Breast surgery options flex to meet personalized needs of women

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With a plethora of advice from websites and survivor support networks as well as friends, family and co-workers, it can seem daunting to make the "right" decision when facing breast cancer.

While breast surgery has evolved to incorporate smaller incisions and more skin-sparing techniques, three basic types of breast surgery remain the standard-of care: lumpectomy, mastectomy or mastectomy with reconstruction.

Jaime Lewis, MD, says a patient's choice to have one technique versus another often lies in a combination of both medical and psychosocial factors that represent the woman's personal needs.

"There is no formula ... the 'right' choice is the one that gives the patient the best chances for long-term survival with acceptable cosmetic outcomes" says Lewis, a UC Health surgical oncologist affiliated with the University of Cincinnati Cancer Institute. "It's a very personal choice, and because women have so many choices, it can be a hard one to make."

According to the National Cancer Institute, more than 226,000 women are diagnosed with breast cancer in the United States annually. Breast cancer forms in tissues of the breast, usually the ducts (tubes that carry milk to the nipple) and lobules (glands that make milk). It can occur in both men and women, although male breast cancer is rare, affecting just over 2,000 men annually.

Once treated, the five-year survival rate for localized breast cancer is 98.4 percent.

Lumpectomy vs. Mastectomy

Women with smaller, localized tumors with no evidence of spread to the lymph nodes or other areas of the body are typically candidates for a either a lumpectomy (partial mastectomy), a procedure to remove the mass along with some surrounding normal tissue along the tumor's edges, or a mastectomy, which removes all the overlying skin and nipple/areola complex, along with a margin of healthy surrounding tissue.

According to medical literature, there is no difference between lumpectomy with radiation and a mastectomy in terms of long-term survival, says Lewis. The difference between the two procedures lies in recurrence rates: Women who have a lumpectomy are at a higher risk of having a local recurrence in the same breast.

"Patients have to weigh their desired cosmetic outcomes against their concern for recurrence and, therefore, the risk of additional surgery," says Lewis. Women who have lumpectomies will also require some form of radiation post-op to address potential cancer cells that still exist in the remaining breast tissue.

Reconstruction After Breast Cancer

Breast reconstruction techniques have improved dramatically in recent years, allowing specially trained surgeons to do muscle-sparing reconstructive surgery using the patient's own tissue and fat. The approach offers the best of both worlds to many patients—a medically sound technique with appealing cosmetic results.

Through UC Health, the UC Cancer Institute offers DIEP (deep inferior epigastric perforator) flap breast reconstruction, a technique in which tiny blood vessels from the abdominal tissue are surgically reattached to the chest wall. The procedure spares the rectus muscle; therefore, reducing the risk for complications associated with traditional TRAM (transverse rectus abdominis myocutaneous) flap surgery.

"The rectus abdominis muscle is a critical component of the abdominal wall that helps maintain core strength," explains Minh Doan Nguyen, MD, PhD, a UC Health plastic and reconstructive surgeon affiliated with the UC Cancer Institute. "The DIEP flap results in a more natural breast, both in feeling and appearance, which offers a great reconstruction alternative for certain patients, especially young survivors."

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