Chinese Herbal Medicine for Acute Pelvic Inflammatory Disease: a Systematic Review of Randomised Clinical Trials

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**Purpose:** To assess the effectiveness and safety of Chinese herbal medicine (CHM) for the treatment of acute pelvic inflammatory disease (PID).

**Methods:** We undertook a systematic search for randomised clinical trials of CHM for acute PID through seven electronic databases from their inception to January 2014. Two authors independently extracted data and assessed the methodological quality of the included trials using the Cochrane risk of bias tool. Revman 5.2 software was used for data analysis with effect estimate presented as risk ratio and mean difference with a 95% confidence interval.

**Results:** Thirty-one trials involving 2860 participants with acute PID were identified. All trials were methodologically weak and at high risk of bias. Twenty-one different herbal medicines were tested in the 31 trials. Pooling of data via meta-analysis was impossible due to the clinical heterogeneity in terms of participants, intervention and control. Fifteen out of 31 trials showed CHM used alone or combined with antibiotics was significantly better than antibiotics on the number of the cured participants with PID. Three of four trials demonstrated CHM used alone or combined with antibiotics reduced the time to disappearance of lower abdominal pain and pelvic mass compared to antibiotics. Data from two trials showed CHM plus antibiotics was superior to antibiotics on incidence of chronic pelvic pain after follow up of 3 months and PID relapse after follow up of 1 year. Three of four trials showed CHM plus antibiotics had shorter length of hospital stay than antibiotics. No severe adverse events were reported and only four trials reported mild adverse events.

**Conclusion:** CHM may be potentially effective in the treatment of acute PID. However, due to poor methodological quality of the included trials, current evidence is insufficient to support clinical use. Further rigorous trials are warranted.

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Treatment adherence in Chinese herbal medicine: Findings from a randomised feasibility study in the United Kingdom

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**Purpose:** Randomised controlled trials (RCTs) evaluate effectiveness of Chinese herbal medicines (CHMs) in the West, yet little is known regarding CHM adherence amongst these populations. We aimed to evaluate feasibility of collecting adherence data within a UK study and identify strategies for improving adherence.

**Methods:** We conducted a feasibility study exploring CHM for polycystic ovary syndrome, randomising 40 women to either standardised CHM or individualised CHM. This was prescribed for 24 weeks at 8 g granules/dose, two dosages daily, taken as a tea. Practitioners and participants were blinded. We evaluated adherence using Morisky Medication Adherence Scale (MMAS) at Week 4 and end of study (EoS); weighing prescriptions at Week 12 and EoS, and process data.

**Results:** Mean completion rates were high for MMAS (87.5%). Weighing data was complete for 15 (37.5%) participants, incomplete for 15 (37.5%) and absent for 10 (25%). MMAS data suggests low adherence to both CHM interventions at Week 4 and EoS. Small improvements within-group were observed for both standardised CHM (MD 0.9, 95% CI -0.3 to 2.0) and individualised CHM (MD 1.0, 95% CI 0.3 to 1.8) but which were statistically significant only for individualised. When explored as a categorical variable, improvement in CHM adherence from low to medium or high adherence was found in 4 participants from each of the two groups. We used weighing data to estimate a mean of 65% (SD 21.2) of CHMs were administered, suggesting a dose of 10-11 g/day is more feasible. Process data suggests adherence could be improved by changing administration to tablet/capsules and reducing to once daily dosing.

**Conclusion:** To our knowledge, this is the first rigorous evaluation of CHM treatment adherence carried out in the UK. This study has uncovered important findings regarding CHM adherence in a Western population and will help inform the design of the CHM intervention for a main study.

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