Herbal Menopause Therapy A Good Fit For Breast Cancer Patients?

ScienceDaily (Oct. 15, 2008) — When it comes to understanding the effectiveness and safety of using herbal therapies with other drugs, much is unknown. Now, a University of Missouri researcher will study how black cohosh - an herbal supplement often used to relieve hot flashes in menopausal women - interacts with tamoxifen, a common drug used to treat breast cancer.

As women age and reach menopause, their risk of developing breast cancer increases. Many women who have, or are at risk, for breast cancer take tamoxifen. The drug prevents approximately 50 percent of breast cancers in women who have an increased risk of developing breast cancer. However, when women take tamoxifen, they cannot take hormone replacement therapies to relieve menopausal symptoms. Their options are limited to taking antidepressants that can have complications, enduring uncomfortable menopausal symptoms, or trying the black cohosh.

“Hopefully, this study will provide evidence that black cohosh is safe to use for breast cancer patients,” said Rachel Ruhlen, a postdoctoral researcher in the MU School of Medicine. “Currently, there is little reliable information guiding women in how they can use foods and botanical supplements to enhance their treatment or improve their quality of life.”

To study how black cohosh and tamoxifen interact, Ruhlen will use a group of rats prone to breast cancer, known as ACI rats. Previous studies have found that human breast cancer is associated with life-time exposure of estrogen. ACI rats, like humans, develop mammary tumors after exposure to estrogen. In a previous study, Ruhlen found that when ACI rats were treated with the human breast cancer drug tamoxifen, mammary tumor mass was reduced by 89 percent.

“Many animal models of breast cancer differ in important ways from humans with breast cancer,” Ruhlen said. “These models are useful in studying how human tumors grow and spread to other parts of the body, but fall short because of the difference in how human tumors begin. However, mammary tumors in ACI rats share several key features with the majority of human breast cancers, particularly in how tumors start. Because the ACI rats develop tumors and can be treated in a way similar to humans, it is a relevant model for human breast cancer.”
Ruhlen’s research on black cohosh and tamoxifen is funded by Susan G. Komen for the Cure. Ruhlen works with Salman Hyder, a professor of biomedical sciences in the College of Veterinary Medicine and investigator in the Dalton Cardiovascular Research Center.

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