BREAST SESSION 2

Contralateral Prophylactic Mastectomy: The Argument for Bilateral Mastectomies and Reconstruction

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BACKGROUND: The increasing trend of women with unilateral breast cancer to electively undergo contralateral prophylactic mastectomy (CPM) in addition to treatment of the index breast has been the source of much debate. This trend has been primarily patient-driven, with conflicting, objective evidence supporting CPM. Critics have cautioned against the rising rates of CPM, questioning its indications and the possibility of increased risk over unilateral treatment. As such, any information that can help practitioners better guide their patients towards the most beneficial and risk-reducing options is critical. The authors set out to better frame the risks and benefits of CPM in the treatment of unilateral breast cancer by evaluating outcomes of a large, consecutive cohort of patients.

METHODS: An IRB-approved review of a single-surgeon (NT) experience (2013–2018) was conducted of all consecutive patients with unilateral breast cancer treated with mastectomy and immediate reconstruction. Demographic data, comorbidities, and surgical pathology results were assessed. Thirty-day complication rates were recorded, including medical complications requiring readmission to the hospital and surgical complications requiring a return to the operating room. Outcomes were compared between patients with unilateral cancer who underwent unilateral mastectomy (UM) versus bilateral mastectomy (one breast being CPM). Logistic regression models evaluated various risk factors for potential associations with positive pathology in the CPM specimen and/or postoperative complications.

RESULTS: A total of 244 patients were identified, 146 (59.8%) of which had autologous reconstruction and 98 (40.2%) had implant-based reconstruction. Of the 244 patients, 68 (27.9%) underwent UM and 176 (72.1%) underwent CPM. Of those undergoing CPM, surgical pathology results of the prophylactic breast revealed occult ductal carcinoma in situ or invasive cancer in 13 patients (7.39%) and lobular carcinoma in situ in 8 patients (4.55%). Logistic regression analysis showed no significant association between positive breast pathology and any of the potential factors assessed, including tobacco use, history of radiotherapy, or breast cancer (BRCA) gene status. Incidence of medical complications (4.41% UM vs. 5.68% CPM; p<1.00) and surgical complications (16.18% UM vs. 8.52% CPM; p<0.104) were similar between UM and CPM patients. With UM and CPM patients analyzed in aggregate, multivariable logistic regression revealed increased BMI as a significant risk factor for medical complications (OR=1.15; 95% CI 1.05 to 1.26). Regression models also identified diabetes mellitus to be significantly associated with having a surgical complication (OR=4.05; 95% CI 1.38 to 11.91).

CONCLUSION: These results underscore the premise that women with unilateral breast cancer who elect to undergo CPM may have an oncologic benefit by identifying an occult neoplasm in patients who lack typical risk factors associated with bilateral disease, such as positive BRCA status. Moreover, the findings presented here also suggest CPM does not pose an increased risk of complications compared to unilateral treatment.

Surgeon Gender Affects Patient-Reported Satisfaction after Breast Reconstruction

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PURPOSE: Previous investigators have demonstrated that female patients often prefer female providers. While there are limited studies evaluating the role of gender in women’s choices of breast oncology surgeons, previous reports have not assessed the effects of surgeon gender on patient satisfaction and other patient-reported outcomes (PROs)
in breast reconstruction. Using a multicenter, prospective design, the current study sought to analyze the impact of surgeon gender on PROs in women undergoing post-mastectomy reconstruction.

**METHODS:** Patients were recruited as part of the prospective, multicenter Mastectomy Reconstruction Outcomes Consortium (MROC), a National Institute of Health-funded study (R01 CA152192). Surgeon gender, reconstructive procedure type, timing of reconstruction, lymph node management, and receipt of radiation or chemotherapy were collected for all patients. Patient reported outcomes, including satisfaction with surgeon, satisfaction with information provided, and satisfaction with overall outcome, were assessed using the BREAST-Q questionnaire at three months and two years following breast reconstruction. Univariate and multivariable logistic regression analyses were performed to investigate the effects of surgeon gender on PROs.

**RESULTS:** A total of 2,236 patients from the practices of 55 male breast reconstruction surgeons and 9 female surgeons were included in the analysis. In this cohort, 1921 (82.2%) patients had male surgeons whereas 415 (17.8%) patients had a female surgeon. There were no significant differences in sociodemographic variables between the patients in the male-surgeon and female-surgeon groups. There were also no differences in receipt of radiation or chemotherapy.

On univariate analysis, female surgeons were more likely to perform immediate reconstruction (95.7% vs. 89.9%, p<0.001) and implant-based breast reconstruction (78.8% vs. 62.9%, p<0.001), compared to male surgeons. Patients with female surgeons reported greater satisfaction with their surgeon (p<0.001) and information received (p<0.05) at three months after breast reconstruction. Similarly, patients in the female-surgeon group reported statistically significantly greater satisfaction with overall outcome (p<0.05) at two years following breast reconstruction.

Multivariate analysis of two-year postoperative PROs revealed patients with a female surgeon experienced significantly greater satisfaction with their surgeon (adjusted mean difference=4.45, p=0.0001) and higher satisfaction with information received (adjusted mean difference=2.74, p=0.01), compared to patients in the male-surgeon group. Patients in the female-surgeon group also reported greater satisfaction with overall breast reconstruction outcome (adjusted mean difference=2.91), though this finding only approached statistical significance (p=0.059).

**CONCLUSION:** Based on our findings, surgeon gender appears to be one of the many factors influencing PROs in breast reconstruction. However, more investigation is necessary to determine why this may be the case: Do patients’ expectations simply vary depending on provider gender, or are these differences in outcomes attributable to variations in practices between male and female surgeons?

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**Does Staged Breast Reduction Prior to Nipple-Sparing Mastectomy Decrease Complications? A Retrospective Cohort Study between Staged and Non-Staged Techniques**

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**PURPOSE:** Nipple-sparing mastectomy (NSM) in patients with large, ptotic breasts continues to be a reconstructive challenge. Staged breast reduction prior to prophylactic NSM has been described to decrease complications; however, a direct comparison of outcomes between staged and non-staged techniques is lacking.

**METHODS:** A retrospective review of all patients that underwent staged breast reduction prior to NSM was conducted. Staged cases were compared to non-staged NSM cases within the same range of breast sizes as quantified by mastectomy weight (includes breast reduction specimen weight in staged group). Non-staged cohort inclusion criteria also included similarity in risk factors for...