Complementary and alternative medicine for menopausal symptoms: a review of randomized, controlled trials

Kronenberg F, Fugh-Berman A

Authors' objectives
To review studies of complementary and alternative medicines (CAM) used for menopausal symptoms.

Searching
MEDLINE (from January 1966 to December 2002) and AMED (from January 1985 to December 2000) were searched; the search terms were reported in the review. This search was supplemented with a search of the authors’ own files. Language restrictions were not applied.

Study selection
Study designs of evaluations included in the review
Randomised controlled trials (RCTs) were eligible for inclusion.

Specific interventions included in the review
Studies that investigated CAM were eligible. The therapies investigated were herbs (black cohosh, red clover, dong quai, evening primrose oil, ginseng and Chinese herb mixture), dietary phytoestrogens (soy and soy extracts) and other CAM therapies (vitamin E, behavioural therapies, wild yam and progesterone creams).

Participants included in the review
Studies investigating women with menopausal symptoms were eligible. Studies examining single symptoms or conditions that are clearly associated with menopause were excluded.

Outcomes assessed in the review
The inclusion criteria were not defined in terms of outcomes. The outcomes reported in the studies included the frequency of hot flashes, Kupperman Index scores, changes in hormone levels and other physiological measures.

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
The authors do not state that they assessed validity.

Data extraction
Information on the number of patients, study design, outcome measures and results was extracted by one author, and checked by the second.

Methods of synthesis
How were the studies combined?
The study findings were discussed in a narrative synthesis.

How were differences between studies investigated?
The studies were grouped according to the type of CAM therapy. Differences between the studies within these groups were discussed in the text of the review.
Results of the review
A total of 29 RCTs were included.

Herbal remedies (10 RCTs, n=962).

The majority of the studies reported no significant changes in the primary outcome measures. Only black cohosh showed a beneficial effect. The authors state that questions remain about the long-term safety of most herbs.

Dietary phytoestrogens (11 RCTs, n=1,230).

The authors report that comparisons were difficult because of variations in product, dosage, scoring systems for symptoms of hot flashes, and the menopausal status of the patients. Three of the 8 studies with treatment phases lasting longer than 6 weeks showed significant improvement in hot flashes. In general, the data showed only modest benefits, which mostly disappeared after 6 weeks.

Other CAM therapies.

Vitamin E: 2 RCTs, conducted in 1953 (n=658) and 1998 (n=125), respectively, reported that vitamin E was no more effective than placebo.

Acupuncture: one study (n=24) that compared electroacupuncture to a shallow acupuncture control group reported no differences between the groups.

Behavioural therapies: 3 studies investigated therapies including paced respiration or biofeedback control (n=57), and a relaxation response technique (n=45). On the whole, intervention groups experienced a significant decrease in hot flashes compared with the control. The authors state that behavioural therapies seem to be safe.

Wild yam and progesterone creams: one study (n=23) that compared wild yam cream with placebo reported no significant difference on any outcome. A second study (n=102) investigated the effects of progesterone cream on hot flashes as a secondary outcome. Compared with placebo, patients in the intervention group reported a significant 'improvement'. Eight women treated with progesterone cream experienced vaginal spotting.

Authors' conclusions
Black cohosh and foods that contain phytoestrogens are promising for the treatment of menopausal symptoms. Data from clinical trials do not support the use of other herbs or CAM therapies, and long-term safety data on individual isoflavones or isoflavone concentrates are not available.

CRD commentary
The authors posed an appropriate review question. The inclusion criteria were not well defined, but given the lack of clinical data in this area they were suitable. The search was fairly extensive and was not limited to English language studies. With regards to the review process, the study selection process was not described, but the authors reported the methods of data extraction. The authors did not assess the included studies for validity. Although only RCTs were included, the authors should have made some attempt to investigate their quality. Study details, where tabulated, were clear and well reported; however, for studies of 'other CAM therapies', details could only be found in the text of the review. The discussion of study findings was informative. The authors’ conclusions follow from the data presented.

Implications of the review for practice and research
Practice: The authors state that health care providers and consumers should be aware that despite the potential usefulness of many CAM therapies, scientific research is limited.

Research: The authors state that the popularity of CAM therapies and their therapeutic potential necessitate definitive safety and efficacy studies.
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Other publications of related interest
These additional published commentaries may also be of interest. Cheung AM, Walji R. Review: most herbal treatments have no benefit for menopausal symptoms. Evid Based Med 2003;8:118. Cheung AM, Walji R. Review: most herbal therapies have no benefit for menopausal symptoms. ACP J Club 2003;139:21.

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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.