Increasing Prophylactic Mastectomy Rates: The Role of the Healthcare Environment

Should physicians provide more treatment direction?

Abstract: Increasing Mastectomy Rates: The role of the health-care milieu. A comparative analysis between Canada & the United States

April 30, 2014, Las Vegas--The surgeon and the surgical practice environment play an important role in a woman’s decision about the extent of her breast cancer surgery according to a study presented this week at the American Society of Breast Surgeons (ASBrS) Annual Meeting. The research explored the causes of the rapid growth in prophylactic mastectomies since 2003 among average risk early-stage breast cancer patients in the US and Canada. It identified three factors in the healthcare environment as significant – physician treatment recommendations, physician consultation on post-diagnostic MRI exams and the availability of immediate reconstruction.

“We found that women were more likely to choose prophylactic surgery when physicians did not specifically recommend other treatments or counsel against it, explains lead study author Andrea Covelli, MD, University of Toronto department of surgery. “They also opted for more surgery when MRI exams were done early in the consultative process and initial results were presented without detailed explanation. Access to immediate reconstruction also meant women were more likely to choose prophylactic surgery.”

The study involved 45 one-on-one interviews with breast surgeons equally divided between the US and Canada, academic and community settings and gender of the surgeon. The median length of physician practice was 15 years.

In the US, state legislation mandates that surgeons present all treatment options to patients. The research found that surgeons interviewed from the 20 states with such legislation, complied, but
generally did not recommend one procedure over another. Instead, they encouraged patient choice. Canadian surgeons discussed similar surgical options. However, more often they specifically recommended breast conserving surgery and counseled against contralateral prophylactic mastectomy.

Focusing on MRI findings, Dr. Covelli notes, “This imaging exam has a high rate of false positive results. Exams presented to patients without detailed explanation often cause patient concern about new disease, in addition to the original diagnosed tumor.” She notes that the study found that in Canada, MRI exams were ordered less frequently than in the US, and surgeons often had more opportunity to discuss potential for inaccuracies with patients. As one surgeon participating in the study noted, “Most of the time, additional lesions seen on a pre-surgical MRI end up being benign tissue when biopsied. But patient fear remains even though the biopsy is negative. Often these patients still want to have a mastectomy.”

Another participant adds, “It becomes difficult to counsel patients and undo the fear that an MRI has caused.”

The study also found that immediate reconstruction, which was associated with the choice of prophylactic mastectomy, is more widely available in the US than in Canada. It also found that in both countries, many patients requested a contralateral prophylactic mastectomy after returning from a consult with a reconstructive surgeon.

“We need to look at what happens during that consult to better understand patient decision-making,” Dr. Covelli says.

The authors conclude that the healthcare milieu, including legislation, social values, management of MRI exams and availability of immediate reconstruction appear to influence the surgical consultation process and in turn a woman’s choice of prophylactic mastectomy.

Noting that breast cancer is one of the few major illnesses for which physicians often do not recommend a specific treatment option, Dr. Covelli says, “Patients should ask for their doctor’s opinion if helpful to them. After all, most surgeons have years of experience treating breast cancer and can provide valuable counsel and advice.”
Abstract

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Title: Increasing Mastectomy Rates: The role of the health-care milieu. A comparative analysis between Canada & the United States

Objective: Rates of both unilateral (UM) and contralateral prophylactic mastectomy (CPM) for average risk, early-stage breast cancer (ESBC) have been increasing since 2003. A number of etiological factors have been suggested as a cause including increasing use of MRI, access to reconstruction and women playing an active role in their decision-making. We wished to understand how surgeons might be influencing the increasing mastectomy rates, and if there are differences between Canadian and American surgeons.

Methods: We conducted a qualitative study to explore the surgeons’ current approach to treatment of ESBC, as well as their experience with women requesting mastectomy. Purposive sampling was used to identify surgeons across Ontario, Canada and across the United States (U.S.) who varied in length/location of practice, extent of training, and gender. Data were collected through semi-structured interviews. Constant comparative analysis identified key concepts and themes.

Results: Data saturation was achieved after 45 one-on-one telephone interviews. Surgeons were equally sampled across Canada (23) and the U.S. (22), practice locations (22 were academic and 23 were community) and gender (23 male and 22 female). 29 had subspecialty training. Median length of practice was 15 years.

‘The effect of external factors on rising mastectomy rates’ was the dominant theme. All surgeons described breast conserving therapy (BCT) and UM as surgical treatment for ESBC with equivalent survival. State and/or federal legislation require U.S. surgeons to present all treatment options for ESBC including BCT, UM with or without reconstruction and balancing procedures on the contralateral side; U.S. surgeons rarely made a direct recommendation regarding extent of surgery. In contrast, Ontario surgeons presented both BCT and UM, but often recommended BCT. Neither U.S. nor Canadian surgeons recommended the use of UM+CPM in average-risk ESBC. Ontario surgeons strongly attempted to dissuade patients who requested CPM, often recommending they initially treat only the index cancer. Whereas, U.S. surgeons did not advise as strongly against this request; risks and benefits were discussed but it was often left up to the woman’s choice. Access to reconstruction and MRI vary considerably between the U.S. and Canada; the U.S. surgeons had more ready access to MRI and breast reconstruction. MRI use within Ontario is predominately regulated by the treating surgeon whereas U.S. patients often had an MRI completed prior to surgical consultation. Not infrequently our U.S. surgeons experienced patients requesting UM+CPM after consulting with the reconstructive surgeon, especially regarding concerns about balance. All surgeons describe the discussion for UM+CPM as being initiated by the patient. However, decision making by patients within the U.S is more affected by strong external factors including MRI results, reconstruction options and legislation.

Conclusion: While both Canadian and U.S. surgeons describe the same surgical options for ESBC (BCT and UM) the external environment in which surgeons work appears to influence patient decision-making regarding extent of surgery. These findings are important as the effects of MRI, reconstruction, and
legislation appear to influence the surgical consultation process and in-turn a women’s choice for mastectomy.