Hormones for Menopause Increase Breast Cancer Hazard

Women undergoing hormone therapy for the symptoms of menopause face an increased risk of developing invasive breast cancer or dying of the disease, according to the results of an 11-year study.

Women taking a hormone therapy that uses a combination of estrogen and progestin were 1.25 times more likely to develop invasive breast cancer, and two times more likely to die from breast cancer, than women who took a placebo over the study period.

The study is a follow-up of participants in the Women's Health Initiative, which consisted of several clinical trials involving more than 100,000 women. In 2002, a trial looking at the effects of estrogen and progestin therapy was stopped after 5 and a half years, when researchers found the treatment increased the risk of invasive breast cancer by about 25 percent.

The new study was able to look at the effect of hormone therapy over a longer time period, and was the first to look at a woman's risk of dying from breast cancer.

The findings suggest women taking these hormones should closely follow the current recommendation, which is to use the lowest dose for the shortest amount of time, said study researcher Dr. Rowan Chlebowski, of the Los Angeles Biomedical Research Institute at Harbor-UCLA Medical Center in Torrance, Calif.

Women might also want to think about stopping the therapy after a year or two, to see if their menopause symptoms have diminished, he said.

"I think this data suggests that maybe they should more aggressively consider stopping after some period of time, and see if they still need the treatment, because their symptoms related to the onset of menopause may have gotten better," Chlebowski said.

More serious breast cancers

About 83 percent of the participants in the original Women's Health Initiative hormone therapy trial, or 12,788 women, were followed for five years after the trial was stopped.

After this 11-year period, 385 women taking the hormones developed invasive breast cancer, compared with 293 taking the placebo.

Women taking the hormones were also more likely to have an advanced-stage cancer that had spread to the lymph nodes; 81 women on the hormones developed an advanced cancer, while 43 women on the placebo did.

And a total of 25 women died from breast cancer after taking the hormones, compared with 12 women taking the placebo. This means that for every 10,000 women taking the therapy, 2.6 would die from breast cancer per year, compared with 1.3 deaths per year among those not taking the therapy, the researchers said.

The results counter the suggestion from some previous findings that breast cancers arising in women taking estrogen and progestin would be less serious and less likely to result in death than in women not taking these hormones, Chlebowski said.

Why does hormone thearpy increase breast cancer risk?

Breast tissue responds to hormones, such as those that trigger milk production after pregnancy. Hormone therapy may contribute to the development of breast cancer by exaggerating or accelerating a normal response, Chlebowski said.

The hormones may also interfere with breast cancer detection, keeping the cancer from being found until it has reached a more advanced stage, he said. In a previous study, Chlebowski and his colleagues found mammograms were less able to detect breast cancers in women taking hormone therapy.

"The cancers were kind of hiding in the breast and getting larger, but they weren't able to be detected," Chlebowski said.

After many postmenopausal women in the United States stopped taking estrogen and progestin hormones, there was a decrease in cases of breast cancer in the country, the researchers said, and their results suggest even fewer deaths due to breast cancer can be expected in the future.

The new study will be published tomorrow (Oct. 20) in the Journal of the American Medical Association.

• Findings: Why the Pill May Increase Breast Cancer Risk