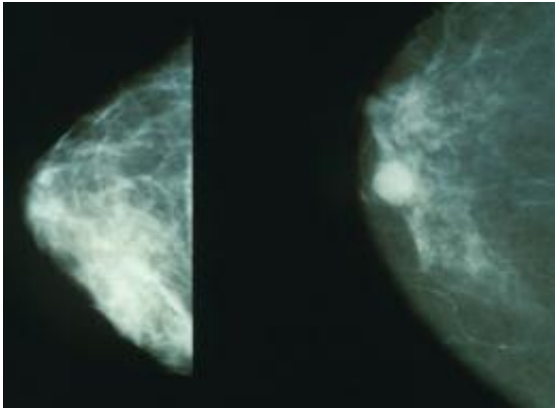


Breast cancer patients with bilateral mastectomy don't have better survival rates

September 2 2014



Mammograms showing a normal breast (left) and a cancerous breast (right).
Credit: Wikipedia.

Breast cancer patients treated with lumpectomy followed by radiation therapy survived as long as patients who had bilateral mastectomy, according to a large study conducted by researchers at the Stanford University School of Medicine and the Cancer Prevention Institute of California.

The comprehensive analysis of nearly 190,000 California women with the disease is the first to directly compare [survival rates](#) following the three most common surgical interventions: bilateral mastectomy (the removal of both breasts), unilateral mastectomy (the removal of the affected breast), and lumpectomy (the selective removal of cancerous

tissue within the breast) plus radiation. Women in the study were diagnosed between 1998 and 2011 with cancer in one breast.

The study will be published on Sept. 2 in the *Journal of the American Medical Association*.

The researchers sought to understand why increasing numbers of women are choosing bilateral mastectomies after a diagnosis of cancer in just one breast. The study found that, in 2011, as many as 12 percent of newly diagnosed [breast cancer](#) patients opted for a bilateral mastectomy, despite uncertainty as to whether this approach was better than the alternatives. This study dispels much of that uncertainty.

"We can now say that the average breast cancer patient who has bilateral mastectomy will have no better survival than the average patient who has lumpectomy plus radiation," said Allison Kurian, MD, an assistant professor of medicine and of health research and policy at Stanford.

"Furthermore, a mastectomy is a major procedure that can require significant recovery time and may entail breast reconstruction, whereas a lumpectomy is much less invasive with a shorter recovery period."

The study did find, however, a slightly lower survival rate among women who underwent a unilateral mastectomy.

Kurian is the lead author of the study. Scarlett Gomez, PhD, a research scientist at CPIC, is the senior author.

"Given the recent attention around bilateral mastectomies, we wanted to know whether there are particular types of patients likely to receive a bilateral mastectomy," Gomez said. "And, secondly, are there relative differences in mortality among the three procedures? We were able to address these questions using data from the California Cancer Registry, which covers nearly all women diagnosed with breast cancer in the state.

The registry is enhanced with information on factors that may influence a treatment decision, including their socioeconomic status, health insurance and where they received their care."

The researchers found that of the 189,734 women in the study, 55 percent received a lumpectomy with follow-up radiation, 38.8 received a unilateral mastectomy and 6.2 percent received a bilateral mastectomy. Overall, the proportion of women receiving unilateral mastectomies declined during the study period, while the proportion of women receiving bilateral mastectomies increased. Racial and ethnic minorities, as well as women of lower socioeconomic status, were more likely than others to receive a unilateral mastectomy. In contrast, women who received a bilateral mastectomy were more likely to be middle- or upper-class, younger than 50 or non-Hispanic whites, or some combination of these.

The difference in the long-term survival rates between women who underwent a bilateral mastectomy and women who received a lumpectomy plus radiation was not statistically significant.

The slightly lower survival rate among women who underwent a unilateral mastectomy could be due to the fact that these patients tended to be members of racial or ethnic minorities or have a lower socioeconomic status than other patient groups, or both, the researchers said. Gomez and Kurian speculate that these patients may have been more likely to have other health problems, such as diabetes, that could have affected or limited the course or effectiveness of their cancer treatment. They may also have had difficulty securing transportation to radiation appointments or had other barriers in access to care, according to Gomez and Kurian.

Physicians in California are legally required to report all cancer cases in the state to the Cancer Registry. The researchers used this data to assess

the outcomes of women diagnosed with stages 0 to 3 unilateral breast cancer—that is, cancer affecting only one breast—in the state from 1998 to 2011.

The registry is unique because it includes information about nearly every cancer case in the state. It captures important information, such as the stage of the disease, the surgical outcome chosen by the patient and her physician, and whether the patient eventually died from her disease. It also includes information about the patient's racial or ethnic background and where she lived.

"The registry allows us to do a population-based study to gain a real-world picture of cancer cases in California," said Kurian. "We can ask and answer questions that couldn't be answered in a randomized clinical trial." For example, Kurian and Gomez point out that it would not be ethical to assign a woman randomly to one of the three common surgical options. But using the registry, they can simply track who received which intervention.

Despite the fact that women who removed both breasts did not have better survival rates, the study found that rapidly increasing numbers of women are opting for the complex surgery, which requires a long recovery period and possibly reconstructive surgery.

The bilateral mastectomy procedure is particularly prevalent among non-Hispanic white women younger than 40 who have private insurance and receive care at a National Cancer Institute-designated cancer center. In fact, 33 percent of women under age 40 received bilateral [mastectomies](#) in 2011, compared with 3.6 percent in 1998. (The prevalence of bilateral mastectomy among all patients in the study increased from 2 to 12.3 percent during the same time period.)

In contrast, racial or ethnic minorities and [women](#) with public insurance,

such as Medicaid, were more likely to receive a unilateral mastectomy.

Kurian and Gomez emphasize that the study's findings don't mean that a woman with a BRCA1, BRCA2 or other gene mutation known to significantly increase the risk of developing breast cancer, or with a strong family history of breast cancer, should not get a bilateral mastectomy. A genetic predisposition may mean that removing both breasts is an effective option.

There are also other reasons why a woman might choose a bilateral mastectomy. Some newer breast-reconstruction methods achieve better symmetry when both breasts are reconstructed simultaneously. Removal of both breasts may also alleviate a woman's fear and worry that a second [cancer](#) will occur in her remaining breast, the researchers said.

"We're hopeful that this study will open a dialogue between a patient and her physician to discuss these kinds of questions," said Gomez. "It's an important piece of evidence that can guide their decision-making process."

More information: doi:10.1001/jama.2014.10707
doi:10.1001/jama.2014.11308

Provided by Stanford University Medical Center

Citation: Breast cancer patients with bilateral mastectomy don't have better survival rates (2014, September 2) retrieved 1 May 2024 from <https://medicalxpress.com/news/2014-09-breast-cancer-patients-bilateral-mastectomy.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.
