GYNECOLOGY APRIL 2010 • OB.GYN. NEWS

Sharp Rise Seen in Prophylactic Mastectomy

BY BETSY BATES

SAN ANTONIO — Breast cancer patients undergoing prophylactic contralateral mastectomy are generally not at high risk for contralateral breast cancer, and may be influenced by anxiety or imaging studies that may not have clinical relevance, based on a study presented at the San Antonio Breast Cancer Symposium.

Rates of prophylactic contralateral mastectomy have increased "dramatically" among women with all stages of breast cancer in the United States in recent years, said Dr. Tari A. King, a breast cancer surgeon at Memorial Sloan-Kettering Cancer Center in New York.

From January 1997 to December 2005, for example, rates of the procedure increased from 7% to 24% of women

who underwent mastectomy at her institution, she said in an interview following her presentation.

Dr. King and her associates sought to learn whether the increase in prophylactic mastectomy could be attributed to better awareness of risk factors for contralateral recurrence or treatment factors related to the index lesion.

A total of 2,965 women underwent mastectomy for stage 0-III unilateral

breast cancer during the study period, 407 of whom (13.7%) opted to have a prophylactic mastectomy of the contralateral breast within 12 months.

The vast majority, 367, had the contralateral procedure immediately following breast cancer surgery, the investigators reported.

Women who opted for prophylactic contralateral mastectomy were younger than those who did not undergo the TAIS

Major Finding: Many women who opt for contralateral prophylactic mastectomy are at low risk of recurrence based on family history and absence of aggressive mutations.

Data Source: Study of 2,965 women who underwent mastectomy for stage 0-III unilateral breast cancer from January 2007 to December 2005.

Disclosures: Neither Dr. King nor any of her coauthors reported any relevant financial disclosures.

added surgery (mean age, 45 vs. 54 years) and more likely to be white (93% vs. 7%).

The *P* values for both characteristics were highly significant at less than .0001.

Equally significant was that women choosing contralateral prophylactic mastectomy were more likely to have a family history of breast

cancer (68% vs. 32%).

Dr. King noted, however, that 43% of patients opting for additional surgery

had no first-degree relatives with breast cancer. Almost half (49%) had two first-degree relatives with breast cancer, and just 8% had two or more first-degree relatives with the disease.

Just 13% of those who underwent prophylactic surgery were considered "high risk" because they were BRCA gene carriers (n = 37) or had undergone prior mantle radiation for Hodgkin's disease (n = 15).

Index cancer pathology revealed only ductal carcinoma in situ in 22% of patients who opted to have their contralateral breasts removed, suggesting

that they were at exceedingly low risk of a contralateral recurrence, they reported.

The mean tumor size was larger among women who failed to have prophylactic surgery (2.16 cm vs. 1.53 cm), as was positive node status (57% vs. 47%); both differences were statistically significant at respective *P* values of less than .0001 and .001.

Clinical management factors strongly associated with prophylactic surgery included MRI at diagnosis and an additional biopsy in the contralateral breast because of MRI results.

Nearly half of women who decided on additional surgery (43%) had undergone an MRI, compared with just 16% of those who did not opt to have a prophylactic mastectomy.

The MRIs led to an additional contralateral or bilateral biopsy in 29% of



Just 13% of those who had prophylactic contralateral mastectomy were considered 'high risk.'

DR. KING

women who chose added surgery, compared with just 4% in the group who did not (P less than .0001).

However, many of the women with MRI findings never had a biopsy to confirm whether a malignancy was present in the contralateral breast, instead deciding preemptively on a contralateral prophylactic mastectomy.

"There's no going back" if a patient decides on a prophylactic mastectomy before a biopsy can determine whether a lesion seen on MRI is benign, Dr. King stressed in her interview.

Breast conservation surgery was attempted in more women in the prophylactic mastectomy group (28%, compared with 16%; *P* less than .0001), the investigators reported.

The same women were more likely to undergo breast reconstruction, 87% vs. 51% (*P* less than .0001), suggesting that some women may have chosen the added surgery in order to achieve cosmetic symmetry.

All prophylactic contralateral mastectomies were performed by surgeons whose practice was limited to breast cancer surgery.

Within that group of 13, the rate of contralateral prophylactic mastectomy ranged from 3% of patients to 26%. A multivariate analysis found no independent association between choice of surgeon and prophylactic contralateral mastectomy, however.

Rates of distant metastasis were statistically similar (4% and 7%) in women who did and did not undergo contralateral prophylactic mastectomies, they reported.

After a median follow-up of 6 years, contralateral breast cancer developed in 12 (0.4%) women who did not undergo contralateral prophylactic mastectomies, Dr. King and her associates reported.