MORE AND MORE PATIENTS ARE opting for mastectomy these days, even when they are candidates for breast conservation (more commonly known as lumpectomy).

While we know clearly from the literature that breast conservation and mastectomy do not vary in terms of survival outcomes, many women are choosing bilateral mastectomies nonetheless. What is driving this trend, and how do we counsel our patients about these two options in the modern era of breast surgery?

Researchers estimate that as much as 20 percent of women with unilateral breast cancer — 30,000 patients a year — opt to have both breasts removed. This represents a significant rise from the estimated 3 percent of such cases in the 1990s. A recent study of almost 1,500 women by the University of Michigan reported that four years after breast cancer diagnosis, 35 percent of patients were considering contralateral prophylactic mastectomies, and 7 percent had already opted in.

This trend toward prophylactic mastectomies likely is driven by several factors. Increasing sophistication in surgical technique has greatly improved the morbidity and cosmetic outcomes of a mastectomy. The surgical community has evolved from the time of Halstead, when the entire muscle and axillary contents were removed, to muscle-sparing technique, then skin-sparing (preservation of the entire breast skin envelop) and now nipple-sparing (combining skin-sparing technique with preservation of the nipple and areola) options. While the nipple loses all function and often also loses all sensation following a nipple-sparing mastectomy, cosmetically the woman's breast remains closer to its natural form.

Nipple-sparing mastectomies originally were limited to prophylactic mastectomies, due to concerns about occult cancer in the nipple and increased rates of local recurrence. In all cases, the nipple ducts are removed and tested, ensuring removal...
of the tumor and any at-risk ducts. In approximately 5 percent of cases, the nipple-areolar complex is removed due to occult nipple involvement. The fear of local recurrence is diminishing as data are reported supporting low local recurrence rates in an appropriately selected patient population. The Massachusetts General Hospital experience is probably the best reported, and their most recent data show that at a mean follow-up of 22 months, local recurrence is seen in 2.6 percent of breasts operated on for cancer. None of those recurrences involved the nipple. Commonly accepted current criteria for nipple-sparing mastectomy are a tumor size of 3 cm or less, at least 2 cm from the nipple, not multicentric, and with clinically negative nodes. As the body of research grows, however, the inclusion criteria for nipple-sparing mastectomies have broadened, and more and more women are being offered this option.

In the same era of these surgical advancements, press coverage of breast cancer has grown exponentially. The stories of several well-known women who elected to undergo prophylactic mastectomies, including Angelina Jolie, Christina Applegate and Miss America contestant Allyn Rose, have gained widespread media attention, and public awareness campaigns also have flourished. While the messages of such campaigns are typically aimed at improving screening and early detection, this awareness of breast cancer risk has possibly contributed to an overestimation of risk. As the body of research grows, however, the inclusion criteria for nipple-sparing mastectomies have broadened, and more and more women are being offered this option.

As a breast surgeon, I am often the first physician a newly diagnosed patient will meet. One of my most important jobs is taking the time to educate my patients about both their surgical options and their overall treatment plan, and understanding each patient’s individual risk of local recurrence or contralateral cancer is a key component to making the best decision regarding treatment. But layered on top of this data is the patient’s life situation and the implications of these risks to them personally. One of the things I listen for from my patients who opt for mastectomy is their understanding that this choice is not about survival, but rather about quality of life. The anxiety component can be significant, and choosing a prophylactic mastectomy for some women helps to alleviate their fears.

REFERENCES:

Lynn Dengel, M.D.

Breast Surgery
A surgeon at Virginia Breast Care, Lynn Dengel joined the Martha Jefferson Medical Staff in October. She returns to Charlottesville following a breast surgical oncology fellowship at Memorial Sloan-Kettering Cancer Center. In addition to her medical training, Lynn’s diverse academic background includes an undergraduate degree in government and a master’s degree in science from University College London. Prior to her training at Sloan-Kettering, she completed her general surgery internship and residency at the University of Virginia. Her research interests in breast cancer and melanoma include investigation of sentinel lymph node outcomes, immunotherapy and novel intraoperative imaging techniques. In addition to her professional achievements, Lynn is the mother of four children, ages 1 to 6 years. She and her husband enjoy taking advantage of the wonderful outdoor and community activities available here in Charlottesville.