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## **HERBCLIP**<sup>™</sup>

FILE: · Black Cohosh (Cimicifuga racemosa)

**DATE:** May 30, 1999 HC 021591

RE: Black Cohosh for Menopause - Monograph

Gruenwald, J. Standardized Black Cohosh (*Cimicifuga*) Extract Clinical Monograph. *Quarterly Review of Natural Medicine*, Summer 1998, pp. 117—125.

The rhizomes of black cohosh (*Cimicifuga racemosa*), a perennial in the buttercup family (*Ranunculaceae*), demonstrate an ability to treat numerous symptoms associated with menopause. This native of eastern North America was used internally by various tribes of Native Americans to treat the pain of menses and childbirth, kidney ailments, rheumatism, and malaria. It was also externally applied to snakebites. The author of this monograph looks at the chemical constituents of black cohosh and studies comparing its actions with synthetic estrogens in the treatment of estrogen deficiencies caused by menopause.

Glycosides, triterpene glycosides in particular, are the principle active constituents of black cohosh. Black cohosh extracts are standardized to the triterpene glycosides. Flavonoids, resins, cimicfugin, volatile oils, fatty acids, tannins, alkaloids, isoferulic acid, salicylic acid, phytosterols, starch, and sugar complete the composition of the rhizome.

The climacteric, or perimenopause, consists of the several years before and after menopause in which ovarian function decreases. During this time the production of estrogen and progesterone by the ovaries diminishes, resulting in an increase in follicle stimulating hormone (FSH) and luteinizing hormone (LH). Prior to the perimenopausal period, these hormones usually function in a balanced manner, due to a hypothalamic negative feedback system. These hormonal alterations precipitate changes in the neurons regulating body temperature and the cardiovascular system, which can lead to palpitations, vasodilation, and sweating (hot flashes). Low estrogen levels can cause emotional instability, experienced by fifty percent of perimenopausal women. Mental disorders, such as depression, nervousness, irritability, insomnia, and "weakness of memory," are common.

Perimenopausal symptoms are commonly treated with hormone replacement therapy (HRT), which can have side effects, primarily gastric problems, edema, or weight gain. Hormone replacement therapy is contraindicated for

women with a history of estrogen-positive carcinoma, liver problems, or thrombosis. Studies have shown black cohosh extracts (Remifemin®) to be effective alternatives to HRT for these patients.

Initially black cohosh was thought to have estrogen-like effects; however, various animal studies did not validate this assumption, and evidence now suggests that black cohosh functions non-hormonally. The author cites a number of studies, most of which are not blinded, and the information extracted from these studies is incomplete. In one double-blind study, 80 women with menopausal complaints were divided into groups receiving either a black cohosh extract (Remifemin®), a low-dose estrogen, or a placebo. The women in the black cohosh group demonstrated significant improvement on the Kupperman menopausal index (which evaluates common symptoms), the Hamilton anxiety scale, and the degree of proliferation of vaginal epithelium. The author does not explain how the control or placebo groups compared with the experimental group.

In another study of 60 patients with moderate menopausal symptoms, black cohosh extracts (Remifemin®), conjugated estrogens (low dose), and diazepam all reduced perimenopausal complaints. In a multicenter drug monitoring study, 80 percent of the 629 perimenopausal women treated with black cohosh extract experienced significant improvement in symptoms. Another study of 60 women under 40 years old with ovarian deficiency symptoms following hysterectomies found significant improvement in symptoms with either HRT or black cohosh extract.

All of the studies cited used a 40 mg, twice-a-day dose of standardized black cohosh rhizome extract (Remifemin®). Improvement in symptoms occurs after two to four weeks of therapy, and the German Commission E recommends a treatment course not to exceed six months (probably due to the fact that the longest duration of clinical trials has been for this period. There is no evidence that use of black cohosh for more than 6 months produces any adverse side effects). Black cohosh extract is widely used and well tolerated. The only side effect is gastrointestinal disturbance. Drug interactions are unknown. Black cohosh is contraindicated in pregnancy; an overdose may cause premature birth (no data available). Black cohosh is neither toxic nor mutagenic. A chronic toxicity study in rats given 90 times the human therapeutic dose found no teratogenic (causing birth defects), mutagenic, or carcinogenic effects. In the author's opinion, long-term use (several years) of black cohosh extracts is safe. Use of black cohosh in conjunction with HRT is has not been studied. —Leela Devi, MSN, RN

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