Royal College of Obstetricians & Gynaecologists

Acupuncture and Chinese Herbal Medicine for Women with Chronic Pelvic Pain

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1. Background

Chronic pelvic pain (CPP) can be defined as intermittent or constant pain in the lower abdomen or pelvis of at least six months' duration, not occurring exclusively with menstruation or intercourse and not associated with pregnancy.[1] It is estimated to affect approximately one in six of the adult female population.[2] CPP may be a symptom of a number of different conditions which may present as pelvic symptoms including gynaecological e.g. endometriosis, urinary tract e.g. interstitial cystitis, digestive e.g. irritable bowel syndrome (IBS) and musculo-skeletal disorders. Psychological factors also play an important role in CPP with many women reporting histories of physical, emotional and sexual abuse.

The conventional treatment of CPP may be of limited effectiveness[3] and as a consequence women with CPP may seek non-conventional approaches to manage their symptoms. This review considers the evidence surrounding the use of complementary and alternative medicine (CAM) as a treatment for CPP with a specific focus on acupuncture and herbal medicine.

2. Complementary and alternative medicine therapies

Whereas conventional medicine aims to assess new treatments through controlled clinical trials, many CAM therapies, such as acupuncture and herbal medicine, have already been practiced extensively for hundreds of years. This long period of recorded clinical experience contributes to a different type of evidence base. Clinical trials are still required to test assumptions that may be incorrect in these traditions, but the history of traditional use, and the slowly growing corpus of well-conducted randomised controlled trials, may be regarded as very preliminary evidence that may provide data for those seeking treatment, and that should be used as a rationale for more definitive research activity in the future. This is consistent with the approach used for all available but non evidence-based interventions.

In China there are over 20 000 randomised controlled trials investigating Chinese herbal medicine (CHM).[4,5] However, a large proportion of this work has been undermined by poor methodology and, as a consequence, much of this evidence is still inconclusive. In addition to clinical trials there is now a growing body of research looking at biologically plausible mechanisms that could act to improve chronic pelvic pain through anti-inflammatory and other activities.[6–8]

2.1 Acupuncture and CPP

Acupuncture is a system of medicine that evolved in China over 2000 years ago. It involves the insertion of fine needles into specific, defined, points distributed over the body surface. Stimulation of these points is considered to be able to induce a local and systemic healing response.[9] Frequency of treatment varies from acute conditions that may require treatment 2–3 times a week to more stable chronic conditions where acupuncture once a month may be sufficient. Typically though, treatment is given once a week. The duration of treatment is similarly variable. In some instances 2–3 sessions may suffice, but in more complex recalcitrant conditions, treatment may require several months. In general there should be some noticeable beneficial changes after 3–4 sessions. Anyone considering acupuncture treatment should ensure that they find a practitioner registered with one of the major acupuncture associations (see appendix) including the British Acupuncture Council, the Association of Traditional Chinese Medicine, and the British Medical Acupuncture Society.

Our literature search did not find any trials of acupuncture relating specifically to CPP. It did however identify trials on acupuncture for dysmenorrhoea, pelvic inflammatory disease (PID) and IBS – all of which are known to contribute to CPP.

There is preliminary evidence that acupuncture is effective in reducing the severity of dysmenorrhoea when compared to an untreated control group.[10] However, a recent Cochrane systematic review found no significant differences between real and sham acupuncture.[11] While acupuncture may be effective for dysmenorrhoea, this raises the possibility that any needle insertion – together with other contextual factors operating during the delivery of acupuncture, such as the unique therapeutic relationship – have a more important effect than the precise needling of traditional acupoints.[12]

Two small trials included in this Cochrane review found that acupuncture treatment significantly reduced menstrual symptoms compared to standard non-steroidal anti-inflammatory drugs (NSAIDs).[11] NSAIDs are a mainstay of treatment for dysmenorrhoea and other pelvic inflammatory conditions such as endometriosis. The use of acupuncture as a potentially effective and safe intervention for pain management, without the risk of adverse gastrointestinal effects from NSAIDs, warrants further investigation.

A Cochrane review of acupuncture for IBS also found little difference between real and sham acupuncture treatments, although both reported clinically important improvements.[13] The use and validity of sham acupuncture as a placebo control in clinical research is increasingly being questioned.[14] Consequently, a more pragmatic approach to the interpretation of these data may be more appropriate.

Chinese studies have considered the role of acupuncture in the treatment of chronic PID in comparison with Chinese herbal medicine[15] and antibiotic treatment.[16] These were unblinded trials that lacked methodological rigour and have a high risk of bias.

2.2. Chinese herbal medicine and CPP

Chinese herbal medicine developed alongside acupuncture in China and other East Asian countries and has a recorded history of over 2000 years. During a consultation with a CHM practitioner a detailed case history is taken, the tongue is inspected and the pulse palpated. Information from this process is used to define a traditional pattern or syndrome of disease. A herbal formula is then designed to address this pattern and to treat both the symptoms and the underlying cause of disease. In the UK only plant-based products are used and a CHM practitioner will typically select 8 to 15 herbs from around 400 commonly used plants. Treatment may be administered in a number of ways including cooked decoctions or herbal soups, concentrated powders, herbal pills, or alcoholic tinctures.

In 2011 the UK government committed itself to statutory regulation for herbal medicine through the Health Professions Council. When this becomes law in 2012–13 it will ensure that herbal practitioners will have an agreed standard of training, and will abide by a code of good practice and a programme of continuing professional development. In the meantime it is recommended that people only consult members of the Register of Chinese Herbal Medicine or the Association of Traditional Chinese Medicine (see the appendix for contact details).

A Cochrane review of CHM for endometriosis found that CHM administered post-surgery had comparable benefits to the anti-progestin gestrinone, and a significantly greater effect in reducing dysmenorrhoea and shrinking pelvic lesions than danazol, but with fewer adverse reactions than conventional treatments.[17] Although over 100 Chinese clinical trials have been conducted on CHM for endometriosis, methodological weaknesses led to all but two being excluded from this review. A small retrospective study involving 47 women with endometriosis who had used a regime of CHM coupled with hypnotherapy (median follow-up five years previously) found a significant long-term decrease in reported pain and analgesic use.[18] There is a clear need for more rigorous trials to test the potential benefits of CHM in the treatment of endometriosis, as a contributor to CPP treatment.

A Cochrane review of CHM for dysmenorrhoea included 39 randomised controlled trials and reported promising results for CHM when compared to the use of pharmaceutical drugs such as NSAIDs and the oral contraceptive pill. This review indicated that CHM was associated with significant improvements in pain relief and a reduction in the use of additional pain-relieving medication. However, the review is limited by the inclusion of trials of low methodological quality and small sample sizes, and these results should therefore be interpreted cautiously.[19]

Liu et al[20] completed a Cochrane review of herbal medicines for the treatment of IBS that included 75 randomised controlled trials evaluating the effects of herbal medicines versus both placebo controls and a variety of conventional therapies. However, the methodological rigour of these trials was poor. One rigorously conducted and powered study did find a significant difference between CHM and placebo controls.[21] In this trial, 76% of participants who received standard CHM intervention reported improvements during treatment compared to only 33% of the placebo group ($p < 0.007$).

There are also Chinese reports of the effects of CHM on PID when administered orally or via a herbal enema. Several studies compare one CHM regime with another[22,23] and report clinically important levels of pain and symptom relief, although these trials are of poor quality. In addition, in vivo[24] and in vitro[25] research is increasingly being conducted that describes biologically plausible immunological and anti-inflammatory effects of CHM, such as cytokine (TNF-a, IL-6, IL-8) suppression, COX-2 inhibition, antioxidant activity, and pain relief via opioid, dopaminergic, and GABAergic mechanisms, that would be consistent with clinical benefit in pelvic inflammation.

3. Acupuncture, CHM and adverse events

Acupuncture practised with disposable needles by an experienced, registered and trained professional is considered a very safe procedure.[26,27]

In recent years there have been grounds for concern over the safety of CHM, particularly from adulteration with pharmaceutical drugs or contamination with toxic plant species.[28] Whilst serious adverse events from CHM appear rare, this too needs more rigorous research.

The recent move towards statutory regulation will ensure that herbal practitioners are adequately trained, and governed by clear codes of ethics and continuing professional development (CPD) requirements. New EU regulation relating to over-the-counter (OTC) herbal products will ensure that these conform to Good Manufacturing Practice (GMP) standards that are in place to protect against adulteration or accidental contamination.

4. Opinion

There is no compelling evidence that acupuncture or CHM are effective in the treatment of CPP. We could find no trials of acupuncture or CHM specifically evaluating the effects of these interventions on CPP. This review therefore summarises the evidence relating to the use of some CAM interventions in the treatment of diseases that are known to be associated with, and cause, CPP.

Acupuncture and CHM may have roles to play in the treatment of CPP associated with dysmenorrhoea, endometriosis, IBS and PID, either as an adjunct or as an alternative to conventional treatments. Unfortunately the current evidence lacks rigour and the available trials are frequently small, poorly designed, and inadequately reported. As a consequence we can only consider this preliminary evidence. This area clearly requires further more rigorous investigation.

We support well-designed research into CAM therapies for this problematic condition. Women wishing to have acupuncture or CHM should be informed of the very provisional nature of the evidence supporting these approaches.

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The final version is the responsibility of the Scientific Advisory Committee of the RCOG.

The review process will commence in 2015 unless otherwise indicated.

Appendix

Acupuncture and Chinese herbal professional associations in the UK

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