

Research Snapshots

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COST-EFFECTIVENESS OF BREECH VERSION BY ACUPUNCTURE-TYPE INTERVENTIONS ON BL 67, INCLUDING MOXIBUSTION, FOR WOMEN WITH A BREECH FOETUS AT 33 WEEKS GESTATION: A MODELLING APPROACH

OBJECTIVE: The aim of this study was to evaluate the effectiveness and costs of using acupuncture-type interventions on BL67 *Zhiyin* compared to usual care for women presenting with a baby in a breech position at 33 weeks gestation.

STUDY DESIGN: A modelling approach was used; therefore a decision tree was developed to predict the number of caesarean sections that could be prevented. There were two strategies for women presenting with breech presentation at 33 weeks gestation: expectant management (a wait-and-see approach with external cephalic version (ECV) offered if required), and the use of acupuncture-type interventions on BL67. Ten thousand women were accounted for in this model. Also included were the medical costs of two ultrasounds for every woman, ECV treatment if required, and costs for pre- and post-natal care until eight days after delivery. The acupuncture treatment included extra costings for two visits with an acupuncturist and the moxibustion sticks supplied for home treatment. Both strategies of this decision tree included an option for women to receive an ECV at 36 gestational weeks and for all births to occur in hospital. Women refusing the option of acupuncture-type interventions on BL67 or not using the moxa treatment at home were also accounted for. The probability

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that women would accept treatment and that babies would remain in a persistent breech presentation were retrieved from a systematic review and meta-analysis of six randomised controlled trials (RCTs) reporting on the effectiveness of acupuncture-type interventions on BL67 versus expectant management. These trials consisted of three RCTs using moxibustion. The remaining three used acupuncture, electroacupuncture and a mixture of moxibustion and acupuncture.

RESULTS: Two data analyses were performed for the women receiving acupuncture-type intervention: one with and one without ECV. Both resulted in a decreased breech presentation at term. To prevent one caesarean section, seven women with breech presentation at 33 weeks gestation would need to be treated with acupuncture-type interventions on BL67. Sensitivity analysis showed that if 16% or more of the women offered moxibustion treatment complied, it was more effective and less costly than expectant management. The cost difference per woman with a baby in breech position at 33 weeks gestation using the moxa around 33 weeks versus no additional treatment was €451 (95% CI €109, €775; $p = 0.005$) eight days after delivery.

CONCLUSION: The authors concluded that offering acupuncture type interventions at BL67 to women with a breech foetus at 33 weeks gestation reduced the number of breech presentations at term, the number of caesarean sections required, and was cost effective when compared to expectant management.

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COMMENT: The lead researcher of this study has published a previous systematic review on the safety and effectiveness of using acupuncture-type interventions on BL 67 for women with breech presentation. This recent research approach is timely, enabling acupuncturists to engage in discussions with medical, midwifery and hospital clinic management staff about the cost effectiveness of implementing acupuncture-type interventions for breech presentation. Being able to enter into such discussions may well be an important factor for acupuncturists to facilitate the integration of acupuncture services within mainstream medical care.

van den Berg I, Kaandorp G, Bosch J, Duvekot J, Arends L, Hunink M. Cost-effectiveness of breech version by acupuncture-type interventions on BL 67, including moxibustion, for women with a breech foetus at 33 weeks gestation: a modelling approach. Complement Ther Med 2010;18:67-77.

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TRANSCUTANEOUS ELECTRIC ACUPOINT STIMULATION HELPS OPIOID DETOXIFICATION

Opioid dependence, as one of the biggest drug problems in the United States, has increased significantly and become a heavy burden on the sufferers and society. The commonly used pharmacological treatment is sublingual buprenorphine combined with naloxone (bup-nx); however, relapse often occurs due to severe withdrawal symptoms. In the 1970s acupuncture was proposed to treat opioid withdrawal. Unfortunately, to

date, its effectiveness has not been fully evaluated in high-quality studies.

OBJECTIVES: To evaluate whether transcutaneous electric acupoint stimulation (TEAS) as an adjunct treatment to bup-nx could (1) help patients with opioid dependence maintain abstinence from drug use; or (2) improve withdrawal symptoms, physical pain and health status.

STUDY DESIGN: Participants aged from 18 to 59 years old were recruited from inpatients admitted to the McLean Hospital (Belmont, MA) for opioid detoxification. Participants were randomly assigned to receive three 30-minute real or sham TEAS sessions per day for four days. Apart from standard treatment of bup-nx, TEAS (2 and 100 Hz) was delivered via skin electrodes on the palmar and ventral sides of LI 4 Hegu and dorsal and ventral surfaces of PC6 *Neiguan*. In the real TEAS group, the intensity of stimulation was adjusted gradually to strong but comfortable level. In the sham TEAS group, the intensity was set at 1 mA, which was undetectable by the participants.

RESULTS: Of 177 patients admitted to the hospital, 55 were randomised; 48 of these 55 participants (33 males and 15 females), with an average of 24 days of opioid use in the past 30 days, completed the study. The baseline data was comparable between the two groups. In the first two weeks after being discharged from the hospital, the real TEAS group (1) were more than twice as likely to maintain abstinence from any drugs and opioids ($p < 0.05$); (2) had greater decreases in pain interference between baseline and discharge ($p = 0.01$); and (3) had more improvement in physical health ($p = 0.01$) than the sham TEAS group did.

CONCLUSION: TEAS, as a simple, inexpensive adjunct treatment with minimal side effects, can be implemented in an inpatient unit or

self-administered by patients. It could be a beneficial adjunct to pharmacological opioid detoxification.

Meade CS, Lukas SE, McDonald LJ, Fitzmaurice GM, Eldridge JA, Merrill N, Weiss RD. A randomized trial of transcutaneous electric acupoint stimulation as adjunctive treatment for opioid detoxification. J Subst Abuse Treat 2010;38(1):12–21.

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CHINESE HERBAL MEDICINE (CHM) MAY PROVIDE THERAPEUTIC EFFECT FOR MILD COGNITIVE IMPAIRMENT (MCI) AND AGE ASSOCIATED MEMORY IMPAIRMENT (AAMI)

OBJECTIVE: To evaluate both the therapeutic and adverse effects of CHM formulae for MCI and AAMI.

METHODS: The Cochrane Central Register of Controlled Trials in the Cochrane Library, Pubmed, EMBASE, Elsevier BIOBASE and CQVIP were electronically searched to February 2007, and relevant journals in the library of Guangzhou University of Chinese Medicine were hand searched in September 2007. Studies considered were randomised controlled trials (RCTs), quasi-RCTs in English, Japanese, Chinese or German on memory or other impairments consistent with MCI and/or AAMI comparing CHM (excluding Ginkgo biloba alone) with placebo, using no intervention or active intervention.

RESULTS: 2638 potential titles and abstracts were identified and ten studies, involving 754 participants, were included. Jadad score of the included studies ranged from 1 to 5 with a mean of 2.6; all studies mentioned randomisation in their methods but not all provided the appropriate description of the randomisation method. Sample size ranged from 44 to 126. CHM was better than placebo on improving memory quotient (MQ), hippocampal

volume, beta amyloid, and mini-mental state examination (MMSE). CHM was better than hydergine in improving results of cognitive capacity screening examination (CCSE) and functional activity questionnaire (FAQ). Hydergine is a nootropic drug used to improve dementia and age-related cognitive impairment. CHM was better than no treatment in improving six or ten subscales of Wechsler's memory scale (depending on whether CHM was low or high dose respectively), and MQ. Compared with Ginkgo biloba, CHM was either no different when assessed with MQ and a range of biomedical markers or slightly better than Ginkgo biloba when assessed using the clinical memory scale (CMS). Meta-analysis of three studies showed that, in comparison to piracetam, CHM was as effective as piracetam (WMD: 0.37, 95% CI: -0.21–0.95) in improving MMSE. Compared with a combination of piracetam and donepezil, CHM was better in MMSE assessment. Piracetam is a nootropic drug and donepezil is an acetylcholinesterase inhibitor. Both medications have been shown to improve cognitive impairment. No serious adverse events were reported in four out of ten studies; the other six studies did not record adverse events. The categories of the CHM formulae were tonifying qi and blood, tonifying yin and yang, moving blood, clearing deficient heat and calming the mind. No particular formula was used more often than others.

CONCLUSION: This review provides preliminary evidence on the effect of CHM on MCI and AAMI. Further investigation through larger, longer-term multi-centre, placebo controlled RCTs is warranted.

May BH, Yang WH, Zhang AL, Owens MD, Bennett L, Head R, et al. Chinese herbal medicine for mild cognitive impairment and age associated memory impairment: a review of randomised controlled trials. Biogerontology 2009;10(2):109–23.

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