Contralateral Prophylactic Mastectomy for Unilateral Breast Cancer: A Review of the National Comprehensive Cancer Network (NCCN) Database
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Problem: Contralateral prophylactic mastectomy (CPM) has traditionally been offered for women who carry a mutation in the BRCA1 or BRCA2 gene. In this population, the risk of a second primary breast cancer is 25% to 30% at 10 years. The use of CPM for women without a genetic mutation and unilateral breast cancer (UBC) appears to be increasing as evidenced by analyses of the Surveillance, Epidemiology, and End Results (SEER) database. The risk of subsequent contralateral breast cancer in this population of women is 0.5 to 1% per year. Importantly, studies evaluating contralateral prophylactic mastectomy in women with UBC have not shown a survival benefit for this procedure.

Evidence: Evidence used to address the problem was gathered from surgical literature.

Strategy: The National Comprehensive Cancer Network (NCCN) is comprised of twenty-one cancer centers. The NCCN maintains several disease-specific databases into which member institutions submit patient data on a regular basis. The Breast Cancer database was accessed to evaluate the demographic characteristics and outcomes of women who have chosen unilateral mastectomy (ULM) for treatment of their primary breast cancer as compared to those who have elected to undergo ULM and CPM. This study assessed the trend of CPM for UBC over the entire time period for which data has been collected.

Practice Change: Advance practice nurses can reinforce the evidence presented by the surgeon regarding survival rates and contralateral breast cancer rate.

Evaluation: A prospectively maintained breast cancer database was retrospectively reviewed. Statistical analysis was performed by Fisher’s exact test and Chi squared test.

Results: Patients who were younger (<50), white, diagnosed after 2004, educated beyond high school, ductal carcinoma in situ and lobular carcinoma in situ histology, low-intermediate grade and HER2 negative were more likely to undergo prophylactic contralateral mastectomy.

Recommendations: Advance practice nurses need to be aware of current trends regarding contralateral prophylactic mastectomy in order to utilize information in counseling the patient of surgical options.

Lessons Learned: The decision to undergo a contralateral prophylactic mastectomy for a patient who has unilateral breast cancer is multifactorial. Individual surgeons play a role in educating the patient about contralateral prophylactic mastectomy versus unilateral mastectomy. The advance practice nurse is in a unique position to assist the patient by providing evidence based information.
Bibliography:


