel movement by 96 h after surgery. The main outcomes were time to first flatus, time to first bowel movement, and electrogastroenterography. Secondary outcomes were quality of life (QOL) measures, including pain, nausea, insomnia, abdominal distension/fullness, and sense of well-being.

RESULTS: No significant differences in PPOI on day 4 ($P = 0.71$) or QOL measures were found between the groups. There were also no group differences when the data were analyzed by examining those whose PPOI had resolved by day 5 ($P = 0.69$) or day 6 ($P = 0.88$). No adverse events related to acupuncture were reported.

CONCLUSION: Acupuncture did not prevent PPOI and was not useful for treating PPOI once it had developed in this population.

J Clin Oncol. 2010 Feb 1;28(4):634-40.

Acupuncture versus venlafaxine for the management of vasomotor symptoms in patients with hormone receptor-positive breast cancer: a randomized controlled trial.

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PURPOSE: Vasomotor symptoms are common adverse effects of antiestrogen hormone treatment in conventional breast cancer care. Hormone replacement therapy is contraindicated in patients with breast cancer. Venlafaxine (Effexor), the therapy of choice for these symptoms, has numerous adverse effects. Recent studies suggest acupuncture may be effective in reducing vasomotor symptoms in menopausal women. This randomized controlled trial tested whether acupuncture reduces vasomotor symptoms and produces fewer adverse effects than venlafaxine.

PATIENTS AND METHODS: Fifty patients were randomly assigned to receive 12 weeks of acupuncture ($n = 25$) or venlafaxine ($n = 25$) treatment. Health outcomes were measured for up to 1 year post-treatment.

RESULTS: Both groups exhibited significant decreases in hot flashes, depressive symptoms, and other quality-of-life symptoms, including significant improvements in mental health from pre- to post-treatment. These changes were similar in both groups, indicating that acupuncture was as effective as venlafaxine. By 2 weeks post-treatment, the venlafaxine group experienced significant increases in hot flashes, whereas hot flashes in the acupuncture group remained at low levels. The venlafaxine group experienced 18 incidences of adverse effects (eg, nausea, dry mouth, dizziness, anxiety), whereas the acupuncture group experienced no negative adverse effects. Acupuncture had the additional benefit of increased sex drive in some women, and most reported an improvement in their energy, clarity of thought, and sense of well-being.

CONCLUSION: Acupuncture appears to be equivalent to drug therapy in these patients. It is a safe, effective and durable treatment for vasomotor symptoms secondary to long-term antiestrogen hormone use in patients with breast cancer.

J Altern Complement Med. 2010 Jan;16(1):107-12.

Effectiveness of acupuncture in the treatment of temporomandibular disorders of muscular origin: a systematic review of the last decade.

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OBJECTIVES: The purpose of this review is to evaluate the effectiveness of using acupuncture treatment for temporomandibular disorders (TMD) of muscular origin according to research published in the last decade.

METHODS: The information was gathered using the MEDLINE, EMBASE, CINAHL, and CISCOP databases. The inclusion criteria for selecting the studies were the following: (1) only randomised controlled trials (RCTs) were selected; (2) studies had to be carried out on patients with TMD of muscular origin; (3) studies had to use acupuncture treatment; and (4) studies had to be published in scientific journals between 1997 and 2008. Two (2) independent reviewers analyzed the methodological quality of the studies using the Delphi list. A total of four RCTs were chosen once the methodological quality was judged as being acceptable. All of the studies included in the review compared the acupuncture treatment with a placebo treatment. All of them described results that were

statistically significant in relation to short-term improvement of TMD signs and symptoms of a muscular origin, except one of the analyzed studies that found no significant difference between acupuncture and sham acupuncture.

CONCLUSIONS: In the authors' opinion, research into the long-term effects of acupuncture in the treatment of TMD is needed. We also recommend larger samples sizes for future studies, so the results will be more reliable.

Clin J Pain. 2010 Jan;26(1):60-9.

Acupuncture for lower back pain: a review.

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OBJECTIVE: We briefly discuss the history of acupuncture and its postulated mechanisms of action, but our primary objectives is to discuss the evidence for acupuncture's efficacy in low back pain as well as approaches of newer study protocols to define more clearly the true usefulness of this alternative modality in low back pain.

METHODS: Pubmed online search of all articles and other literature in the past 50 years related to acupuncture efficacy in low back pain, including case reports, randomized controlled trials and meta-analyses.

RESULTS: Lower back pain and its associated incapacitating sequelae constitute an important healthcare and socioeconomic problem. There have been multiple, generally poor quality studies on the efficacy of acupuncture for this multi-factorial pain condition. Although newer studies seem to show promise, effectiveness has not been clearly demonstrated.

CONCLUSIONS: There is a paucity of high-quality research assessing efficacy of acupuncture in the management of LBP. Nonetheless, it continues to play a significant role in our clinical practice, not as a sole therapeutic modality but rather as an adjunct to a multidisciplinary integrative approach of LBP management. Most of the published articles about acupuncture in the biomedical literature consist of case reports, case series, or intervention studies with designs inadequate to assess its efficacy. Thus it is imperative that further research be performed, both preclinical to help elucidate the mechanisms underlying acupuncture, and clinical to justify its clinical application.

J Altern Complement Med. 2010 Jan;16(1):53-7.

Electro-acupuncture for pain relief after nasal septoplasty: a randomised controlled study.

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BACKGROUND: Electro-acupuncture (EA) can be effective in some pain conditions, but still there have been no randomized controlled studies of EA for treatment of acute postoperative pain in nasal septoplasty. Therefore, we did a study to test whether EA of specific points is superior to sham acupuncture for complementary analgesia after nasal septoplasty.

METHODS: Ninety (90) patients with an American Society of Anesthesiology (ASA) physical status of I-II scheduled for elective septoplasty were randomly allocated to acupuncture group or control group. Postoperative pain was treated with intravenous meperidine. The time to the first analgesic request, and pain intensity on a 100-mm visual analogue scale (VAS-100) were used to evaluate postoperative pain, and the amount of postoperative meperidine and incidence of analgesia related to side-effects were recorded.

RESULTS: Postoperative pain intensity on VAS-100 and respiratory depression were similar in both groups ($p > 0.05$), but nausea and vomiting were less in the acupuncture group than in the control group ($p < 0.05$).

CONCLUSIONS: Findings from our study demonstrate that both uses of EA and 0.1 mg/kg IV morphine given intraoperatively resulted in a similar postoperative pain score, and meperidine was not given in any patient in the two groups during postoperative period because the VAS scores of all patients were less than 40 mm.

Maturitas. 2010 Jan;65(1):15-22.

Managing hot flashes in men after prostate cancer--a systematic review.

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CONTEXT AND OBJECTIVE: The aim of this study was to describe hot flashes in men with prostate cancer, and their treatment methods. **METHOD:** A systematic review was conducted of the literature indexed between 1966 and 2009 on the MEDLINE, the ISI Web of Knowledge, Cinahl and PsycINFO. Of 252 articles identified, 32 were selected for consideration of their complete texts, of which five were subject to detailed analysis.

RESULTS: Diethylstilbestrol, megestrol acetate and cyproterone acetate have the strongest effect, giving a 75% or larger decrease of the number of hot flashes, but they may have severe or bothersome side-effects. Gabapentin has an uncertain effect. Clonidine is not proven effective for hot flashes. Long-term effects were not evaluated in any of the studies. SSRI/SNRI and acupuncture may have a moderate effect on hot flashes but are not proven in any RCTs.

CONCLUSION: Hot flashes are common and bothersome symptoms in men with prostate cancer and those taking anti-androgen treatment, and reduce quality of life. Few treatments are available and some are avoided for these patients. Additional prospective treatment studies are needed, with long-term follow-up, in order to evaluate the effects and risks of treatments. Treatments with few or no severe side-effects should be prioritised in future investigations. Experimental studies are also needed to elucidate the mechanism behind hot flashes in men and to suggest routes for the development of new treatments.

114.Menopause. 2010 Mar;17(2):269-80.

Effects of acupuncture on hot flashes in perimenopausal and postmenopausal women--a multicenter randomized clinical trial.

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OBJECTIVE: The aim of this study was to evaluate the effectiveness of acupuncture plus usual care for relief of hot flashes and menopause-related symptoms compared with usual care alone in perimenopausal or postmenopausal women.

METHODS: A multicenter, randomized, controlled trial was conducted. Perimenopausal or postmenopausal women with average hot flash scores of 10 or higher during the week before the screening visit were enrolled and randomly divided into two groups. The treatment group received 12 sessions of acupuncture and maintained usual care for 4 weeks, whereas the control group underwent

usual care alone. Hot flash scores were calculated by multiplying frequency by severity of hot flashes recorded in a daily diary. The primary outcome was the mean change in the average 24-hour hot flash score at week 4 from baseline. The secondary outcome was the mean change in menopause-related symptoms as estimated by the Menopause Rating Scale questionnaire at week 4. Follow-up assessment at week 8 was conducted in the treatment group only.

RESULTS: The mean change in the average 24-hour hot flash score was -16.57 in the treatment group (n = 116) and -6.93 in the control group (n = 59), a difference of 9.64 (P < 0.0001). The total Menopause Rating Scale score, as well as the subscale scores for the psychological, somatic, and urogenital dimensions of menopause, showed significant improvement in the acupuncture group compared with the control group (P < 0.001). The mean change in the treatment group in the primary outcome was -17.58 at week 8.

CONCLUSIONS: Our results suggest that acupuncture in addition to usual care is associated with marked clinical improvement in hot flashes and menopause-related symptoms in perimenopausal or postmenopausal women.