

Biennial Mammography Better Than Annual for Women 50 to 74



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http://www.medscape.com/viewarticle/780957?src=wnl_edit_medn_wir&uac=40052EN&spon=34

Women aged 50 to 74 who undergo biennial mammography have a similar risk for advanced-stage breast cancer and a lower cumulative risk for false-positive results compared with women who undergo annual mammography, according to a prospective cohort study of 934,098 women.

Karla Kerlikowske, MD, a professor in the Department of Epidemiology and Biostatistics at the University of California, San Francisco, and a staff physician in the General Internal Medicine Section at the San Francisco Veterans Affairs Medical Center, California, and colleagues published their findings online March 18 in *JAMA Internal Medicine*.

The researchers analyzed data collected from 11,474 women with breast cancer and 922,624 women without cancer who underwent mammography from January 1994 to December 2008 at community mammography facilities that participate in the Breast Cancer Surveillance Consortium mammography registries.

They calculated the odds of advanced stage (IIb, III, or IV) cancer and large tumors (20 mm in diameter) and the 10-year cumulative probability of a false-positive mammography result according to screening frequency, age, breast density, and postmenopausal hormone therapy (HT) use.

Most of the women with breast cancer were at least 50 years of age, were white, and had heterogeneously dense or extremely dense breasts.

Women who were using combination HT, had heterogeneously dense or extremely dense breasts, and underwent biennial mammography did not have a statistically significant increase in risk for advanced stage (odds ratio [OR], 1.56; 95% confidence interval [CI], 0.88 - 2.80) and large tumor size (OR, 1.59; 95% CI, 0.97 - 2.61). There were no differences among women aged 50 to 74 years who underwent triennial compared with biennial mammography.

Women aged 40 to 49 years with extremely dense breasts who underwent biennial mammography vs annual mammography did have a significantly increased risk for advanced-stage cancer (OR, 1.89; 95% CI, 1.06 - 3.39) and large tumor size (OR, 2.39; 95% CI, 1.37 - 4.18).

For women aged 50 to 74 years with scattered fibroglandular densities who were not using HT, the cumulative probability of having 1 or more false-positive mammography results after 10 years was 49.8% with annual, 30.7% with biennial, and 21.9% with triennial screening. These results were similar among women who used estrogen-only HT.

Among women aged 50 to 74 years who underwent annual mammography, the highest estimates were among women with extremely dense (65.8%) or heterogeneously dense (68.1%) breasts who were using combination HT. The lowest estimates were among women aged 50 to 74 years who had fatty breasts (30.3% with annual, 17.4% with biennial, and 12.1% with triennial mammography in women not receiving HT), as well as HT users.

The cumulative probability of at least 1 false-positive mammography result after 10 years was highest among women aged 40 to 49 years who underwent annual screening with heterogeneously dense (68.9%) or extremely dense breasts (65.5%).

"These individual decisions involve evaluating the balance between the benefits of screening — detecting cancer early — and the potential harms, such as false positives among healthy women," Dr. Kerlikowske said in a statement. "Some people who are at higher risk of disease may be more willing than those at lower risk to accept such potential harms of screening."

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