

New-onset breast tenderness during HT judged a risk factor for cancer

A hormone user who reports new breast tenderness is more likely to have breast cancer than a user who doesn't have tenderness, according to an analysis of data from the Women's Health Initiative

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Breast tenderness that arises after initiation of combination hormone therapy (HT)—specifically, conjugated equine estrogen (CEE) and medroxyprogesterone acetate (MPA)—heightens a woman's risk of breast cancer, according to researchers whose analysis of data from the Women's Health Initiative (WHI) is reported in the *Archives of Internal Medicine*.¹

Investigators reached their conclusion after studying data from the estrogen-progestin arm of WHI, in which women who had an intact uterus were randomly assigned to receive 0.625 mg of CEE and 2.5 mg of MPA daily or placebo. Participants underwent mammography at study entry and every 12 months thereafter, as well as clinical breast examination. Breast tenderness was assessed at baseline and 12 months.

Among women taking HT, the incidence of breast cancer was significantly higher among those who reported new-onset breast tenderness than among those who didn't (hazard ratio, 1.48; 95% confidence interval, 1.08–2.03; $P=.02$).

Among women in the placebo group, new-onset breast tenderness was not associated with an increased risk of breast cancer.

“To our knowledge, no previous published studies have addressed whether there is an association between conjugated equine estrogens plus medroxyprogesterone-induced new-onset breast tenderness and breast cancer risk,” write Carolyn J. Crandall, MD, MS, and colleagues in the October 12 issue of *Archives*. Previous studies, however, have found that such breast tenderness in users of CEE plus MPA is associated with increased mammographic density—“a risk factor for breast cancer that indirectly measures parenchymal tissue proliferation.”

The sensitivity and specificity of new-onset breast tenderness for predicting the risk of invasive breast cancer among users of CEE plus MPA were similar to the sensitivity and specificity of the Gail model, the authors note.

Reference

1. Crandall CJ, Aragaki AK, Chlebowski RT, et al. New-onset breast tenderness after initiation of estrogen plus progestin therapy and breast cancer risk. *Arch Intern Med.* 2009;169:1684–1691.