
Black cohosh (*Cimicifuga racemosa*) for menopausal symptoms: a systematic review of its efficacy

Borrelli F, Ernst E

CRD summary

The evidence did not consistently demonstrate an effect of black cohosh on menopausal symptoms; a beneficial effect on perimenopausal women could not be excluded. The findings of this review should be considered with caution bearing in mind potential methodological weaknesses of the review processes and synthesis.

Authors' objectives

To review the efficacy of black cohosh *Cimicifuga racemosa* for treating menopausal symptoms.

Searching

A number of databases were searched from inception to December 2007, including MEDLINE, EMBASE, AMED, Phytobase and The Cochrane Library without language restrictions. Manufacturers of relevant products were contacted and bibliographies of included papers were scanned. Search terms were reported.

Study selection

Randomised controlled trials (RCTs) that compared mono preparations of black cohosh with placebo or standard drug treatment in women who experienced menopausal symptoms were eligible for inclusion. Women who had undergone a hysterectomy were considered eligible if at least one ovary remained. Women with medically induced menopause were excluded.

The included trials were set in Germany, Czech Republic, USA, Switzerland and China. Populations included perimenopausal and postmenopausal women whose ages ranged between 46 and 58 years, where reported. Reported outcomes included severity of symptoms rating scales (Kupperman Menopausal Index, Wiklund menopause symptoms index, menopausal ratings scale) and self-reported frequency of vaso-motor symptoms. Dosage of black cohosh preparations varied across studies. Half of the included trials used a commercial preparation called Remifemin.

Studies were selected by two independent reviewers. Disagreements were resolved by discussion.

Assessment of study quality

The validated five-point Jadad scale was used to assess validity including items on randomisation, blinding, withdrawals and drop-outs.

It was not clear how many reviewers performed validity assessment.

Data extraction

It was not clear how many reviewers performed data extraction. Authors were contacted for further information if necessary.

Methods of synthesis

A narrative synthesis was adopted due to statistical and clinical heterogeneity. Study details were presented in tables and described in the text, then broadly grouped according to outcome type, severity measures and frequency measures.

Results of the review

A total of six RCTs (n=1,163) were included. One trial scored 3 out of 5 on the Jadad scale and the others scored either 4 or 5. One trial had a small number of participants and a high drop-out rate.

Three studies reported on frequency of vaso-motor responses, two of these found no significant benefit from black

cohosh.

All six trials reported severity of menopausal symptoms, four of these reported some significant improvements. Two trials found stronger effects in perimenopausal women.

Authors' conclusions

The evidence did not consistently demonstrate an effect of black cohosh on menopausal symptoms, but a beneficial effect on perimenopausal women could not be excluded. Further rigorous trials were warranted.

CRD commentary

This review updated a previous work (see Other Publications of Related Interest) on the same clear question, but used tighter inclusion criteria. The searches appeared comprehensive. There were no language restrictions. Contacting manufacturers was likely to have reduced publication bias. Review processes were not described fully, which made it difficult to know whether two reviewers performed quality assessment and data extraction as well as study selection to reduce reviewer error and bias. Although use of summary quality scores may have obscured useful information, the descriptions in the text of the paper were helpful. The included studies were not described clearly in terms of population characteristics (proportion of premenopausal and perimenopausal women, age ranges) or the results (no p-values); they appeared heterogeneous, but it was difficult to be certain. The narrative synthesis appeared appropriate, but focused heavily on one particular type of outcome. The conclusions appeared to focus overly strongly on less encouraging results, and although attention was drawn to perimenopausal effects the proportion of the study populations this represented was unclear. The findings of this review should be considered with caution bearing in mind potential methodological weaknesses of review processes and the synthesis.

Implications of the review for practice and research

Practice: The authors did not state any recommendations for practice.

Research: The authors recommended that further investigations to support any possible beneficial effects of black cohosh were desirable; these should be rigorous and identify the site of action and the active ingredient.

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Other publications of related interest

Borrelli F, Ernst E. *Cimicifuga racemosa*: a systematic review of its clinical efficacy. *Eur J Clin Pharmacol* 2002; 58: 235-241.

Indexing Status

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MeSH

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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.