Clinical Policy Bulletin: Acupuncture

Revised February 2015

Number: 0135

Policy

**Note:** Most Aetna plans limit coverage of acupuncture to when it is used in lieu of other anesthesia for a surgical or dental procedure covered under the health benefits plan, and the health care provider administering it is a legally qualified physician practicing within the scope of his/her license. Other plans may extend coverage of acupuncture for medically necessary indications, but only when administered by a health care provider who is a legally qualified physician practicing within the scope of his/her license. Please check benefit plan descriptions for details.

Aetna considers needle acupuncture (manual or electroacupuncture) medically necessary for any of the following indications:

- Chronic low back pain. (Maintenance treatment, where the patient's symptoms are neither regressing or improving, is considered not medically necessary. If no clinical benefit is appreciated after 4 weeks, then the treatment plan should be re-evaluated); or
- Migraine headache; or
- Nausea of pregnancy; or
- Pain from osteoarthritis of the knee or hip (adjunctive therapy; if no clinical benefit is appreciated after 4 weeks, then the treatment plan should be re-evaluated); or
- Post-operative and chemotherapy-induced nausea and vomiting; or
- Post-operative dental pain; or
- Temporomandibular disorders (TMD)

Aetna considers acupuncture experimental and investigational for all other indications, including but not limited to any of the following conditions, because there is inadequate scientific research assessing the efficacy of acupuncture compared with placebo, sham acupuncture or other modalities of treatment in these conditions:
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**Note:** Further acupuncture treatment is not considered medically necessary if the member does not demonstrate meaningful improvement in symptoms. Maintenance treatment, where the member’s symptoms are neither regressing nor improving, is considered not medically necessary.

Aetna considers acupuncture point injection (also known as acupoint injection therapy, biopuncture) experimental and investigational for the following conditions:

- Acupuncture
(not an all-inclusive list) because the effectiveness of this approach has not been established:

- Amyotrophic lateral sclerosis.
- Cancer-related pain
- Cervical spondylosis
- Chronic daily headache
- Dysmenorrhea (menstrual pain)
- Lateral elbow pain (tennis elbow).

Aetna considers dry needling experimental and investigational because of inadequate evidence of its effectiveness.

Background

Acupuncture as a therapeutic intervention is widely practiced in the United States. The general theory of acupuncture is based on the premise that there are patterns of energy flow (Qi) through the body that are essential for health. Disruptions of this flow are believed to be responsible for disease. Acupuncture may correct imbalances of flow at identifiable points close to the skin. Findings from basic research have begun to elucidate the mechanisms of action of acupuncture, including the release of opioids and other peptides in the central nervous system and the periphery and changes in neuroendocrine function.

While there have been many studies of its potential usefulness, the vast majority of papers studying acupuncture in the biomedical literature consist of case reports, case series, or intervention studies. One of the difficulties with drawing conclusions from the existing literature is that the term acupuncture is used to describe a variety of treatments that differ in many important aspects according to level of effect (e.g., local, segmental, generalized) and type of acupuncture treatment (e.g., manual versus electrical acupuncture). Many of these studies provide equivocal results because of design, sample size, and other factors. The issue is further complicated by inherent difficulties in the use of appropriate controls, such as placebos and sham acupuncture groups, and by absence of studies comparing acupuncture with conventional biomedical treatments. Some factors needing investigation include frequency, number, and duration of treatments, depth of puncture, number of acupuncture points used, combination with other therapies, sample size, setting, blinding factors, and needle size. Be that as it may, promising results have emerged on the efficacy of acupuncture in adult post-operative and chemotherapy nausea and vomiting and in postoperative dental pain.

There is insufficient evidence of the efficacy of acupuncture as a treatment for fibromyalgia. The U.S. Department of Health and Human Services, Public Health Service, Agency for Healthcare Research and Quality (AHRQ) performed a technology assessment (2003) on Acupuncture for the Treatment of Fibromyalgia; it stated that "[a]t this time, therefore, there is insufficient evidence to conclude that acupuncture has efficacy for the treatment of fibromyalgia."
There is evidence to support the use of acupuncture in migraine. In a large randomized controlled study (n = 401), Vickers et al (2004) examined the effects of a policy of "use acupuncture" on headache (predominantly migraine), health status, days off sick, and use of resources in patients with chronic headache compared with a policy of "avoid acupuncture". Patients were randomly allocated to receive up to 12 acupuncture treatments over 3 months or to a control intervention offering usual care. Headache score, SF-36 health status, and use of medication were assessed at baseline, 3, and 12 months. Use of resources was assessed every 3 months. Headache score at 12 months, the primary end point, was lower in the acupuncture group (16.2, SD 13.7, n = 161, 34 % reduction from baseline) than in controls (22.3, SD 17.0, n = 140, 16 % reduction from baseline). The adjusted difference between means is 4.6 (95 % confidence interval [CI]: 2.2 to 7.0; p = 0.0002). This result is robust to sensitivity analysis incorporating imputation for missing data. Patients in the acupuncture group experienced the equivalent of 22 fewer days of headache per year (8 to 38). SF-36 data favored acupuncture, although differences reached significance only for physical role functioning, energy, and change in health. Compared with controls, patients randomized to acupuncture used 15 % less medication (p = 0.02), made 25 % fewer visits to general practitioners (p = 0.10), and took 15 % fewer days off sick (p = 0.2). The authors concluded that acupuncture leads to persisting, clinically relevant benefits for primary care patients with chronic headache, particularly migraine.

The results of the study by Vickers et al (2004) are in agreement with recent findings of Allais et al (2003) who reported that acupuncture is effective in reducing the frequency of migraine attacks as well as those by Linde et al (2009) who reported that acupuncture was more effective than a placebo injection in the early treatment of an acute migraine attack.

Facco and colleagues (2008) examined the effectiveness of a true acupuncture treatment according to traditional Chinese medicine (TCM) in migraine without aura, comparing it to a standard mock acupuncture protocol, an accurate mock acupuncture healing ritual, and untreated controls. A prospective, randomized, controlled study was performed in 160 patients suffering from migraine without aura, assessed according to the ICD-10 classification. Patients were divided into the following 4 groups: (i) group TA, treated with true acupuncture (according to TCM) plus rizatriptan; (ii) group RMA, treated with ritualized mock acupuncture plus rizatriptan; (iii) group SMA, treated with standard mock acupuncture plus rizatriptan; (iv) group R, without prophylactic treatment with relief therapy only (rizatriptan). The MIDAS Questionnaire was administered before treatment (T0), at 3 (T1) and 6 months (T2) from the beginning of treatment, and the MIDAS Index (MI) was calculated. Rizatriptan intake was also checked in all groups of patients at T0, T1, and T2. Group TA and RMA were evaluated according to TCM as well; then, the former was submitted to true acupuncture and the latter to mock acupuncture treatment resembling the same as TA. The statistical analysis was conducted with factorial ANOVA and multiple tests with a Bonferroni adjustment. A total of 127 patients completed the study (33 dropouts): 32 belonged to group TA, 30 to group RMA, 31 to group SMA, and 34 to group R. Before treatment the MI (T(0)) was moderate-to-severe with no significant inter-group differences. All groups underwent a decrease of MI at T(1) and T(2), with a significant group
difference at both T(1) and T(2) compared to T(0) (p < 0.0001). Only TA provided a significant improvement at both T(1) and T(2) compared to R (p < 0.0001). Patients in the RMA group underwent a transient improvement of MI at T(1). The intake of rizatriptan paralleled the MI in all groups. The authors concluded that TA was the only treatment able to provide a steady outcome improvement in comparison to the use of only rizatriptan, while RMA showed a transient placebo effect at T1.

There is insufficient evidence for acupuncture as a treatment for insomnia. Sok and colleagues (2003) stated that further investigation, using a randomized clinical trial design, is necessary to determine the effectiveness of acupuncture for the treatment of insomnia. Furthermore, additional work is also needed to promote the long-term therapeutic effects of acupuncture and to compare it with other therapies for insomnia.

There is limited and insufficient evidence for acupuncture for treatment of dysmenorrhea, infertility and other women's reproductive indications. White (2003) performed a review of controlled studies of acupuncture for women's reproductive health care. The author concluded that in view of the small number of studies and their variable quality, doubt remains about the effectiveness of acupuncture for gynecological conditions. Acupuncture appears promising for dysmenorrhea and infertility, and further studies are justified.

There is insufficient evidence for acupuncture to improve outcomes of in vitro fertilization. In a Cochrane review, Cheong et al (2008) determined the effectiveness of acupuncture in the outcomes of assisted reproductive treatment (ART). Randomized controlled trials (RCTs) of acupuncture for couples who were undergoing ART comparing acupuncture treatment alone or acupuncture with concurrent ART versus no treatment, placebo or sham acupuncture plus ART for the treatment of primary and secondary infertility were selected. Women with medical illness deemed contra-indications for ART or acupuncture were excluded. A total of 16 RCTs that involved acupuncture and assisted conception were identified; 13 trials were included in the review and 3 were excluded. Quality assessment and data extraction were performed independently by 2 review authors. Meta-analysis was performed using odds ratio (OR) for dichotomous outcomes. The outcome measures were live birth rate, clinical ongoing pregnancy rate, miscarriage rate, and any reported side effects of treatment. There is evidence of benefit when acupuncture is performed on the day of embryo transfer (ET) on the live birth rate (OR 1.89, 95 % CI: 1.29 to 2.77) but not when it is performed 2 to 3 days after ET (OR 1.79, 95 % CI: 0.93 to 3.44). There is no evidence of benefit on pregnancy outcomes when acupuncture is performed around the time of oocyte retrieval. The authors concluded that acupuncture performed on the day of ET shows a beneficial effect on the live birth rate; however, with the present evidence this could be attributed to placebo effect and the small number of women included in the trials. They stated that acupuncture should not be offered during the luteal phase in routine clinical practice until further evidence is available from sufficiently powered RCTs. This is in agreement with the observation of El-Toukhy et al (2008) who stated that currently available literature does not provide sufficient evidence that adjuvant acupuncture improves in vitro fertilization clinical pregnancy rate. In addition, Ng et al (2008) noted that
although acupuncture has gained increasing popularity in the management of sub-
fertility, its effectiveness has remained controversial.

There is some evidence to support the use of acupuncture for treatment of hip and
knee osteoarthritis. An earlier AHRQ technology assessment (2003) on
Acupuncture for Osteoarthritis concluded that “The currently available evidence is
insufficient to determine whether acupuncture has a specific beneficial effect in
osteoarthritis.” However, a Cochrane review of acupuncture for peripheral joint
osteoarthritis (Manheimer et al, 2010) concluded that sham-controlled trials show
statistically significant benefits; the authors stated, however, that these benefits
are small, do not meet the authors’ pre-defined thresholds for clinical relevance,
and are probably due at least partially to placebo effects from incomplete blinding.
The authors found that 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.

Acupuncture has also been employed to relieve pain and improve movement in
people with osteoarthritis (OA) of the knee. In the largest clinical study of
acupuncture reported to date, Berman et al (2004) studied 570 patients with an
average age of 65 who had OA of the knee. Subjects were randomly assigned to
receive one of three treatments for 26 weeks, in addition to standard care such as
anti-inflammatory medications and pain relievers: (i) 190 received acupuncture, (ii)
191 underwent sham acupuncture and (iii) 189 participants attended 6, 2-hour
group sessions over 12 weeks based on the Arthritis Foundation's Arthritis Self-
Help Course. Patients' progress was assessed at 4, 8, 14, and 26 weeks. At
week 8, patients receiving acupuncture began showing a significant increase in
function and by week 14 a significant decrease in pain, compared with the sham
and control groups. Overall those who received acupuncture had a 40 %
decrease in pain and a nearly 40 % improvement in function compared to baseline
assessments. The authors concluded that acupuncture seems to provide
improvement in function and pain relief as an adjunctive therapy for OA of the
knee when compared with credible sham acupuncture and education control
groups. This finding is in agreement with the recent observations of Vas et al

In a randomized, controlled, single-blind trial on the use of acupuncture as a
complementary therapy to the pharmacological treatment of OA of the knee (n =
97), Vas and colleagues (2004) concluded that acupuncture plus diclofenac is
more effective than placebo acupuncture plus diclofenac for the symptomatic
treatment of OA of the knee. Tukmachi and associates (2004), in a randomized
controlled trial (n = 30), reported that manual and electroacupuncture causes a
significant improvement in the symptoms of OA of the knee, either on its own or as
an adjunctive therapy, with no loss of benefit after one month.

In a randomized controlled study, Stener-Victorin et al (2004) evaluated the
therapeutic effect of electro-acupuncture (EA) and hydrotherapy, both in
combination with patient education or with patient education alone, in the
treatment of OA in the hip (n = 45). These investigators found that EA and
hydrotherapy, both in combination with patient education, induce long-lasting
effects, shown by reduced pain and ache and by increased functional activity and
quality of life, as demonstrated by differences in the pre- and post-treatment
assessments. This finding is in agreement with that of Haslam (2001) who reported that acupuncture is more effective than advice and exercises in the symptomatic treatment of OA of the hip (n = 32) as well as that of Fink and co-workers (2001) who found that placement of acupuncture needle in the area of the affected hip is associated with improvement in the symptoms of OA (n = 67).

There is evidence to support the use of acupuncture in treating chronic low back pain (LBP). In a prospective cohort study, Kukuk et al (2005) ascertained the long-term effects 3 and 6 months after the end of a course of acupuncture treatment for chronic LBP or chronic pain caused by gonarthrosis. A total of 1,096 eligible patients with chronic LBP or gonarthrosis pain were identified (68.1 % female) and invited by letter to participate in the study. Ultimately 249 patients remained, with no loss of representativeness. Two telephone interviews were conducted 3 and 6 months after the last acupuncture session using standardized questionnaires, available as electronic case report forms. The primary target criteria were self-assessment of pain tolerability before the start of acupuncture and after the end of treatment, and pain intensity (GCPS) over time. Secondary target criteria were changes to functional impairment (HFAQ for chronic LBP, WOMAC for gonarthrosis), quality of life (SF12), depression (CES-D) and patient global assessment of treatment effectiveness (PGA). For the indication chronic LBP, pain-related fear avoidance beliefs (FABQ) were also queried. These investigators found that pain tolerability was significantly improved after acupuncture and remained so up to 6 months after treatment. The mean scores of almost all questionnaires did not change significantly between 3 and 6 months. They concluded that acupuncture had a long-term effect on important aspects of cognitive and emotional pain coping.

In a multi-center, randomized controlled trial, Thomas et al (2005) examined whether patients with persistent non-specific LBP, when offered access to traditional acupuncture care alongside conventional primary care, gained more long-term relief from pain than those offered conventional care only, for equal or less cost. Safety and acceptability of acupuncture care to patients, and the heterogeneity of outcomes were also tested. Patients in the experimental arm were offered the option of referral to the acupuncture service comprising 6 acupuncturists. The control group received usual care from their general practitioner (GP). Eligible patients were randomised in a ratio of 2:1 to the offer of acupuncture to allow between-acupuncturist effects to be tested. Patients were 18 to 65 years of age with non-specific LBP of 4 to 52 weeks' duration, and were assessed as suitable for primary care management by their general practitioner. The trial protocol allowed up to 10 individualized acupuncture treatments per patient. The acupuncturist determined the content and the number of treatments according to patient need. Main outcome measures included the Short Form 36 (SF-36) Bodily Pain dimension (range of 0 to 100 points), assessed at baseline, and 3, 12 and 24 months. Cost-utility analysis was conducted at 24 months using the EuroQoL 5 Dimensions (EQ-5D) and a preference-based single index measure derived from the SF-36 (SF-6D). Secondary outcomes included the McGill Present Pain Index (PPI), Oswestry Pain Disability Index (ODI), all other SF-36 dimensions, medication use, pain-free months in the past year, worry about back pain, satisfaction with care received, as well as safety and acceptability of acupuncture care. A total of 159 patients were in the acupuncture offer arm and 80 in the usual care arm. All 159 patients randomized to the offer of acupuncture
care chose to receive acupuncture treatment, and received an average of 8 acupuncture treatments within the trial. These investigators found that traditional acupuncture care delivered in a primary care setting was safe and acceptable to patients with non-specific LBP. Acupuncture care and usual care were both associated with clinically significant improvement at 12- and 24-month follow-up. Acupuncture care was significantly more effective in reducing bodily pain than usual care at 24-month follow-up. No benefits relating to function or disability were identified. They concluded that GP referral to a service providing traditional acupuncture care offers a cost-effective intervention for reducing LBP over a 2-year period.

In a meta-analysis, Manheimer et al (2005) evaluated the effectiveness of acupuncture for treating LBP. These researchers concluded that acupuncture effectively relieves chronic LBP. However, no evidence suggests that acupuncture is more effective than other active therapies. This is in agreement with the findings of a Cochrane review on acupuncture for LBP by Furlan et al (2005) who stated that the data do not allow firm conclusions about the effectiveness of acupuncture for acute LBP. For chronic LBP, acupuncture is more effective for pain relief and functional improvement than no treatment or sham treatment immediately after treatment and in the short-term only. Acupuncture is not more effective than other conventional and alternative treatments. They concluded that the data suggest that acupuncture may be useful adjuncts to other therapies for chronic LBP.

There is insufficient evidence that acupuncture, alone or in combination with moxibustion, may be effective in the treatment of fetal breech presentation. Moxibustion refers to a type of Chinese medicinal practice that involves burning a herb close to the skin of the acupuncture point -- urinary bladder 67 (BL67, Chinese name Zhiyin), located at the tip of the 5th toe. Available guidelines have yielded conflicting recommendations on the use of moxibustion in fetal breech presentation.

Evidence based clinical guidelines from the New Zealand Guidelines Group (2004) state that "[m]oxibustion is an acupuncture technique that involves burning herbal preparations to stimulate the acupoint by the 5th toe. It may be offered to women with breech presentation". Their conclusions were based primarily on a study by Cardini and Weixin (1998), which assessed the safety and effectiveness of moxibustion on acupoint BL67 to increase fetal activity and correct breech presentation in a randomized, controlled, open clinical trial (n = 260). The 130 primigravidas in the 33rd week of gestation with normal pregnancy and an ultrasound diagnosis of breech presentation randomized to the intervention group received stimulation of acupoint BL 67 by moxa (Japanese term for Artemisia vulgaris) rolls for 7 days, with treatment for an additional 7 days if the fetus persisted in the breech presentation. The 130 subjects randomized to the control group received routine care but no interventions for breech presentation. Subjects with persistent breech presentation after 2 weeks of treatment could undergo external cephalic version (ECV) anytime between 35 weeks’ gestation and delivery. The intervention group experienced a mean of 48.45 fetal movements versus 35.35 in the control group (p < 0.001). During the 35th week of gestation, 98 (75.4 %) of 130 fetuses in the intervention group were cephalic versus 62 (47.7 %) of 130 fetuses in the control group (p < 0.001). Despite the fact that 24
subjects in the control group and 1 subject in the intervention group underwent ECV, 98 (75.4 %) of the 130 fetuses in the intervention group were cephalic at birth versus 81 (62.3 %) of the 130 fetuses in the control group (p = 0.02). The authors concluded that among primigravidas with breech presentation during the 33rd week of gestation, moxibustion for 1 to 2 weeks increased fetal activity during the treatment period and cephalic presentation after the treatment period and at delivery.

Kanakura et al (2001) discussed their findings on the use of moxibustion or electrical stimulation for the treatment of breech. Only patients with breech pregnancies at the 28th week or later were entered into the study. With moxibustion treatment, the control group had a spontaneous correction rate of 165/224 (73.7 %), and the treatment group had a correction rate of 123/133 (92.5 %) (p < 0.0001). With low-frequency percutaneous electrical stimulation, the correction rate was 20/941 (83.9 %) in the control group and 171/191 (89.5 %) in the treatment group (p = 0.094). The controls in the moxibustion study did no exercises and received no external manipulation to correct breech presentation whereas those in the electrical stimulation study experienced both. Acupuncture stimulation, especially with moxibustion, is expected to serve as a safe and effective modality in the management of breech presentation in a clinical setting.

Habek et al (2003) evaluated the value of acupuncture in the conversion of fetal breech presentation into vertex presentation in a randomized prospective controlled clinical study that included 67 pregnant women with fetal breech presentation: 34 women with singleton pregnancies treated with manual acupuncture (Zhiyin) and a control group which included 33 women with singleton pregnancies without acupuncture treatment. The acupuncture treatment lasted 30 minutes a day, and was conducted during and after 34 weeks of pregnancy with simultaneous cardiotocography. The success rate of the acupuncture correction of fetal breech presentation is 76.4 % (26 women), and spontaneous conversion without acupuncture in vertex presentation is observed in 15 women (45.4 %; p < 0.001). The authors concluded that acupuncture correction of fetal malpresentation is a relatively simple, efficacious and inexpensive method associated with a lower percentage of operatively completed deliveries, which definitely reflects in improved parameters of vital and perinatal statistics.

In a controlled study by Neri et al (2004), a total of 240 women at 33 to 35 weeks of gestation carrying a fetus in breech presentation were randomized to receive active treatment (acupuncture plus moxibustion) or to be assigned to the observation group. Bilateral acupuncture plus moxibustion was applied at the BL67 acupoint. The primary outcome of the study was fetal presentation at delivery. Fourteen cases dropped out. The final analysis was thus made on 226 cases, 114 randomized to observation and 112 to acupuncture plus moxibustion. At delivery, the proportion of cephalic version was lower in the observation group (36.7 %) than in the active-treatment group (53.6 %) (p = 0.01). Hence, the proportion of Cesarean sections indicated for breech presentation was significantly lower in the treatment group than in the observation group (52.3 % versus 66.7 %, p = 0.03). The authors concluded that acupuncture plus moxibustion is more effective than observation in revolving fetuses in breech presentation. Such a method appears to be a valid option for women willing to experience a natural birth.
While the majority of evidence supports the use of acupuncture/moxibustion in correcting fetal breech presentation, recent publications are less clear in its role for the management of this condition. In a single-blind randomized controlled study, Cardini et al (2005) assessed the effectiveness of moxibustion for the correction of fetal breech presentation in a non-Chinese population. Healthy non-Chinese nulliparous pregnant women at 32 to 33 weeks + 3 days of gestational age with the fetus in breech presentation were randomly assigned to treatment or observation. Treatment consisted of moxibustion (stimulation with heat from a stick of Artemisia vulgaris) at the Zhiyin for 1 or 2 weeks. Subjects in the control group received no moxibustion but were observed. Two weeks after recruitment, each participant was subjected to an ultrasonic examination of the fetal presentation. The main outcome measure was number of participants with cephalic presentation in the 35th week. The study was interrupted when 123 participants had been recruited (46 % of the planned sample). Intermediate data monitoring revealed a high number of treatment interruptions. At this point no difference was found in cephalic presentation in the 35th week (treatment group: 22/65, 34 %; control group: 21/58, 36 %). The authors stated that the results underline the methodological problems evaluating of a traditional treatment transferred from a different cultural context. They do not support either the effectiveness or the ineffectiveness of moxibustion in correcting fetal breech presentation.

In a Cochrane review, Coyle and colleagues (2005) examined the safety and effectiveness of moxibustion on changing the presentation of an unborn baby in the breech position, the need for ECV, mode of birth, and perinatal morbidity and mortality for breech presentation. These investigators concluded that there is insufficient evidence from randomized controlled clinical trials to support the use of moxibustion to correct a breech presentation. The authors stated that moxibustion may be beneficial in reducing the need for ECV, and decreasing the use of oxytocin; however there is a need for well-designed randomised controlled trials to evaluate moxibustion for breech presentation which report on clinically relevant outcomes as well as the safety of the intervention.

Women with a 3rd trimester breech presentation often receive Cesarean section as the mode of delivery of 1st choice, especially when ECV has failed to turn the fetus to cephalic (Tiran, 2004). According to the American College of Obstetricians and Gynecologists (ACOG, 2002), ECV may not be for some women and it can pose risks including pre-term labor, placental abruption, umbilical cord entanglement, premature rupture of the membranes, as well as severe maternal discomfort. Currently, ACOG does not have a policy statement/recommendation on the use of acupuncture/moxibustion for managing fetal breech presentation.

The Royal College of Obstetricians and Gynaecologists has concluded that "moxibustion should not be recommended as a method of promoting spontaneous version over ECV." The guidelines explain that moxibustion, burnt at the tip of the 5th toe (acupuncture point BL67) has been used to promote spontaneous version of the breech, with some success, and appears to be safe. However, citing the Cochrane systematic evidence review (Coyle et al, 2005) and the study by Cardini et al (2005), RCOG concluded that pooled and recent data conclude that "there is
insufficient evidence to support its use, highlighting the need for good quality studies."

A randomized controlled study by Smith et al (2008) found acupuncture to be ineffective at inducing labor. Women who were scheduled for a post-term induction with a singleton pregnancy and cephalic presentation were eligible for the study. Subjects received 2 acupuncture or sham acupuncture sessions over a 2-day period before the planned medical/pharmacological induction. The principal primary outcomes related to the need for induction methods and time from the administration of the intervention to delivery. A total of 364 women were randomly assigned to the trial (treatment n = 181 and control n = 183). Subjects did not differ in their need for induction methods between groups: prostaglandin induction: relative risk (RR) 1.20, 95 % CI: 0.96 to 1.51, p = 0.11; artificial rupture of membranes only: RR 0.93, 95 % CI: 0.72 to 1.20, p = 0.57; oxytocin only: RR 0.89, 95 % CI: 0.60 to 1.32, p = 0.55; artificial rupture of membranes plus oxytocin: RR 0.87, 95 % CI: 0.57 to 1.33, p = 0.52; prostaglandins, artificial rupture of membranes, and oxytocin: RR 0.84, 95 % CI: 0.37 to 1.91, p = 0.68. The median time from acupuncture to delivery was 68.6 hours (interquartile range of 53.9 to 79.5) compared with 65 hours (interquartile range of 49.3 to 76.3) for women in the control group. The authors concluded that 2 sessions of manual acupuncture, using local and distal acupuncture points, administered 2 days before a scheduled induction of labor did not reduce the need for induction methods or the duration of labor for women with a post-term pregnancy.

A systematic review found no reliable evidence for the effectiveness of acupuncture in the management of xerostomia. Jedel (2005) evaluated the effectiveness of acupuncture in the management of xerostomia. Articles of controlled clinical studies assessing the effectiveness of acupuncture in the management of xerostomia were obtained by searching through the databases MEDLINE and Cochrane Central Register of Controlled Trials. Three articles met the criteria for inclusion and a criteria list was used to assess the quality of these studies. The studies were considered to be of high quality or low quality in accordance with the criteria list utilized. The results of the trials were considered positive, negative or indifferent based on statistically significant between group differences. The criteria list utilized indicate that one of the three studies was of high quality and it presents indifferent results. One of the two studies of low quality presents positive results and one presents indifferent results. An analysis of the results degree of evidence resulted in no evidence for the effectiveness of acupuncture in the management of xerostomia. The authors concluded that this systematic review showed that there is no evidence for the effectiveness of acupuncture in the management of xerostomia, and there is a need for future high quality randomized controlled trials.

A Cochrane review found insufficient evidence for acupuncture in irritable bowel syndrome. Lim et al (2006) examined if acupuncture is more effective than no treatment, more effective than "sham" (placebo) acupuncture, and as effective as other interventions used to treat irritable bowel syndrome. The authors concluded that most of the trials included in this review were of poor quality and were heterogeneous in terms of interventions, controls, and outcomes measured. Thus, it is still inconclusive if acupuncture is more effective than sham acupuncture or other interventions for treating irritable bowel syndrome.
A systematic evidence review found no clear evidence of the effectiveness of acupuncture in allergic rhinitis and asthma. Passalacqua et al (2006) noted that complementary-alternative medicines (CAM) are extensively used in the treatment of allergic rhinitis and asthma, but evidence-based recommendations are lacking. These researchers carried out a systematic review on CAM for these two indications. Meta-analyses provided no clear evidence for the effectiveness of acupuncture in rhinitis and asthma. Some positive results were described with homeopathy in good-quality trials in rhinitis, but a number of negative studies were also found. Therefore, it is not possible to provide evidence-based recommendations for homeopathy in the treatment of allergic rhinitis, and further trials are needed. A limited number of studies of herbal remedies showed some effectiveness in rhinitis and asthma, but the studies were too few to make recommendations. There are also unresolved safety concerns. The authors concluded that the effectiveness of CAM (e.g., acupuncture) for rhinitis and asthma is not supported by currently available evidence.

There is insufficient evidence of the effectiveness of acupuncture for chemotherapy-induced leukopenia and neutropenia. Lu et al (2007) stated that chemotherapy-induced leukopenia and neutropenia are common side effects during cancer treatment. Acupuncture has been reported as an adjunct therapy for this complication. These researchers reviewed randomized controlled trials of acupuncture’s effect and explored the acupuncture parameters used in these trials. The study populations were cancer patients who were undergoing or had just completed chemotherapy or chemo-radiotherapy, randomized to either acupuncture therapy or usual care. The methodologic quality of trials was assessed. From 33 reviewed articles, 682 patients from 11 eligible trials were included in analyses. All trials were published in non-PubMed journals from China. The methodologic quality of these trials was considerably poor. The median sample size of each comparison group was 45, and the median trial duration was 21 days. The frequency of acupuncture treatment was once-daily, with a median of 16 sessions in each trial. In the seven trials in which white blood cell (WBC) counts were available, acupuncture use was associated with an increase in leukocytes in patients during chemotherapy or chemo-radiotherapy, with a weighted mean difference of 1,221 WBC/μL on average (95 % CI: 636 to 1,807; p < 0.0001). Acupuncture for chemotherapy-induced leukopenia is an intriguing clinical question. However, the inferior quality and publication bias present in these studies may lead to a false-positive estimation. Meta-analysis based on these published trials should be treated in an exploratory nature only.

In a review on the safety and effectiveness of various interventions for the treatment of neck pain, Binder (2008) stated that compared with sham treatment, inactive treatment, or waiting list control, acupuncture may be more effective than some types of sham treatment (not further defined) or inactive treatment (not further defined) at improving pain relief at the end of treatment or in the short-term (less than 3 months), but not in the intermediate-term (not defined) or in the long-term (not defined) in people with chronic mechanical disorders. The author also noted that acupuncture may be more effective than sham TENS at improving pain at 1 week after treatment, and at 6 months, in people with chronic neck pain. Needle acupuncture may be more effective than no acupuncture at improving a composite outcome of neck pain and disability (not further defined) at 3 months in people with
chronic neck pain (very low-quality evidence). Furthermore, compared with sham
treatment, inactive treatment, or waiting list control, needle acupuncture may be
more effective than no acupuncture at improving quality of life (measured by SF-
36) at 3 months in people with chronic neck pain (very low-quality evidence).

There is no evidence of benefit of acupuncture for dyspnea palliation in cancer
patients. Ben-Aharon and associates (2008) conducted a systematic review of
RCTs assessing all pharmacological and non-pharmacological interventions for
dyspnea palliation in cancer patients. Two reviewers independently appraised the
quality of trials and extracted data. The search yielded 18 trials; 14 evaluated
pharmacological interventions: 7 assessing opioids (n = 256 patients), 5 assessing
oxygen (n = 137 patients), 1 assessing helium-enriched air, and 1 assessing
furosemide. Four trials evaluated non-pharmacological interventions (n = 403
patients). The administration of subcutaneous morphine resulted in a significant
reduction in dyspnea visual analog scale (VAS) compared with placebo. No
difference was observed in dyspnea VAS score when nebulized morphine was
compared with subcutaneous morphine, although patients preferred the nebulized
route. The addition of benzodiazepines to morphine was significantly more
effective than morphine alone, without additional adverse effects. Oxygen was not
superior to air for alleviating dyspnea, except for patients with hypoxemia. Nursing
-led interventions improved breathlessness. Acupuncture was not beneficial. The
authors concluded that their review supports the use of opioids for dyspnea relief
in cancer patients. The use of supplemental oxygen to alleviate dyspnea can be
recommended only in patients with hypoxemia. Nursing-led non-pharmacological
interventions seem valuable. Only a few studies addressing this question were
performed. Thus, the investigators concluded, further studies evaluating
interventions for alleviating dyspnea are warranted.

A systematic evidence review by Bauswein et al (2008) reached similar
conclusions about the lack of adequate evidence to support the use of
acupuncture for cancer-associated dyspnea.

There is a lack of reliable evidence for acupuncture treatment of Parkinson's
disease. Lam and co-workers (2008) evaluated the safety and effectiveness of
acupuncture therapy (monotherapy or adjuvant therapy), compared with placebo,
conventional interventions, or no treatment in treating patients with idiopathic
Parkinson's disease (IPD). All RCTs of any duration comparing monotherapy and
adjuvant acupuncture therapy with placebo or no intervention were included. Data
were abstracted independently by 2 investigators onto standardized forms, and
disagreements were resolved by discussion. A total of 10 trials were included,
each using a different set of acupoints and manipulation of needles. None of them
reported the concealment of allocation. Only 2 studies mentioned the number of
dropouts; 2 used a non-blind method while others did not mention their blinding
methods. Nine studies claimed a statistically significant positive effect from
acupuncture as compared with their control; only 1 indicated that there were no
statistically significant differences for all variables measured. Only 2 studies
described details about adverse events. The authors concluded that there is
evidence indicating the potential effectiveness of acupuncture for treating IPD.
However, results were limited by the methodological flaws, unknowns in
concealment of allocation, number of dropouts, and blinding methods in the
studies. They stated that large, well-designed, placebo-controlled RCTs with
rigorous methods of randomization and adequately concealed allocation, as well as intention-to-treat data analysis are needed to ascertain the clinical value of acupuncture in the treatment of IPD.

There is insufficient evidence for the use of acupuncture in polycystic ovary syndrome. Stener-Victorin and colleagues (2008) described the etiology and pathogenesis of polycystic ovary syndrome (PCOS) and evaluated the use of acupuncture to prevent and reduce symptoms related with PCOS. This syndrome is the most common female endocrine disorder and it is strongly associated with hyper-androgenism, ovulatory dysfunction and obesity. It increases the risk for metabolic disturbances such as hyper-insulinemia and insulin resistance, which can lead to type 2 diabetes, hypertension and an increased likelihood of developing cardiovascular risk factors and impaired mental health later in life. Despite extensive research, little is known about the etiology of PCOS. The syndrome is associated with peripheral and central factors that influence sympathetic nerve activity. Therefore, the sympathetic nervous system may be an important factor in the development and maintenance of PCOS. Many women with PCOS require prolonged treatment. Current pharmacological approaches are effective but have adverse effects. Thus, non-pharmacological treatment strategies need to be evaluated. Acupuncture may affect PCOS via modulation of endogenous regulatory systems, including the sympathetic nervous system, the endocrine and the neuroendocrine system. Experimental observations in rat models of steroid-induced polycystic ovaries and clinical data from studies in women with PCOS suggested that acupuncture exert long-lasting beneficial effects on metabolic and endocrine systems and ovulation.

In a randomized controlled trial, Stener-Victorin and associates (2009) examined the effect of low-frequency electroacupuncture (EA) and physical exercise on sympathetic nerve activity in women with PCOS. A total of 20 women with PCOS were randomly allocated to one of 3 groups: (i) low-frequency EA (n = 9), (ii) physical exercise (n = 5), or (iii) untreated control (n = 6) during a 16-wk study period. Direct recordings of multi-unit efferent post-ganglionic muscle sympathetic nerve activity (MSNA) in a muscle fascicle of the peroneal nerve before and following 16 wks of treatment were carried out. Biometric, hemodynamic, endocrine, and metabolic parameters were measured. Low-frequency EA (p = 0.036) and physical exercise (p = 0.030) decreased MSNA burst frequency compared with the untreated control group. The low-frequency EA group reduced sagittal diameter (p = 0.001), while the physical exercise group reduced body weight (p = 0.004) and body mass index (p = 0.004) compared with the untreated control group. Sagittal diameter was related to MSNA burst frequency (Rs = 0.58, p < 0.005) in the EA group. No correlation was found for body mass index and MSNA in the exercise group. There were no differences between the groups in hemodynamic, endocrine, and metabolic variables. For the first time, these researchers showed that low-frequency EA and physical exercise lowers high sympathetic nerve activity in women with PCOS. Thus, treatment with low-frequency EA or physical exercise with the aim to reduce MSNA may be of importance for women with PCOS.

There is insufficient evidence of the effectivness of acupuncture for toxic neuropathy. Zhou et al (2009) noted that thalidomide and bortezomib are effective in the treatment of multiple myeloma. Unfortunately, their use can cause sensory
neuropathy that frequently limits dose and duration of treatment. Although the relationship between peripheral neuropathy and therapeutic dose is controversial, many researchers have demonstrated a positive correlation between neuropathy and cumulative dose, dose intensity, and length of therapy. Peripheral neuropathic pain is the most troublesome symptom of neuropathy. Spontaneous pain, allodynia, hyperalgesia, and hyperpathia are often associated with decreased physical activity, increased fatigue, mood, and sleep problems. Symptoms are often difficult to manage, and available treatment options rarely provide total relief. Moreover, the adverse effects of these treatments often limit their use. Several studies have reported the efficacy of acupuncture, with fewer adverse effects than analgesic drugs, in the treatment of painful diabetic and human immunodeficiency virus-related neuropathy. However, the effectiveness of acupuncture in treating toxic neuropathy has not been assessed. Although its putative mechanisms remain elusive, acupuncture has strong potential as an adjunctive therapy in thalidomide- or bortezomib-induced painful neuropathy, and a better understanding might guide its use in the management of chemotherapy-induced neuropathic pain. The authors concluded that well-designed clinical trials with adequate sample size and power are warranted.

There is no reliable evidence for the use of acupuncture as a treatment for erectile dysfunction. Lee and colleagues (2009) evaluated the current evidence for the use of acupuncture to treat erectile dysfunction (ED). Systematic searches were conducted in 15 electronic databases, with no language restrictions. Hand-searches included conference proceedings and our files. All clinical studies of acupuncture as a treatment for ED were considered for inclusion, and their methodological quality was assessed using the Jadad score. Of the 4 studies included, 1 randomized controlled trial (RCT) showed beneficial effects of acupuncture compared with sham acupuncture in terms of response rate, while another RCT found no effects of acupuncture. The remaining 2 studies were uncontrolled clinical trials. Collectively these data showed that RCTs of acupuncture for ED are feasible but scarce. Most investigations had methodological flaws (e.g., inadequate study design, poor reporting of results, small sample size, and publication without appropriate peer review process). The authors concluded that the evidence is insufficient to suggest that acupuncture is an effective intervention for treating ED. They stated that further research is needed to investigate if there are specific benefits of acupuncture for men with ED.

A Cochrane review found insufficient evidence of the effectiveness of acupuncture in Bell's palsy. Chen et al (2010) examined the effectiveness of acupuncture in hastening recovery and reducing long-term morbidity from Bell's palsy. These investigators updated the searches of the Cochrane Neuromuscular Disease Group Trials Specialized Register (May 24, 2010), the Cochrane Central Register of Controlled Trials (CENTRAL) (issue 2, 2010), MEDLINE (January 1966 to May 2010), EMBASE (January 1980 to May 2010), AMED (January 1985 to May 2010), LILACS (from January 1982 to May 2010) and the Chinese Biomedical Retrieval System (January 1978 to May 2010) for RCTs using “Bell's palsy” and its synonyms, "idiopathic facial paralysis" or "facial palsy" as well as search terms including "acupuncture". Chinese journals in which the researchers thought they might find RCTs relevant to their study were hand-searched. These investigators reviewed the bibliographies of the randomized trials and contacted
the authors and known experts in the field to identify additional published or unpublished data. They included all RCTs involving acupuncture by needle insertion in the treatment of Bell's palsy irrespective of any language restrictions. Two review authors identified potential articles from the literature search, extracted data and assessed quality of each trial independently. All disagreements were resolved by discussion between the review authors. The literature search and hand-searching identified 49 potentially relevant articles. Of these, 6 RCTs were included involving 537 participants with Bell's palsy. Two more possible trials were identified in the update than the previous version of this systematic review, but both were excluded because they were not real RCTs. Of the 6 included trials, 5 used acupuncture while the other 1 used acupuncture combined with drugs. No trial reported on the outcomes specified for this review. Harmful side effects were not reported in any of the trials. Poor quality caused by flaws in study design or reporting (including uncertain method of randomization, allocation concealment and blinding) and clinical differences between trials prevented reliable conclusions about the effectiveness of acupuncture. The authors concluded that the quality of the included trials was inadequate to allow any conclusion about the effectiveness of acupuncture. They stated that more research with high quality trials is needed.

There is insufficient evidence of the effectiveness of acupuncture for respiratory symptoms. Gibson and colleagues (2010) noted that anecdotal evidence from both clinicians and patients suggests there may be some beneficial effect of acupuncture in the treatment of respiratory symptoms, such as bronchospasm, breathlessness and hyper-ventilation syndromes. Some respiratory clinicians are introducing acupuncture as a treatment modality for the management of respiratory symptoms, despite the lack of available objective evidence to support this practice. The authors reviewed the available evidence on the use of acupuncture in respiratory disorders and discussed the methodological issues that are evident within this literature. In addition, they highlighted reasons for the lack of objective evidence to support acupuncture for respiratory conditions and the difficulties faced by acupuncture researchers when designing randomized, placebo-controlled trials. The authors concluded that presently, there is insufficient evidence to support a recommendation on the use of acupuncture in respiratory disorders.

There is insufficient evidence of the effectiveness of acupuncture for treatment of uterine fibroids. Zhang et al (2010) evaluated the benefits and harms of acupuncture in women with uterine fibroids. All 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 contemporary acupuncture, regardless of the source of stimulation (e.g., body, electro, scalp, elongated, fire, hand, fine needle, moxibustion). Acupuncture management without needling was excluded. Two review authors assessed trial risk of bias according to their a priori criteria. No trials were included in this version of the review, therefore no data was collected. No randomized double-blind controlled trials met the inclusion criteria. The authors concluded that the effectiveness of acupuncture for the management of uterine fibroids remains uncertain. They stated that more evidence is needed to establish the safety and effectiveness of acupuncture for uterine fibroids. There is a continued need for well-designed RCTs with long-term follow-up.
In a randomized, patient-assessor blinded, sham-acupuncture, controlled trial, Shin et al (2010) assessed the safety and effectiveness of acupuncture for ocular symptoms, tear film stability and tear secretion in dry eye patients. A total of 42 subjects with defined moderate to severe dry eye underwent acupuncture treatment 3 times a week for 3 weeks. Seventeen standard points (GV23; bilateral BL2, GB14, TE23, Ex1, ST1 and GB20; and unilateral SP3, LU9, LU10 and HT8 on the left for men and right for women) with "de qi" manipulation for the verum acupuncture group and seventeen sham points of shallow penetration without other manipulation for the sham group were applied during the acupuncture treatment. Differences were measured using the ocular surface disease index (OSDI), the VAS of ocular discomfort, the tear film break-up time (TFBUT) and the Schirmer I test with anesthesia. In addition, adverse events were recorded. There were no statistically significant differences between results on the OSDI, VAS, TFBUT or Schimer I tests from baseline between the verum and sham acupuncture groups. However, results from the within-group analysis showed that the OSDI and VAS in both groups and the TFBUT in the verum acupuncture group were significantly improved after 3 weeks of treatment. No adverse events were reported during this trial. The authors concluded that both types of acupuncture improved signs and symptoms in dry-eye patients after a 4-week treatment. However, verum acupuncture did not result in better outcomes than sham acupuncture.

Lee and colleagues (2011) evaluated the effectiveness of acupuncture as a treatment option for treating the condition of dry eye. These investigators searched the literature using 14 databases from their inceptions to December 3, 2009, without language restrictions. They included RCTs comparing acupuncture with conventional treatment. Their risk of bias was assessed using Cochrane criteria. A total of 6 RCTs met all the inclusion criteria. Three RCTs compared the effects of acupuncture with artificial tears in patients with xerophthalmia or Sjögren syndrome. A meta-analysis of these data showed that acupuncture improved tear break-up times (p < 0.0001), Schirmer test scores (p < 0.00001), response rates (p = 0.002) and the region of cornea fluorescent staining (p = 0.0001) significantly more than artificial tears did. The other 3 RCTs compared the effects of acupuncture plus artificial tears with artificial tears alone -- 2 of these studies failed to show significant effects of acupuncture, while 1 reported significant effects. For Schirmer test scores and frequency of artificial tear usage, 2 RCTs reported superior effects of acupuncture plus artificial tears, while 1 RCT failed to do so. The authors concluded that these findings provide limited evidence for the effectiveness of acupuncture for treating dry eye. However, the total number of RCTs, the total sample size and the methodological quality were too low to draw firm conclusions.

Standaert et al (2011) sought to answer the following clinical questions: (i) Is structured exercise more effective in the treatment of chronic LBP than spinal manipulative therapy (SMT)? (ii) Is structured exercise more effective in the treatment of chronic LBP than acupuncture? (iii) Is SMT more effective in the treatment of chronic LBP than acupuncture? (iv) Do certain subgroups respond more favorably to specific treatments? and (v) Are any of these treatments more cost-effective than the others? A systematic review of the literature was performed to identify RCTs comparing a structured exercise program, SMT, or

acupuncture with one another in patients with chronic LBP. Two studies were identified comparing the use of structured exercise with SMT that met the inclusion criteria. Although these studies utilized different approaches for the exercise and SMT treatment groups, patients in both groups improved in terms of pain and function in both studies. Using random-effects modeling, there was no difference between the exercise and SMT groups when the data from these studies were pooled. These researchers identified no studies meeting the inclusion criteria that compared acupuncture with either structured exercise or SMT or that addressed the relative cost-effectiveness of these approaches in the treatment of patients with chronic LBP. The authors concluded that studies identified indicate that structured exercise and SMT appear to offer equivalent benefits in terms of pain and functional improvement for those with chronic LBP with clinical benefits evident within 8 weeks of care. However, the level of evidence is low. There is insufficient evidence to comment on the relative benefit of acupuncture compared with either structured exercise or SMT or to address the differential effects of structured exercise, SMT, or acupuncture for specific subgroups of individuals with chronic LBP. There is also insufficient evidence regarding the relative cost-effectiveness of structured exercise, SMT, or acupuncture in the treatment of chronic LBP. Structured exercise and SMT appear to offer equivalent benefits in the management of pain and function for patients with non-specific chronic LBP. If no clinical benefit is appreciated after using one of these approaches for 8 weeks, then the treatment plan should be re-evaluated and consideration should be given to modifying the treatment approach or using alternate forms of care. There is insufficient evidence regarding the relative benefits of the acupuncture compared with either structured exercise or SMT in the treatment of chronic LBP. There is insufficient evidence to address differential effects of structured exercise, SMT, or acupuncture for specific subgroups of individuals with chronic LBP. There is insufficient evidence regarding the relative cost-effectiveness of structured exercise, SMT, or acupuncture in the treatment of chronic LBP.

In a prospective, randomized, controlled, cross-over trial, Lam et al (2011) evaluated the safety and adjunctive effect of acupuncture added to refractive correction for anisometropic amblyopia in younger children. A total of 83 children aged 3 to less than 7 years with untreated anisometropic amblyopia and baseline best-corrected visual acuity (BCVA) of 20/40 to 20/200 in the amblyopic eye were included in this study. Participants were randomized to receive spectacles alone (group 1; n = 42) or spectacles + acupuncture (group 2; n = 41) for 15 weeks, and were then crossed-over to receive the other regimen for another 15 weeks. The BCVA in both eyes was measured at baseline and every 5 (+/- 1) weeks for the initial 45 weeks and at 60 (+/- 1) weeks. Main outcome measures were BCVA in the amblyopic eye at 15, 30, and 60 weeks. The mean baseline BCVA in the amblyopic eye was 0.50 and 0.49 logarithm of the minimum angle of resolution (logMAR) in groups 1 and 2, respectively. After 15 weeks of treatment, the BCVA had improved by a mean of 2.2 lines in group 1 and 2.9 lines in group 2. The mean difference in BCVA between groups was 0.77 lines (95 % CI: 0.29 to 1.3; p = 0.0020) with baseline adjustment. BCVA of less than or equal to 0.1 logMAR was achieved in 14.6 % of the patients in group 1 and 57.5 % in group 2 (p < 0.00010). After the regimens were crossed-over at 30 weeks, group 1 had a mean of 1.2 (95 % CI: 0.98 to 1.48) lines additional improvement from the 15-week BCVA, whereas in group 2 the mean improvement was 0.4 (95 % CI: 0.19 to 0.63)
lines. The proportions of responders, resolution, and participants achieving a BCVA of less than or equal to 0.1 logMAR at 30 weeks were similar between groups. After completion of acupuncture, only 1 participant had greater than 1 line of VA decrease to 60 weeks. Acupuncture was well-tolerated by all children, and no severe adverse effect was encountered. The authors concluded that acupuncture is a potentially useful complementary treatment modality that may provide sustainable adjunctive effect to refractive correction for anisometropic amblyopia in young children. They stated that acupuncture has good potential to become a complimentary therapeutic modality for amblyopia, and further large-scale studies seem warranted.

In a Cochrane review, Cheuk et al (2011) examined the effectiveness of acupuncture for people with autism spectrum disorders (ASD) in improving core autistic features, as well as communication, cognition, overall functioning and quality of life, and established if it has any adverse effects. These investigators searched the following databases on September 30, 2010: CENTRAL (The Cochrane Library, 2010, Issue 3), MEDLINE (1950 to September 2010 Week 2), EMBASE (1980 to 2010 Week 38), PsycINFO, CINAHL, China Journal Full-text Database, China Master Theses Full-text Database, China Doctor Dissertation Full-text Database, China Proceedings of Conference Database, Index to Taiwan Periodical Literature System, metaRegister of Controlled Trials and the Chinese Clinical Trials Registry. They also searched AMED (February 26, 2009) and Dissertation Abstracts International (March 3, 2009), but these were no longer available to the authors or editorial base at the date of the most recent search. TCMLARS (Traditional Chinese Medical Literature Analysis and Retrieval System) was last searched on March 3, 2009. These researchers included RCTs and quasi-RCTs. They included studies comparing an acupuncture group with at least one control group that used no treatment, placebo or sham acupuncture treatment in people with ASD. They excluded trials that compared different forms of acupuncture or compared acupuncture with another treatment. Two review authors independently extracted trial data and assessed the risk of bias in the trials. They used relative risk (RR) for dichotomous data and mean difference (MD) for continuous data. The authors included 10 trials that involved 390 children with ASD. The age range was 3 to 18 years and the treatment duration ranged from 4 weeks to 9 months. The studies were carried out in Hong Kong, mainland China and Egypt. Two trials compared needle acupuncture with sham acupuncture and found no difference in the primary outcome of core autistic features (RFRLRS total score: MD 0.09; 95% CI: -0.03 to 0.21, p = 0.16), although results suggested needle acupuncture might be associated with improvement in some aspects of the secondary outcomes of communication and linguistic ability, cognitive function and global functioning. Six trials compared needle acupuncture plus conventional treatment with conventional treatment alone. The trials used different primary outcome measures and most could not demonstrate effectiveness of acupuncture in improving core autistic features in general, though 1 trial reported patients in the acupuncture group were more likely to have improvement on the Autism Behavior Checklist (RR 1.53; 95% CI: 1.09 to 2.16, p = 0.02) and had slightly better post-treatment total scores (MD -5.53; 95% CI: -10.76 to -0.31, p = 0.04). There was no evidence that acupuncture was effective for the secondary outcome of communication and linguistic ability, though there seemed to be some benefit for the secondary outcomes of cognitive function.
and global functioning. Two trials compared acupressure plus conventional treatment with conventional treatment alone and did not report on the primary outcome. Individual study results suggested there may be some benefit from acupressure for certain aspects of the secondary outcomes of communication and linguistic ability, cognitive function and global functioning. Four trials reported some adverse effects, though there was little quantitative information, and at times both intervention and control groups experienced them. Adverse effects included bleeding, crying due to fear or pain, irritability, sleep disturbance and increased hyperactivity. None of the trials reported on quality of life. There are a number of problems with the evidence base: the trials were few in number and included only children; 6 of the trials were at high-risk of bias; they were heterogeneous in terms of participants and intervention; they were of short duration and follow-up; they reported inconsistent and imprecise results, and, due to carrying out large numbers of analyses, they were at risk of false positivity. The authors concluded that current evidence does not support the use of acupuncture for treatment of ASD. There is no conclusive evidence that acupuncture is effective for treatment of ASD in children and no RCTs have been carried out with adults. They stated that further high quality trials of larger size and longer follow-up are needed.

In a Cochrane review, Wei et al (2011) evaluated the safety and effectiveness of acupuncture in slowing the progression of myopia in children and adolescents. These investigators searched CENTRAL (which contains the Cochrane Eyes and Vision Group Trials Register) (The Cochrane Library 2011, Issue 7), MEDLINE (January 1950 to July 2011), EMBASE (January 1980 to July 2011), the Allied and Complementary Medicine Database (AMED) (January 1985 to July 2011), Latin American and Caribbean Health Sciences Literature Database (LILACS) (January 1982 to July 2011), the metaRegister of Controlled Trials (mRCT) (http://www.controlled-trials.com/), ClinicalTrials.gov (http://www.clinicaltrial.gov/), the National Center for Complementary and Alternative Medicine (NCCAM) (The first issue to August 2010), the Chinese Biological Medicine Database (CBM) (1978 to April 2011), China National Knowledge Infrastructure (CNKI) (1994 to April 2011) and VIP (1989 to April 2011). There were no date or language restrictions in the electronic searches for trials. CENTRAL, MEDLINE, EMBASE, AMED, LILACS, mRCT and ClinicalTrials.gov were last searched on 9 July 2011. NCCAM was searched up to August 2010 and CBM, CNKI, and VIP were last searched on April 6, 2011. These researchers included RCTs that included any type of acupuncture treatment for myopia in children and adolescents. Two authors independently evaluated the search results according to the inclusion and exclusion criteria. Two authors extracted and assessed data independently. They contacted the study investigator for missing data. The authors included 2 RCTs conducted in Taiwan with a total of 131 participants. They did not perform a meta-analysis as the trials were assessing different outcomes. Neither trial met the pre-defined primary outcome criteria of myopia progression defined as 1 diopter mean change. Only 1 trial reported the changes of axial length without non-significant difference among groups and both trials reported that several children experienced mild pain during acupuncture stimulation. Two trials were included in this review but no conclusions can be drawn for the benefit of co-acupressure for slowing progress of myopia in children. The authors concluded that further evidence in the form of RCTs are needed before any recommendations can be made for the use of acupuncture treatment in clinical use. These trials should compare acupuncture
to placebo and have large sample sizes. Other types of acupuncture (such as auricular acupuncture) should be explored further as well as compliance with treatment for at least 6 months or longer. Axial length elongation of the eye should be investigated for at least 1 year. The potential to reduce/eliminate pain from acupuncture experienced by children should also be reviewed.

The Canadian Thoracic Society’s clinical practice guideline on “Managing dyspnea in patients with advanced chronic obstructive pulmonary disease” (Marciniuk et al, 2011) noted that dyspnea is a cardinal symptom of chronic obstructive pulmonary disease (COPD), and its severity and magnitude increases as the disease progresses, leading to significant disability and a negative effect on quality of life. Refractory dyspnea is a common and difficult symptom to treat in patients with advanced COPD. There are many questions concerning optimal management and, specifically, whether various therapies are effective in this setting. These investigators addressed these important clinical issues using an evidence-based systematic review process led by a representative inter-professional panel of experts. The evidence supported the benefits of oral opioids, neuromuscular electrical stimulation, chest wall vibration, walking aids and pursed-lip breathing in the management of dyspnea in the individual patient with advanced COPD. Oxygen is recommended for COPD patients with resting hypoxemia, but its use for the targeted management of dyspnea in this setting should be reserved for patients who receive symptomatic benefit. There is insufficient evidence to support the routine use of anxiolytic medications, nebulized opioids, acupuncture, acupressure, distractive auditory stimuli (music), relaxation, hand-held fans, counseling programs or psychotherapy. There is also no evidence to support the use of supplemental oxygen to reduce dyspnea in non-hypoxemic patients with advanced COPD.

Williams et al (2012) stated that acne is a chronic inflammatory disease of the pilo-sebaceous unit resulting from androgen-induced increased sebum production, altered keratinization, inflammation, and bacterial colonization of hair follicles on the face, neck, chest, and back by Propionibacterium acnes. Although early colonization with P. acnes and family history might have important roles in the disease, exactly what triggers acne and how treatment affects the course of the disease remain unclear. Other factors such as diet have been implicated, but not proven. Facial scarring due to acne affects up to 20% of teenagers. Acne can persist into adulthood, with detrimental effects on self-esteem. There is no ideal treatment for acne, although a suitable regimen for reducing lesions can be found for most patients. Good quality evidence on comparative effectiveness of common topical and systemic acne therapies is scarce. Topical therapies including benzoyl peroxide, retinoids, and antibiotics when used in combination usually improve control of mild to moderate acne. Treatment with combined oral contraceptives can help women with acne. Patients with more severe inflammatory acne usually need oral antibiotics combined with topical benzoyl peroxide to decrease antibiotic-resistant organisms. Oral isotretinoin is the most effective therapy and is used early in severe disease, although its use is limited by teratogenicity and other side-effects. Availability, adverse effects, and cost, limit the use of photodynamic therapy. New research is needed into the therapeutic comparative effectiveness and safety of the many products available, and to better understand the natural history, subtypes, and triggers of acne. Moreover, the authors stated that complementary and alternative medicine (including acupuncture) can not be
recommended for the treatment of acne because it is not supported by good evidence.

Yan et al (2012) noted that burning mouth syndrome (BMS) is a common chronic pain condition that lacks a satisfactory treatment approach. These researchers examined the effects of acupuncture or acupoint injection on the management of BMS and evaluated the evidence supporting the use of acupuncture therapy for BMS in clinical practice. The following databases were searched for relevant articles: Cochrane Oral Health Group Trials Register (July 2011), Cochrane Central Register of Controlled Trials (issue 7, 2011), MEDLINE (1966 to June 2011), and electronic medical database from the China-National Knowledge Infrastructure (1979 to June 2011). Articles were screened, and the quality of the included trials was assessed independently by 2 reviewers. After screening, 9 studies with 547 randomized patients were included in this review. All 9 articles were published in Chinese and were clinical trial studies with a Jadad score of less than 3. Their results showed that acupuncture/acupoint injection may benefit patients with BMS. The evidence supported the efficacy of acupuncture/acupoint injection therapy in reducing BMS pain and related symptoms. The authors concluded that in light of the positive outcomes reported, the use of acupuncture therapy for BMS patients warrants further research.

Bo and colleagues (2012) evaluated the reports' qualities which are about RCTs of acupuncture treatment on diabetic peripheral neuropathy (DPN). A total of 8 databases including The Cochrane Library(1993 to Sept.,2011), PubMed (1980 to Sept., 2011), EMBase (1980 to Sept.,2011), SCI Expanded (1998 to Sept.,2011), China Biomedicine Database Disc (CBMdisc, 1978 to Sept., 2011), China National Knowledge Infrastructure (CNKI, 1979 to Sept., 2011 ), VIP (a full text issues database of China, 1989 to Sept., 2011), Wan Fang (another full text issues database of China 1998 to Sept., 2011) were searched systematically. Hand-search for further references was conducted. Language was limited to Chinese and English. These investigators identified 75 RCTs that used acupuncture as an intervention and assessed the quality of these reports with the Consolidated Standards for Reporting of Trials statement 2010 (CONSORT2010) and Standards for Reporting Interventions Controlled Trials of Acupuncture 2010(STRICITA2010). A total of 24 articles (32 %) applied the method of random allocation of sequences. No article gave the description of the mechanism of allocation concealment, no experiment applied the method of blinding. Only 1 article (1.47 %) could be identified directly from its title as about the RCTs, and only 4 articles gave description of the experimental design. No article mentioned the number of cases lost or eliminated. During 1 experiment, acupuncture syncope led to temporal interruption of the therapy. Two articles (2.94 %) recorded the number of needles, and 8 articles (11.76 %) mentioned the depth of needle insertion. None of articles reported the base of calculation of sample size, or has any analysis about the metaphase of an experiment or an explanation of its interruption. One (1.47 %) mentioned intentional analysis (ITT). The authors concluded that the quality of the reports on RCTs of acupuncture for diabetic peripheral neuropathy is moderate to low. They stated that the CONSORT2010 and STRICTA2010 should be used to standardize the reporting of RCTs of acupuncture in future.

In a meta-analysis, Wang et al (2012) evaluated the effectiveness of acupuncture in facial spasm. The research team categorized results from each of the reviewed
studies in 2 ways: (i) the number of participants who showed a positive response to therapy (total effectiveness rate), and (ii) the number of participants who made a full recovery (clinical cure rate). The research team reviewed a total of 13 studies involving 1,262 participants with facial spasm. Researchers in China had conducted all studies, and most studies were poor in methodological quality. All studies reported that acupuncture was superior to other treatments, including carbamazepine, mecobalamin, and massage, and the meta-analysis on these low-quality studies yielded similar results. The authors concluded that present trials evaluating the effectiveness of acupuncture in treatment of facial spasm are mostly poor in methodological quality. These studies showed that acupuncture was superior to other treatments for facial spasm; however, in its meta-analysis, the research team could not draw an affirmative conclusion as to the benefits of acupuncture due to the poor methodological quality and localized population of the included trials. The authors concluded that the field needs large international, well-conducted RCTs.

In a Cochrane review, He and colleagues (2012) evaluated the safety and effectiveness of acupuncture for children with mumps. These investigators searched CENTRAL (2012, Issue 4), MEDLINE (1950 to April week 4, 2012), EMBASE (1974 to May 2012), CINAHL (1981 to May 2012), AMED (1985 to May 2012), the Chinese BioMedicine Database (CBM) (1979 to May 2012), China National Knowledge Infrastructure (CNKI) (1979 to May 2012), Chinese Technology Periodical Database (CTPD) (1989 to May 2012) and WANFANG database (1982 to May 2012). They also hand-searched a number of journals (from first issue to current issue). These researchers included RCTs comparing acupuncture with placebo acupuncture, no management, Chinese medication, Western medication or other treatments for mumps. Acupuncture included either traditional acupuncture or contemporary acupuncture, regardless of the source of stimulation (body, electro, scalp, fire, hand, fine needle, moxibustion). Two review authors independently extracted data and assessed the quality of included studies. They calculated risk ratios (RR) with their 95% CI for the effective percentage and standardized mean differences (SMD) with 95% CIs for the time to cure. Only 1 study with 239 participants met the inclusion criteria. There were a total of 120 participants in the acupuncture group, of which 106 recovered, with their temperature returning back to normal and no swelling or pain of the parotid gland; the condition of 14 participants improved, with a drop in temperature and alleviation of swelling or pain of the parotid gland. There were 119 participants in the Western medicine group, of which 56 recovered and the condition of 63 improved. The acupuncture group had a higher recovery rate than the control group. The relative RR of recovery was 1.88 (95% CI: 1.53 to 2.30). However, the acupuncture group had a longer time to cure than the control group. The mean was 4.20 days and the standard deviation (SD) was 0.46 in the acupuncture group, while in the control group the mean was 3.78 days and the SD was 0.46. There was a potential risk of bias in the study because of low methodological quality. The authors concluded that they could not reach any confident conclusions about the safety and effectiveness of acupuncture based on 1 study. They stated that more high-quality research is needed.

The American Academy of Otolaryngology-Head and Neck Surgery Foundation (AAO-HNSF)’s clinical practice guideline on “Bell’s palsy” (Baugh et al, 2013)
stated that “no recommendation can be made regarding the effect of acupuncture in patients with Bell’s palsy”.

Zhang et al (2014) systematically examined published reviews and meta-analyses in order to determine if and when acupuncture is an effective treatment for stroke and stroke-related disorders. These investigators also hoped to identify the best directions for future research in this area. Systematic reviews and meta-analyses of RCTs and quasi-RCTs evaluating the effectiveness of acupuncture to treat stroke or stroke-related conditions were included. Electronic searches were conducted in the Cochrane Database of Systematic Reviews, Ovid MEDLINE, CINAHL, Ovid EMBASE, EBSCO Allied and Complementary Medicine (AMED) database, Chinese Biological Medicine Database, and Chinese National Knowledge Infrastructure Database. Two authors independently assessed the compliance of studies with eligibility criteria, and extracted data from included studies. The quality of systematic reviews was assessed according to the Overview Quality Assessment Questionnaire. A total of 24 systematic reviews were included, of which 4 (16.7%) were Cochrane systematic reviews and 20 (83.3%) were non-Cochrane reviews. Acupuncture was analyzed as an acute stroke intervention in 3 reviews (12.5 %), as an approach to stroke rehabilitation in 6 (25 %), and as an intervention to treat various stroke-related disorders in the remaining 15 (62.5 %). Reviews analyzing death or dependency/disability as the primary outcome reported no statistically significant difference between acupuncture and non-acupuncture control treatments. In contrast, reviews in which the outcome was improvement in global neurological deficit scores or performance on the video-fluoroscopic swallowing study test or water-swallowing test often reported that acupuncture was superior to control treatment. The quality of 10 reviews was “poor”, 6 reviews were “moderate” and 8 were “good”. The authors concluded that the available evidence suggests that acupuncture may be effective for treating post-stroke neurological impairment and dysfunction such as dysphagia, although these reported benefits should be verified in large, well-controlled studies. On the other hand, the available evidence does not clearly indicate that acupuncture can help prevent post-stroke death or disability, or ameliorate other aspects of stroke recovery, such as post-stroke motor dysfunction. These findings suggest that researchers should focus on the potential application of acupuncture to treat post-stroke neurological impairment and dysfunction and on the development of more precise tools to assess these improvements after stroke.

Zeng and associates (2013) evaluated the effectiveness of acupuncture for cancer-related fatigue (CRF). Five databases (Medline, CINAHL, Scopus, the Cochrane Library, and CAJ Full-text Database) were searched up to May 2013. Randomized controlled trials of acupuncture for the treatment of CRF were considered for inclusion. A total of 7 RCTs were included for meta-analysis, involving a total of 689 subjects. Three studies compared acupuncture with sham acupuncture for CRF with follow-up at 10 weeks; the standardized mean difference (SMD) for general CRF change values was -0.82 (95 % CI: -1.90 to 0.26). When acupuncture plus education intervention was compared with usual care, there was a statistically significant difference for the change score of general CRF (SMD = -2.12; 95 % CI: -3.21 to -1.03). The SMD for general CRF change scores between acupuncture with no treatment or wait-list control was -1.46 (95 % CI: -3.56 to 0.63). Finally, the SMD for general CRF change scores between
acupuncture with acupressure or self-acupuncture was -1.12 (95 % CI: -3.03 to 0.78). Three trials reported data for general quality of life and functioning status, reporting enough data for statistical pooling but showing no statistically significant difference ( : score = 1.15, := 0.25, SMD = 0.99, 95 % CI: -0.70 to 2.68 and : score = 1.13, := 0.26, SMD = 1.38, 95 % CI: -1.02 to 3.79, respectively). The : 2 statistics of all statistically pooled data were higher than 50 %, indicating heterogeneity between the trials. The authors concluded that there were 4 sets of comparison for the effectiveness of acupuncture for CRF; statistical pooling of the reduction in CRF from baseline to follow-up showed in favor of acupuncture. However, 3 sets of comparison for the pooled estimates of effect sizes had no statistical significance. Although one set of comparison (acupuncture plus education interventions versus usual care) had statistically significant differences, it is unclear whether this pooled positive outcome is attributable to the effects of acupuncture or to the education intervention. In addition, the duration of follow-up in these included trials was up to 10 weeks, and some RCTs had methodological flaws. They stated that further rigorously designed RCTs adhering to acceptable standards of trial methodology are needed to determine the effectiveness of acupuncture and its long-term effects on CRF.

Cao and colleagues (2013) evaluated the safety and effectiveness of acupuncture for patients with vascular mild cognitive impairment (VMCI). A total of 7 electronic databases were searched for RCTs that investigated the effects of acupuncture compared with no treatment, placebo or conventional therapies on cognitive function or other clinical outcomes in patients with VMCI. The quality of the trials selected was evaluated according to the “risk of bias” assessment provided by the Cochrane Handbook for Systematic Reviews of Interventions. RevMan V.5.1 software was employed for data analysis. A total of 12 trials with 691 participants were included. The methodological quality of all included trials was unclear and/or they had a high-risk of bias. Meta-analysis showed acupuncture in conjunction with other therapies could significantly improve Mini-Mental State Examination scores (mean difference 1.99, 95 % CI: 1.09 to 2.88, random model, p < 0.0001, 6 trials). No included trials mentioned any adverse events of the treatment. The authors concluded that the current clinical evidence is not of sufficient quality for wider application of acupuncture to be recommended for the treatment of VMCI; they stated that further large, rigorously designed trials are warranted.

Yang et al (2013) conducted a systematic review of RCTs to evaluate the effectiveness of acupuncture for diabetic gastroparesis (DGP). These investigators searched PubMed, EMBase, Cochrane Central Register of Controlled Trials (CENTRAL) and 4 Chinese databases including China National Knowledge Infrastructure (CNKI), VIP Database for Chinese Technical Periodicals, Chinese Biomedical Literature Database (CBM) and WanFang Data up to January 2013 without language restriction. Eligible RCTs designed to examine the effectiveness of acupuncture in improving dyspeptic symptoms and gastric emptying in DGP were selected for analysis. Risk of bias, study design and outcomes were extracted from trials. Relative risk (RR) was calculated for dichotomous data. Mean difference (MD) and standardized mean difference (SMD) were selected for continuous data to pool the overall effect. These investigators searched 744 studies, among which 14 RCTs were considered eligible. Overall, acupuncture treatment had a high response rate than controls (RR, 1.20 [95 % CI: 1.12 to 1.29], p < 0.00001), and significantly improved dyspeptic symptoms compared with
the control group. There was no difference in solid gastric emptying between acupuncture and control. Acupuncture improved single dyspeptic symptom such as nausea and vomiting, loss of appetite and stomach fullness. Most studies were in unclear and high-risk of bias and with small sample size (median = 62). The majority of the RCTs reported positive effect of acupuncture in improving dyspeptic symptoms. The authors concluded that the results suggested that acupuncture might be effective to improve dyspeptic symptoms in DGP, while a definite conclusion about whether acupuncture was effective for DGP could not be drawn due to the low quality of trials and possibility of publication bias. They stated that further large-scale, high-quality RCTs are needed to validate this claim and translate this result to clinical practice.

In a prospective, blinding-validated, randomized controlled multi-center trial, Skjeie et al (2013) tested the hypothesis that acupuncture treatment has a clinically relevant effect for infantile colic. Research assistants and parents were blinded. Intervention was 3 days of bilateral needling of the acupuncture point ST36, with no treatment as control. A total of 113 patients were recruited; 23 patients were excluded, and 90 randomized; 79 diaries and 84 interviews were analyzed. Main outcome measures were difference in changes in crying time during the trial period between the intervention and control group. The blinding validation questions showed a random distribution with p = 0.41 and 0.60, indicating true blinding. These researchers found no statistically significant difference in crying time reduction between acupuncture and control group at any of the measured intervals, nor in the main analysis of differences in changes over time (p = 0.26). There was a tendency in favor of the acupuncture group, with a non-significant total baseline-corrected mean of 13 minutes (95% CI: -24 to +51) difference in crying time between the groups. This was not considered clinically relevant, according to protocol. The authors concluded that this trial of acupuncture treatment for infantile colic showed no statistically significant or clinically relevant effect; they suggested that acupuncture for infantile colic should be restricted to clinical trials.

Zhang et al (2013) analyzed the effectiveness of acupoint application therapy for infantile diarrhea. The authors of the present paper did a literature retrieval using the China National Knowledge Infrastructure (CNKI) database, Chinese biomedical database and Wanfang database covering the period of January 1, 1990 to June 30, 2012, and made a systemic evaluation on the retrieved RCTs of acupoint application therapy for infantile diarrhea using Cochrane system evaluation method. Following excluding the repetitive, irrelevant and non-RCTs, those meeting the standards of RCTs were collected. Trial quality was assessed using the Jadad score that evaluates the randomization process, blinding, and the description of withdrawals or drop-outs. The RevMan 5. 1 software was used to make statistical analysis. A total of 16 papers (2,151 patients) were included in the meta-analysis. The homogeneity test was better (chi² = 8.09, p = 0.92, I² = 0 %), displaying a homogeneity of most studies. Meta-analysis showed the merger effect quantity OR = 4.68, and 95% CIs: 3.41 to 6.42, and the merger effect value test Z = 9.58, p < 0.00001. Statistical difference indicates a better therapeutic effect of acupoint application group than the control group, providing evidence in favor of acupoint application therapy for infantile diarrhea. Funnel chart displays that the researched object distribution is symmetric, being smaller in the bias. But the potential publication bias still possibly exists. The authors concluded that
Acupoint application therapy for infantile diarrhea has some advantages, which needs further confirmation due to lower quality of the collected literatures. They stated that larger sample, high quality RCTs are highly recommended.

Zhu and colleagues (2013) examined the safety and effectiveness of acupuncture for pain in endometriosis. These investigators searched the Cochrane Menstrual Disorders and Subfertility Group (MSDG) Specialized Register of controlled trials, Cochrane Central Register of Controlled Trials (CENTRAL) (The Cochrane Library), MEDLINE, EMBASE, CINAHL, AMED, PsycINFO, CNKI and TCMDS (from inception to 2010) and reference lists of retrieved articles. Randomized single or double-blind controlled trials enrolling women of reproductive age with a laparoscopically confirmed diagnosis of endometriosis and comparing acupuncture (body, scalp or auricular) to either placebo or sham, no treatment, conventional therapies or Chinese herbal medicine were selected for analysis. Three authors independently assessed risk of bias and extracted data; they contacted study authors for additional information. Meta-analyses were not performed as only 1 study was included. The primary outcome measure was decrease in pain from endometriosis. Secondary outcome measures included improvement in quality of life scores, pregnancy rate, adverse effects and rate of endometriosis recurrence. A total of 24 studies were identified that involved acupuncture for endometriosis; however only 1 trial, enrolling 67 participants, met all the inclusion criteria. The single included trial defined pain scores and cure rates according to the Guideline for Clinical Research on New Chinese Medicine. Dysmenorrhea scores were lower in the acupuncture group (mean difference -4.81 points, 95 % CI: -6.25 to -3.37, p < 0.00001) using the 15-point Guideline for Clinical Research on New Chinese Medicine for Treatment of Pelvic Endometriosis scale. The total effective rate (“cured”, “significantly effective” or “effective”) for auricular acupuncture and Chinese herbal medicine was 91.9 % and 60 %, respectively (risk ratio 3.04, 95 % CI: 1.65 to 5.62, p = 0.0004). The improvement rate did not differ significantly between auricular acupuncture and Chinese herbal medicine for cases of mild-to-moderate dysmenorrhea, whereas auricular acupuncture did significantly reduce pain in cases of severe dysmenorrhea. Data were not available for secondary outcomes measures. The authors concluded that the evidence to support the effectiveness of acupuncture for pain in endometriosis is limited, based on the results of only a single study that was included in this review. This review highlighted the necessity for developing future studies that are well-designed, double-blinded, RCTs that assess various types of acupuncture in comparison to conventional therapies.

Acupoint Point Injection:

Acupuncture point injection (also known as acupoint injection therapy, biopuncture) entails the injection of small amounts of saline or other substances (e.g., Chinese herbal extracts, drugs, homeopathic substances, vitamin B12, and vitamin K) into acupuncture points/trigger points by qualified acupuncturists. Similar to acupuncture, fine needles are inserted into acupuncture points/trigger points just under the skin or into muscles. However, there is insufficient evidence to support the effectiveness of this approach.

In a Cochrane review, Green et al (2002) evaluated the effectiveness of acupuncture in the treatment of adults with lateral elbow pain with respect to pain...
reduction, improvement in function, grip strength and adverse effects. These investigators searched MEDLINE, CINAHL, EMBASE and SCISEARCH and the Cochrane Clinical Trials Register and the Musculoskeletal Review Group's specialist trial database from 1966 to June 2001. Identified keywords and authors were searched in an effort to retrieve as many trials as possible. Two independent reviewers assessed all identified trials against pre-determined inclusion criteria. Randomized and pseudo-randomized trials in all languages were included in the review provided they were testing acupuncture compared to placebo or another intervention in adults with lateral elbow pain (tennis elbow). Outcomes of interest were pain, function, disability, quality of life, strength, participant satisfaction with treatment and adverse effect. For continuous variables means and standard deviations were extracted or imputed to allow the analysis of weighted mean difference, while for binary data numbers of events and total population were analyzed and interpreted as relative risks. Trial results were combined only in the absence of clinical and statistical heterogeneity. A total of 4 small RCTs were included but due to flaws in study designs (particularly small populations, uncertain allocation concealment and substantial loss to follow-up) and clinical differences between trials, data from trials could not be combined in a meta-analysis. One RCT found that needle acupuncture results in relief of pain for significantly longer than placebo (WMD = 18.8 hours, 95 % CI: 10.1 to 27.5) and is more likely to result in a 50 % or greater reduction in pain after 1 treatment (RR 0.33, 95 % CI: 0.16 to 0.69) (Molsberger 1994). A second RCT demonstrated needle acupuncture to be more likely to result in overall participant reported improvement than placebo in the short term (RR = 0.09 95 % CI: 0.01 to 0.64) (Haker 1990a). No significant differences were found in the longer term (after 3 or 12 months). A RCT of laser acupuncture versus placebo demonstrated no differences between laser acupuncture and placebo with respect to overall benefit (Haker 1990b). A 4th RCT included trial published in Chinese demonstrated no difference between vitamin B12 injection plus acupuncture, and vitamin B12 injection alone (Wang 1997). The authors concluded that there is insufficient evidence to either support or refute the use of acupuncture (either needle or laser) in the treatment of lateral elbow pain. This review has demonstrated needle acupuncture to be of short-term benefit with respect to pain, but this finding is based on the results of 2 small trials, the results of which were not able to be combined in meta-analysis. No benefit lasting more than 24 hours following treatment has been demonstrated. No trial assessed or commented on potential adverse effect. They stated that further trials, utilizing appropriate methods and adequate sample sizes, are needed before conclusions can be drawn regarding the effect of acupuncture on tennis elbow.

In a prospective, observational, pilot study, Wang et al (2004) examined the effects of vitamin K acupuncture point injection on menstrual pain in young women aged 14 to 25 from different countries and cultural backgrounds who have had unmitigated severe primary dysmenorrhea for 6 months or more. All subjects were treated with bilateral acupuncture point injection of vitamin K on the first or second day of menstrual pain. Pain intensity, total duration, and average intensity of menstrual distress, hours in bed, normal daily activity restrictions, and numbers of analgesic tablets taken to relieve pain were recorded before the treatment and for 4 subsequent menstrual cycles. Noticeable pain relief was observed 2 mins after treatment, and subsequent pain reduction occurred at 30 mins (p < 0.001).
Subjects reported significantly fewer daily life restrictions, fewer hours in bed, less consumption of analgesic tablets, and lower scores of menstrual pain duration and intensity ($p < 0.001$). There were no adverse events. Some women experienced mild, self-limited pain at the injection site. The authors concluded that acupuncture point injection with vitamin K alleviated acute menstrual pain, and relief extended through the non-treatment follow-up cycles in this uncontrolled pilot study conducted in 2 countries. They stated that further investigation employing controlled experimental designs is warranted.

Liang et al (2011) reported the findings of 2 patients with amyotrophic lateral sclerosis (ALS) who were treated with 4 weeks of acupuncture injection point therapy using Enercel. These patients were administered 0.25 to 0.5 cc Enercel Plus IM to specific acupuncture points for 5 days per week for 4 weeks. Patient 1 exhibited flaccid paralysis of all 4 extremities and impaired speech and swallowing. By Week 4, she demonstrated significant improvement in her motor strength in all 4 extremities (R>L) and improved speech and swallowing. However, she did not continue to receive the Enercel acupuncture injections, and she subsequently demonstrated a slow, progressive loss of neurological function during the ensuing 3 months, as shown on follow-up examinations. Patient 2 had significantly impaired speech and mild motor loss in the upper extremities and the left leg. After 4 weeks of treatment, his voice had significantly improved to the point where his speech was understandable and his motor functions had returned to normal. He continued receiving Enercel acupuncture injections during the 3-month follow-up period and his clinical improvements were maintained. Thus, these 2 patients with ALS showed clinical improvements after 4 weeks of Enercel acupuncture injection therapy. Follow-up data suggested that ongoing therapy may be necessary in order to maintain these positive effects. The authors concluded that the findings of this preliminary study merits further study and confirmation.

In a Cochrane review, Paley et al (2011) evaluated effectiveness of acupuncture for relief of cancer-related pain in adults. CENTRAL, MEDLINE, EMBASE, PsycINFO, AMED, and SPORTDiscus were searched up to November 2010 including non-English language papers. Randomized controlled trials evaluating any type of invasive acupuncture for pain directly related to cancer in adults of 18 years or over were selected for analysis. It was planned to pool data to provide an overall measure of effect and to calculate the number needed to treat to benefit, but this was not possible due to heterogeneity. Two review authors independently extracted data adding it to data extraction sheets. Quality scores were given to studies. Data sheets were compared and discussed with a third review author who acted as arbiter. A total of 3 RCTs (204 participants) were included. One high-quality study investigated the effect of auricular acupuncture compared with auricular acupuncture at “placebo” points and with non-invasive vaccaria ear seeds attached at “placebo” points. Participants in 2 acupuncture groups were blinded but blinding wasn’t possible in the ear seeds group because seeds were attached using tape. This may have biased results in favor of acupuncture groups. Participants in the real acupuncture group had lower pain scores at 2-month follow-up than either the placebo or ear seeds group. There was high-risk of bias in 2 studies because of low methodological quality. One study comparing acupuncture with medication concluded that both methods were effective in controlling pain, although acupuncture was the most effective. The second study compared acupuncture, point-injection and medication in participants with stomach
cancer. Long-term pain relief was reported for both acupuncture and point-injection compared with medication during the last 10 days of treatment. Although both studies have positive results in favor of acupuncture, they should be viewed with caution due to methodological limitations, small sample sizes, poor reporting and inadequate analysis. The authors concluded that there is insufficient evidence to judge whether acupuncture is effective in treating cancer-related pain in adults.

In a pilot study, Park et al (2011) examined the possibility of Carthami-Semen (CS, Safflower seed) acupuncture point injection as a new promising treatment for chronic daily headache (CDH). A total of 40 subjects with CDH were recruited and randomized to a CS acupuncture point injection group or a normal saline (NS) acupuncture point injection group. Acupuncture point injections were applied twice-weekly during a 4-week period to the bilateral Fengchi (GB20), Jianjing (GB21) and Taiyang (EX-HN5) acupoints with CS extract or NS. The primary outcome measure was headache-related quality of life (QoL), assessed using the Headache Impact Test (HIT). Secondary outcome measures were the changes in the number of headache-free days and health status as assessed with the Short Form (36) Health Survey (SF-36). HIT scores decreased by 14.9 points in the CS acupuncture point injection group compared with 7.9 points in the NS acupuncture point injection group ($p = 0.013$). Headache-free days increased by 32.6% in the CS acupuncture point injection group compared with 17.4% in the NS acupuncture point injection group ($p = 0.045$). There were significant increases in SF-36 scores compared with baseline in both groups, but the mean improvement was greater in the CS acupuncture point injection group. No serious adverse events were reported. The authors stated that these findings suggested that the CS acupuncture point injection could be a new safe and promising treatment for CDH. They stated that a larger and long-term follow-up trial is needed to determine more definitely the efficacy of CS acupuncture point injection and to elucidate how long the effect lasts.

Zhang et al (2012) examined the effects of acupoint injection on cervical spondylosis. Electronic retrieval was carried out on literatures from the period of May 1, 2006 to June 1, 2011 in databases of PubMed, ISI web of knowledge and CNKI. The selected literatures were summarized and classified from 3 aspects of acupoints selection, medication selection and manipulations. The authors noted that cervical Jiaji (EX-B 2) points, Fengchi (GB 20) and Ashi points are common acupoints. The medications contain simple Chinese herbs (e.g., Danggui injection, etc.) and compound Chinese herbs (e.g., compound Danggui injection, etc.), simple western medicine (e.g., vitamin B family) and Chinese herbs combined with western medicine (compound Danggui combined with vitamin B12). Disposable syringes were used for injection equipment. The authors stated that while acupoint injection in treating cervical spondylosis is effective, however, mechanism studies are still deficient since most of the researches focused on clinical observation. They concluded that manipulation of acupoint injection is not standardized; laws of clinical effect are unclear. Thus, they stated that "the above mentioned defects are still remained for further improvement".

Bae et al (2014) conducted a meta-analysis of an array of appropriate studies to evaluate the pre-operative anxiolytic efficacy of acupuncture therapy. Four electronic databases (MEDLINE, EMBASE, CENTRAL, and CINAHL) were searched up to February 2014. In the meta-analysis, data were included from
RCT studies in which groups receiving pre-operative acupuncture treatment were compared with control groups receiving a placebo for anxiety. A total of 14 publications (n = 1,034) were included. Six publications, using the State-Trait Anxiety Inventory-State (STAI-S), reported that acupuncture interventions led to greater reductions in pre-operative anxiety relative to sham acupuncture (mean difference = 5.63, p < 0.00001, 95 % CI: 4.14 to 7.11). Further 8 publications, employing VAS, also indicated significant differences in pre-operative anxiety amelioration between acupuncture and sham acupuncture (MD = 19.23, p < 0.00001, 95 % CI: 16.34 to 22.12). The authors concluded that acupuncture therapy aiming at reducing pre-operative anxiety has a statistically significant effect relative to placebo or non-treatment conditions. They stated that well-designed and rigorous studies that employ large sample sizes are needed to corroborate this finding.

Ryu et al (2014) stated that to explore the pain mechanism, numerous animal models have been developed to simulate specific human pain conditions, including cancer-induced bone pain (CIBP). In this study, these researchers analyzed the current research methodology of acupuncture for the treatment of CIBP. They electronically searched the PubMed database for animal studies published from 2000 onward using these search terms: (bone cancer OR cancer) AND (pain OR analgesia) AND (acupuncture OR pharmacopuncture OR bee venom). They selected articles that described cancer pain in animal models. These investigators analyzed the methods used to induce cancer pain and the outcome measures used to assess the effects of acupuncture on CIBP in animal models. They reviewed articles that met their inclusion criteria. Injection of mammary cancer cells into the cavity of the tibia was the most frequently used method for inducing CIBP in the animal models. Among the 8 selected studies, 5 demonstrated the effects of electroacupuncture on CIBP. The effects of acupuncture were assessed by measuring pain-related behavior. The authors concluded that future researches will be needed to ascertain the effectiveness of acupuncture for treating CIBP and to explore the specific mechanism of CIBP in animal models.

In a Cochrane review, Shen et al (2014) examined the effects of acupuncture, alone or in combination treatments compared with placebo (or no treatment) or any other treatments for people with schizophrenia or related psychoses. These investigators searched Cochrane Schizophrenia Group’s Trials Register (February 2012), which was based on regular searches of CINAHL, BIOSIS, AMED, EMBASE, PubMed, MEDLINE, PsycINFO and clinical trials registries. They also inspected references of identified studies and contacted relevant authors for additional information. They included all relevant RCTs involving people with schizophrenia-like illnesses, comparing acupuncture added to standard dose anti-psychotics with standard dose anti-psychotics alone, acupuncture added to low dose anti-psychotics with standard dose anti-psychotics, acupuncture with anti-psychotics, acupuncture added to Traditional Chinese Medicine (TCM) drug with TCM drug, acupuncture with TCM drug, electric acupuncture convulsive therapy with electroconvulsive therapy. These researchers reliably extracted data from all included studies, discussed any disagreement, documented decisions and contacted authors of studies when necessary. They analyzed binary outcomes using a standard estimation of RR and its 95 % CI. For continuous data, they calculated MDs with 95 % CI. For homogeneous data they used fixed-effect model. They assessed risk of bias for included studies and created “Summary of
findings” tables using GRADE. After an update search in 2012 the review included 30 studies testing different forms of acupuncture across 6 different comparisons. All studies were at moderate risk of bias. When acupuncture plus standard anti-psychotic treatment was compared with standard anti-psychotic treatment alone, people were at less risk of being “not improved” (n = 244, 3 RCTs, medium-term RR 0.40 CI: 0.28 to 0.57, very low quality evidence). Mental state findings were mostly consistent with this finding as was time in hospital (n = 120, 1 RCT, days MD -16.00 CI: -19.54 to -12.46, moderate quality evidence). If anything, adverse effects were less for the acupuncture group (e.g., central nervous system, insomnia, short-term, n = 202, 3 RCTs, RR 0.30 CI: 0.11 to 0.83, low quality evidence). When acupuncture was added to low dose anti-psychotics and this was compared with standard dose anti-psychotic drugs, relapse was less in the experimental group (n = 170, 1 RCT, long-term RR 0.57 CI: 0.37 to 0.89, very low quality evidence) but there was no difference for the outcome of “not improved”. Again, mental state findings were mostly consistent with the latter. Incidences of extra-pyramidal symptoms -- akathisia, were less for those in the acupuncture added to low dose anti-psychotics group (n = 180, 1 RCT, short-term RR 0.03 CI: 0.00 to 0.49, low quality evidence) -- as dry mouth, blurred vision and tachycardia. When acupuncture was compared with anti-psychotic drugs of known efficacy in standard doses, there were equivocal data for outcomes such as “not improved” using different global state criteria. Traditional acupuncture added to TCM drug had benefit over use of TCM drug alone (n = 360, 2 RCTs, RR no clinically important change 0.11 CI: 0.02 to 0.59, low quality evidence), but when traditional acupuncture was compared with TCM drug directly there was no significant difference in the short-term. However, these researchers found that participants given electroacupuncture were significantly less likely to experience a worsening in global state (n = 88, 1 RCT, short-term RR 0.52 CI: 0.34 to 0.80, low quality evidence). In the 1 study that compared electric acupuncture convulsive therapy with electroconvulsive therapy there were significantly different rates of spinal fracture between the groups (n = 68, 1 RCT, short-term RR 0.33 CI: 0.14 to 0.81, low quality evidence). Attrition in all studies was minimal. No studies reported death, engagement with services, satisfaction with treatment, quality of life, or economic outcomes. The authors concluded that limited evidence suggested that acupuncture may have some anti-psychotic effects as measured on global and mental state with few adverse effects. They stated that better designed large studies are needed to fully and fairly test the effects of acupuncture for people with schizophrenia.

Park et al (2014) reviewed the available literature on the use of acupuncture as a treatment for spasticity in patients with stroke. Randomized trials assessing the effects of acupuncture for the treatment of spasticity after stroke were identified by searching the Cochrane Library, PubMed, ProQuest, EBSCOhost, SCOPUS, CINAHL, EMBASE, Alternative Medicine Database, and Chinese and Korean medical literature databases. Two reviewers independently extracted data on study characteristics, patient characteristics, and spasticity outcomes. A total of 8 trials with 399 patients met all the inclusion criteria. Compared with controls without acupuncture, acupuncture had no effect on improving clinical outcomes (as measured by validated instruments such as the Modified Ashworth Scale) or physiologic outcomes (assessed by measures such as the H-reflex/M-response [H/M] ratio at the end of the treatment period); H/M ratios did decrease significantly
immediately after the first acupuncture treatment. Methodological quality of all evaluated trials was considered inadequate. The authors concluded that the effect of acupuncture for spasticity in patients with stroke remains uncertain, primarily because of the poor quality of the available studies. They stated that larger and more methodologically sound trials are needed to confirm or refute any effect of acupuncture as a treatment for spasticity after stroke.

Li et al (2014) noted that spontaneous intra-cerebral hemorrhage (ICH) is the most devastating subtype of stroke, but there is currently no evidence-based treatment strategy. Acupuncture is a well-known traditional Chinese therapy for stroke-induced disability, and GV20 is the commonly used acupuncture point. These researchers evaluated the effectiveness of GV20-based acupuncture in animal models of acute ICH. Studies of GV20-based acupuncture in animal models of acute ICH were identified from 6 databases up to July 2013. Study quality for each included article was evaluated according to the CAMARADES 10-item checklist. Outcome measures were neurological deficit scores and brain water content. All the data were analyzed using RevMan V.5.1 software. A total of 19 studies were identified describing procedures involving 1,628 animals. The quality score of the studies ranged from 3 to 6, with a mean of 4.6. The global estimate of the effect of GV20-based acupuncture was 0.19 (95% CI: 0.13 to 0.25, p < 0.001) SDs improvement in outcome compared with controls. In subgroup analyses, size of effect was higher where the outcome was measured as the neurological deficit score than the brain water content or both (p < 0.001). The authors concluded that these findings showed the possible efficacy of GV20-based acupuncture in animal models of acute ICH, suggesting it as a candidate therapy for acute ICH.

**CPT Codes / HCPCS Codes / ICD-9 Codes**

**CPT codes covered if selection criteria are met:**

- **97810** Acupuncture, 1 or more needles; without electrical stimulation, initial 15 minutes of personal one-on-one contact with patient

- **+ 97811** without electrical stimulation, each additional 15 minutes of personal one-on-one contact with the patient, with re-insertion of needle(s) (List separately in addition to code for primary procedure)

- **97813** with electrical stimulation, initial 15 minutes of personal one-on-one contact with patient

- **+ 97814** with electrical stimulation, each additional 15 minutes of personal one-on-one contact with the patient, with re-insertion of needle(s) (List separately in addition to code for primary procedure)

**HCPCS codes covered if selection criteria are met:**

- **S8930** Electrical stimulation of auricular acupuncture points; each 15 minutes of personal one-on-one contact with the patient
ICD-9 codes covered if selection criteria are met (not all-inclusive):

- 346.00 - 346.93: Migraine
- 524.60 - 524.69: Temporomandibular joint disorders
- 525.9: Unspecified disorder of the teeth and supporting structures [postoperative dental pain]
- 643.00 - 643.93: Excessive vomiting in pregnancy
- 715.15: Osteoarthrosis, localized, primary, pelvic region and thigh
- 715.16: Osteoarthrosis, localized, primary, lower leg
- 715.25: Osteoarthrosis, localized, secondary, pelvic region and thigh
- 715.26: Osteoarthrosis, localized, secondary, lower leg
- 715.35: Osteoarthrosis, localized, not specified whether primary or secondary, pelvic region and thigh
- 715.36: Osteoarthrosis, localized, not specified whether primary or secondary, lower leg
- 715.95: Osteoarthrosis, unspecified whether generalized or localized, pelvic region and thigh
- 715.96: Osteoarthrosis, unspecified whether generalized or localized, lower leg
- 724.2: Lumbago [chronic]
- 787.01: Nausea with vomiting [postoperative] [chemotherapy-induced]
- E933.1: Adverse effect of antineoplastic and immunosuppressive drugs [chemotherapy-induced nausea and vomiting]
- V45.89: Other postsurgical status [dental, with pain]

ICD-9 codes not covered for indications listed in the CPB (not all-inclusive): 

- 042: Human immunodeficiency virus [HIV] disease
- 053.10 - 053.19: Herpes zoster with nervous system complications
- 072.0 - 072.9: Mumps
- 218.0 - 218.9: Uterine leiomyoma (fibroids)
256.4  Polycystic ovaries
278.00 - 278.02  Overweight and obesity
288.50  Leukocytopenia, unspecified
290.0 - 319  Mental disorders [including addiction, insomnia, tension headache, smoking cessation, autism spectrum disorders]
306.52  Psychogenic dysmenorrhea
327.00 - 327.09  Organic disorders of initiating and maintaining sleep
331.83  Mild cognitive impairment, so stated
332.0 - 332.1  Parkinson's disease
335.20  Amyotrophic lateral sclerosis
337.20 - 337.29  Reflex sympathetic dystrophy
338.21 - 338.4
350.1 - 357.9  Trigeminal nerve disorders, facial nerve disorders, disorders of other cranial nerves, nerve root and plexus disorders, mononeuritis of upper limb and mononeuritis multiplex, mononeuritis of lower limb, hereditary and idiopathic peripheral neuropathy or inflammatory and toxic neuropathy
365.00 - 365.9  Glaucoma
367.1  Myopia
368.00 - 368.03  Amblyopia ex anopsia
368.15  Unspecified tear film insufficiency [dry eye]
388.30 - 388.32  Tinnitus
389.10 - 389.18  Sensorineural hearing loss
401.0 - 405.99  Hypertensive disease
430 - 438.9  Cerebrovascular disease
440.0 - 448.9  Diseases of arteries, arterioles, and capillaries
460 - 519.9 Other diseases of trachea and bronchus, not elsewhere classified [respiratory disorders]
472.0 Chronic rhinitis
477.0 - 477.9 Allergic rhinitis
490 - 496 Chronic obstructive pulmonary disease and allied conditions
527.7 Disturbance of salivary secretion [xerostomia]
529.6 Glossodynia [burning mouth syndrome]
536.3 Gastroparesis [diabetic]
564.1 Irritable bowel syndrome
606.0 - 606.9 Infertility, male
607.84 Impotence of organic origin
617.0 - 617.9 Endometriosis
625.3 Dysmenorrhea
625.6 Stress incontinence, female
628.0 - 628.9 Infertility, female
649.10 - 649.14 Obesity complicating pregnancy, childbirth, or the puerperium
652.10 - 652.23 Malposition and malpresentation of fetus, breech
696.0 - 696.2 Psoriasis
706.0 - 706.1 Acne varioliformis and other acne
714.0 - 714.33 Rheumatoid arthritis
718.40 - 718.49 Contracture of joint [fibrotic]
719.41 Pain in joint, shoulder
721.0 - 721.1 Cervical spondylosis without myelopathy or with myelopathy
722.0 Displacement of cervical intervertebral disc without myelopathy
722.71 Intervertebral disc disorder with myelopathy, cervical region
722.81 Postlaminectomy syndrome, cervical region
723.0 - 723.9 Other disorders of cervical region
724.00 - Other and unspecified disorders of back
724.1, 724.3 - 724.9

726.0 Adhesive capsulitis of shoulder
726.10 Disorders of bursae and tendons in shoulder region, unspecified
726.30 Enthesopathy of elbow, unspecified
726.32 Lateral epicondylitis
728.85 Spasm of muscle [fibrotic contracture]
729.1 Myalgia and myositis, unspecified
729.5 Pain in limb
767.5 Facial nerve palsy
768.2 - 770.9 Fetal distress, birth asphyxia, respiratory distress syndrome, and other respiratory conditions of fetus and newborn
780.51 Insomnia with sleep apnea, unspecified
780.52 Insomnia, unspecified
780.79 Other malaise and fatigue [cancer related]
783.1 Abnormal weight gain
783.6 Polyphagia
784.0 Headache
786.09 Other dyspnea and respiratory abnormalities [cancer-related]
786.59 Other chest pain
787.91 Diarrhea [infantile]
788.30 - 788.39 Urinary incontinence
789.7 Colic
847.0 Whiplash injury
905.0 - 908.9 Late effects of injuries
E933.1 Adverse effects of antineoplastic and immunosuppressive drugs
V85.30 - V85.45 Body Mass Index 30.0-70 and over, adult
The above policy is based on the following references:


112. New Zealand Guidelines Group (NZGG). Care of women with breech presentation or previous caesarean birth. Evidence-Based Best Practice


Acupuncture Point Injection:


