Mental and Social Well-Being among Women with Cancer in One Breast Who Underwent Surgery to Remove Both Breasts

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What was the research about?
Most women with cancer in one breast have a low risk of getting cancer in their other breast. But many women choose to have both breasts removed to prevent future breast cancers. Surgery to remove the healthy breast is called contralateral prophylactic mastectomy (CPM).

Researchers wanted to see how CPM affects a patient’s mental and social well-being. The research team compared two groups: patients who had both breasts removed and patients who had part or all of the breast with cancer removed but kept their healthy breast.

What were the results?
Compared with patients who kept the healthy breast, patients who had CPM had

- More stress and suffering from their cancer before and after CPM
- More concerns about body image before and after CPM
- More worry about their cancer before CPM
- The same amount of worry about their cancer after CPM
- The same quality of life before CPM
- A lower quality of life after CPM

Patients’ satisfaction with their treatment choice was the same for patients who had CPM and those who kept their healthy breast.

In interviews, patients said they worried about getting cancer again no matter which treatment they chose. Patients who had CPM said having both breasts removed gave them peace of mind.

A computer program predicted that CPM would have little effect on how long patients lived.

Who was in the study?
The study included 252 women from a cancer center and a community clinic in Houston, Texas. The patients were newly diagnosed with cancer in one breast. The cancer was not inherited. Among the patients, 55.5 percent had part of the breast with cancer removed, 27 percent had the whole breast with cancer removed, and 17.5 percent had both breasts removed (CPM). The average patient age was 56. Most patients in the study were white (57 percent), followed by African American (15 percent), Hispanic (15 percent), and other (8 percent).
What did the research team do?
The research team asked patients to fill out surveys before surgery and then again 1 month, 6 months, and 12 months after surgery. Patients rated their stress and suffering, body image concerns, worry about cancer, quality of life, and happiness with their treatment choice. The team used the survey results to find out how CPM and other treatments affected patients' mental and social well-being over time. The research team also interviewed 20 of the patients about how their breast cancer diagnosis and treatment choice affected their lives.

The research team made a computer program to estimate survival rates in patients with cancer in one breast. The program used results from published studies to make estimates. The program considered the age at diagnosis, extent of the cancer, and history of breast cancer in the family.

What were the limits of the study?
Some patients didn't fill out all the surveys. The results may not have been the same if the mental and social well-being of patients who didn't fill out all the surveys was different from those who filled out all the surveys. The study was done in one large city; results may differ in smaller cities or rural areas. The research team recruited some patients after they were diagnosed with breast cancer but before they saw a surgeon. The team recruited the rest of the patients after they had seen a surgeon. These differences in recruiting may have affected the patients' survey answers.

Future studies could look for ways to improve patients' well-being after treatment for cancer in one breast. Studies could also test ways to tell doctors and patients about how treatments may affect mental and social well-being.

How can people use the results?
Women with breast cancer and their doctors can use the results of this study when deciding on treatment for cancer in one breast.

To learn more about this project, visit pcori.org/Brewster037.