The treatment of eczema with Chinese herbs: a systematic review of randomized clinical trials

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Authors' objectives
To assess the evidence for and against the use of oral Chinese herbal medicines in treating eczema.

Searching
The following electronic databases were searched from inception to March 1998: MEDLINE; Cochrane Library; EMBASE; BIOSIS Previews; Science Citation Index; and Healthstar. Search terms included: "eczema"; "skin diseases"; "eczematous"; and "dermatitis", "atopic". Search words included: "drugs", "Chinese herbal"; "medicine", "herbal"; and "medicine, oriental traditional". All search terms were employed both as MeSH terms and as text words. The authors' own database was searched and other experts in the field were contacted. The manufacturers of Zemaphyte was contacted and asked to contribute published and unpublished material. Bibliographies of all articles located were scanned. No language restrictions were applied.

Study selection
Study designs of evaluations included in the review
Clinical trials of the use of Chinese herbs in severe atopic eczema which included a patient control group and clinical end points were included.

Specific interventions included in the review
A mixture of ten different plants traditionally used in Chinese medicine for the treatment of eczema was compared with placebo plant material having a similar appearance, taste, and smell as the active ingredients. Ingredients of both treatments were listed. Treatments were taken orally as sachets in random order once daily for eight weeks with a four weeks wash out period.

Participants included in the review
Children with extensive, non-exudative atopic eczema and adults with refractory extensive non-exudative atopic eczema were included.

Outcomes assessed in the review
A clinical score comprising two components was assessed: erythema and surface damage. Outcomes were evaluated at weeks four and eight of each treatment phase.

How were decisions on the relevance of primary studies made?
The authors do not state how the papers were selected for the review, or how many of the reviewers performed the selection.

Assessment of study quality
No formal validity assessment was conducted, although the following aspects of validity were discussed: effectiveness of patient blinding; whether analysis was intention to treat; and power of sample to detect statistical significance.

Data extraction
Data were extracted in a standardized predefined format and included the following: author; year of publication; characteristics of sample; interventions; main outcome measure and results.

The authors do not state how many of the reviewers performed the data extraction.
Methods of synthesis
How were the studies combined?
The studies were combined in a narrative review.

How were differences between studies investigated?
Differences between the studies were discussed.

Results of the review
Two double blind-randomised cross-over trials were included (87 patients enrolled). Both were conducted by the same group.

Methodological flaws included: doubtfulness concerning patient blinding and the inertness of the control therapy; lack of intention to treat analysis; and potential selection bias. Power calculations in one primary study estimated that 50 patients were required to achieve ‘adequate power’.

Both RCTs were conducted by the same research group and both implied that a complex of Chinese herbs was more effective than placebo.

One cross-over RCT enrolled 47 children and presented results on 37 children. Median percentage decrease in erythema scores was 51.0% (95% CI: 34.5, 72.6) during the active phase and 6.1% (95% CI: -25.2, 30.7) during the placebo phase. Median percentage decrease in surface damage scores during the active phase was 63.1% (95% CI: 34.5, 72.6) compared with 6.2% (95% CI: -25.2, 30.7) during the active phase. 95% CI for the difference = (19.2, 97.9). There was no evidence of carry-over effects between phases.

One cross-over RCT enrolled 40 adults and presented results on 31 adults. Mean proportional change for erythema (based on logarithmic values) between the end of the placebo phase and the end of the active phase was 46% (95% CI: 25.2, 67). Mean proportional change for surface damage between the end of the placebo phase and the end of the active phase was 49% (95% CI: 27, 71). In general itching and sleep patterns were also improved (no data presented). Adverse effects were mild with slight abdominal distension and headaches reported in two patients.

Serious side-effects have recently been reported by independent investigators (see Other Publications of Related Interest no.1, no.2 and no.3).

Authors’ conclusions
At present it is unclear whether Chinese herbal treatments of eczema do more good than harm.

CRD commentary
This review was clearly written and presented. Attempts were made to locate published and unpublished material from several sources. Relevant details of the primary studies were presented in tabular format and described in the text. The methodological flaws in the primary studies were discussed.

Methods used to select primary studies and extract data were not described.

The authors’ conclusions were supported by the evidence.

Implications of the review for practice and research
Practice: The authors state that at present it is unclear whether Chinese herbal treatments of eczema do more good than harm. They also state that no patient should receive this type of therapy without prior routine checking of haematological and hepatic function.

Research: The authors state that more studies are required to establish the effectiveness, safety, cost-effectiveness and mechanism of action of this mode of treatment.
Bibliographic details

PubMedID
10417508

Other publications of related interest

Indexing Status
Subject indexing assigned by NLM

MeSH
Adult; Child; Drugs, Chinese Herbal /therapeutic use; Eczema /drug therapy; Humans; Randomized Controlled Trials as Topic

AccessionNumber
11999001604

Date bibliographic record published
31/03/2001

Date abstract record published
31/03/2001

Record Status
This is a critical abstract of a systematic review that meets the criteria for inclusion on DARE. Each critical abstract contains a brief summary of the review methods, results and conclusions followed by a detailed critical assessment on the reliability of the review and the conclusions drawn.