

Date of release: 02 November, 2009

Herbals for climacteric symptoms and risk of breast cancer

Menopause is a natural event and so, understandably, many women are keen to use complementary and alternative medicines (CAMs) to try to manage symptoms such as hot flushes. However, all therapies, including CAMs like herbals, carry risks. Many women resist taking hormone therapy for fear that it might accelerate the appearance of breast cancer. But how safe are CAMs and do they affect breast cancer risk? Obi and colleagues [1] recently performed a case-controlled study of 10,121 postmenopausal women – 3464 women with a personal history of breast cancer risk and 6657 controls without cancer. The women were interviewed and demographic data collected including their use of herbal remedies. Women were considered 'ever' users of herbal preparations (HEP) if they reported use for more than 3 months. Ever-users were considered 'current' users if HEP was used within 6 months of the referent date. Multivariate and regression analyses were performed. Ever-use of menopause herbals (9.9% of subjects) was associated with a decreased risk of developing breast cancer (odds ratio (OR) 0.74, 95% confidence interval (CI) 0.63–0.87). No particular type of herbal therapy was particularly linked to this reduced risk of breast cancer.

Comment

The Obi study was a population study and so should not be over-interpreted. However, it does add to the growing body of evidence that some herbals might actually decrease breast cancer risk. Rebbeck and colleagues [2] performed a similar study to Obi and obtained comparable results. They compared 949 breast cancer cases with 1524 controls. They found that the women using black cohosh extracts (mostly Remifemin) had a significantly reduced risk of developing breast cancer (adjusted OR 0.39, 95% CI 0.22–0.70).

In the laboratory, some phytoestrogen and black cohosh extracts have been shown to either be neutral to estrogen receptor positive and negative breast cancer cell lines or actually inhibit their growth [see references within 1 and 2; 3]. Einbond and colleagues [3] showed that, in the laboratory, purified triterpenes induced apoptosis in MCF7 breast cancer cell lines. Black cohosh taken for 12 weeks did not affect serum levels of luteinizing hormone, follicle stimulating hormone or estradiol [4]. Nipple aspirate studies have shown that black cohosh does not affect estrogenic markers such as pS2 [4]. Lastly, black cohosh does not seem to affect mammographic density or breast cell proliferation, as assessed by using Ki-67/MIB-1 monoclonal antibodies on a fine needle breast biopsy [5]. It may not yet be scientifically proven that herbals such as black cohosh are superior to placebo for the relief of menopausal symptoms [6, 7], but a conservative interpretation of the data presented above would suggest that they do not increase breast cancer risk and might actually decrease it.

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Scientific Editor: Amos Pines (apines@netvision.net.il)