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HerbClip™

File: ■ Black Cohosh (*Actaea racemosa* syn. *Cimicifuga racemosa*)
■ Menopause
■ Hot Flashes
■ Sleep Quality

HC 031052-405

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RE: Black Cohosh Extract Found Equivalent to Conjugated Estrogens for Relief of Menopausal Symptoms in Pilot Study

Wuttke W, Rauš K, Gorkow C. Efficacy and tolerability of the black cohosh (*Actaea racemosa*) ethanolic extract BNO 1055 on climacteric complaints: a double-blind, placebo- and conjugated estrogens-controlled study. *Maturitas*. 2006;55(Suppl 1):S83-S91.

Hormone replacement therapy (HRT) reduces menopausal symptoms and protects the bones against osteoporosis. However, HRT is associated with an increased risk of breast cancer and cardiovascular disease in menopausal and postmenopausal women. Because the risks of HRT are now believed to outweigh the benefits, women are looking for safe and effective alternatives. One alternative is black cohosh (*Actaea racemosa* syn. *Cimicifuga racemosa*). Extracts of black cohosh rhizome are used to reduce menopause symptoms such as hot flashes, palpitations, mood changes, and sleep disturbances. The purpose of this trial was to evaluate the effectiveness and tolerability of black cohosh extract in postmenopausal women. This article reports data on tolerability and the secondary endpoints of sweating episodes and sleep disturbances; results of the primary endpoint of overall menopause symptoms, as well as bone metabolism and blood hormone levels, were previously reported.[1,2]

This randomized, double-blind, placebo-controlled, and active-controlled trial was conducted at 13 gynecologic clinics in the Czech Republic from November 1998 to September 2000. Women were eligible for the trial if they were 40-60 years of age, in good general health, had no menstrual bleeding at least 6 months before enrolling in the study, had a hormone value appropriate for postmenopause, and experienced hot flashes and other menopause symptoms. Women were excluded if they had any contraindications for HRT, had a hysterectomy or unresolved female conditions, had a history of chronic disease, or were taking estrogenic substances, antidepressants, sedatives, or psychotropic drugs.

The subjects were randomly allocated to 1 of 3 groups. One group received 2 daily capsules containing an aqueous/ethanolic dry extract of black cohosh (BNO 1055;

Klimadynon®/Menofem®; Bionorica AG; Neumarkt, Germany). Each capsule provided 1.66-2.86 mg extract derived from 20 mg of rhizome. A second group received 2 daily capsules of conjugated estrogens (Oestrofeminal®; Heinrich Mack Nachf.; Illertissen, Germany). Each capsule contained 0.3 mg of conjugated estrogens. A third group received 2 daily placebo capsules. All capsules were identical in appearance and taste. Subjects took the capsules for 12 weeks.

The subjects kept track of sweating episodes and sleep disturbances in a daily diary beginning 2 weeks before initiating treatment. They returned for study visits 4 weeks, 8 weeks, and 12 weeks after starting the study drug (baseline). Menopause symptoms were assessed using the Menopause Rating Scale. Symptoms were grouped into 3 subscores and analyzed separately from the total scale score. The subscores grouped major complaints (hot flashes/sweating, depressive mood, vaginal dryness, and joint pain), somatic complaints (hot flashes/sweating, heart palpitations, urinary problems, vaginal dryness, and joint pain), and mental score (depressive mood, nervousness/irritability, physical fatigue/poor concentration/forgetfulness, and decreased sexual desire). Adverse side effects and medications were evaluated at each of the study visits.

A total of 97 subjects were randomized in the study. Data from 35 subjects were excluded from this analysis (2 withdrew consent, 21 did not meet the menopause inclusion criteria, and 12 exceeded the body mass index criteria).[2] At baseline, there were no significant differences among the 3 groups for demographic or menopausal health characteristics. The mean age ranged from 52 to 54 years in the 3 groups.

Self-reported daily sweating episodes decreased significantly in the black cohosh group, but not in the conjugated estrogens group, compared to the placebo group ($P < 0.05$). From baseline to 12 weeks, mean daily sweating episodes decreased 80% in the black cohosh group, 55% in the conjugated estrogens group, and 41% in the placebo group. The number of nightly wake-up periods decreased significantly after 12 weeks in the black cohosh group and the conjugated estrogens group compared to the placebo group (both $P < 0.05$). Early awakenings decreased significantly after 12 weeks in the black cohosh group, but not in the conjugated estrogens group, compared to the placebo group ($P < 0.05$). Menopause symptoms as measured by the major complaints, somatic complaints, and mental subscores decreased significantly after 12 weeks in the black cohosh group compared to the placebo group ($P < 0.05$). In the conjugated estrogens group, only the mean somatic score dropped significantly compared to the placebo group ($P < 0.05$).

The number of adverse events was similar in all groups. The adverse events were judged to be not related or possibly related to the study drug. Three women in the black cohosh group reported spotting, compared to 1 woman in the conjugated estrogens group and 2 women in the placebo group. None of the adverse events were serious, and no subjects left the study because of side effects.

The authors state that black cohosh extract BNO 1055 was well-tolerated, reduced sweating episodes, and improved sleep quality in women with menopausal symptoms. Because sweating episodes are associated with moderate to severe hot flashes, the reduction in sweating episodes indicates the women experienced fewer significant hot flashes. Likewise, sleep interruptions are often due to episodes of hot flashes and sweating, all reduced by BNO 1055 and conjugated estrogens, though decreased

sweating episodes were not statistically significant for conjugated estrogens. The overall effectiveness of black cohosh was comparable to the effectiveness of conjugated estrogens. The authors conclude that BNO 1055 may be a safe and effective alternative to HRT in women experiencing menopause symptoms.

The authors do not discuss any limitations of this separate analysis of secondary outcomes from a trial completed several years earlier. It is not clear if this analysis was planned or if it was conducted ad hoc after the study was completed. While the authors state that their grouping of symptoms from the Menopause Rating Scale to create 3 subscores is “reasonable” based on clinical experience, they do not cite any references to validate this grouping and analysis. They do explain that the study could be considered a pilot study because of the small number of subjects tested in each group. The authors recommend that these results should be confirmed in future trials with appropriate statistical power in carefully selected populations.

—Heather S. Oliff, PhD

References

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2. Rapp C. The effects of a proprietary black cohosh extract on bone turnover, vaginal mucosa, and blood parameters in postmenopausal women. *HerbClip.* July 14, 2006. (No. 060261-308) Austin, TX: American Botanical Council. Review of article by Wuttke W, Gorkow C, Seidlova-Wuttke D. Effects of black cohosh (*Cimicifuga racemosa*) on bone turnover, vaginal mucosa, and various blood parameters in postmenopausal women: a double-blind, placebo-controlled, and conjugated estrogens-controlled study. *Menopause*. 2006;13(2):185-196.

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