Breast Cancer Care at Mercy

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Surgery, Oncology

Our name is Mercy; our spirit is compassion.

Catherine McAuley
Founder, Sisters of Mercy

Breast cancer is the most commonly diagnosed cancer in women, accounting for 28 percent of all new cancers. In 2010, the American Cancer Society (ACS) estimated that 207,090 cases were diagnosed in women in the United States, and 3,880 in Missouri. Nationwide, there were 1,970 cases of male breast cancer. At Mercy in 2010, 880 cases were diagnosed in women and men, compared to 312 in 2003.

Mercy was the first program in Missouri to be accredited by the National Accreditation Program for Breast Centers (NAPBC) and our breast centers have been named "Breast Centers of Excellence," a true accolade. Mercy remains the premier provider of breast cancer care in St. Louis County, and has one of the largest breast cancer programs in Missouri. Data show that screening mammography saves lives through early detection of breast cancer. At Mercy, we adhere to the ACS guidelines of annual mammography beginning at age 40. Twenty-three percent of breast cancers diagnosed at Mercy occurred in women under age 50.

Mercy offers numerous locations for screening mammography in the St. Louis area, all staffed by dedicated breast imaging technologists: the Breast Center at Mercy Hospital, Mercy Clayton and Clarkson, facilities at Tesson Ferry, Hazelwood, O'Fallon and the traveling digital mammography van.

The ACS recommends MRI screenings for women with a lifetime risk of 20 percent or greater. MRI, using the advanced, award-winning Sentinelle Breast MRI table for increased patient comfort, is available at Mercy Hospital and Mercy Clayton and Clarkson. The average breast MRI is completed in just 23 minutes. Additionally, automated 3-dimensional breast ultrasound, another state-of-the-art imaging tool in the armamentarium for breast cancer detection, is available to our patients.

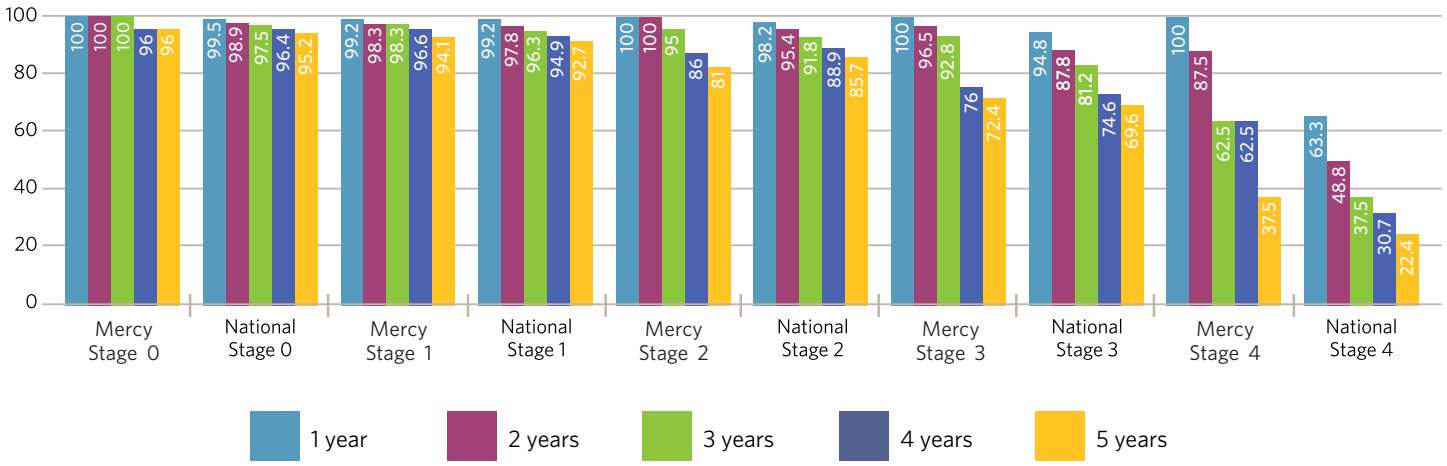
The mission of Sister Catherine McAuley continues in the healthcare ministry at Mercy with the provision of free mammography to the uninsured and underinsured. Thanks to funds from Show Me Healthy Women and Susan G. Komen for the Cure St. Louis Affiliate, over 840 uninsured or underinsured women were screened in 2010. Of those, 15 were diagnosed with breast cancer.

At Mercy, we recognize that a coordinated, multidisciplinary approach is essential for optimal breast cancer care. Just two years ago, Mercy joined forces with St. Louis Cancer and Breast Institute to form Mercy Clinic St. Louis Cancer and Breast Institute. This added four fellowship-trained breast surgical oncologists and five medical oncologists to our dedicated team of breast surgeons, medical oncologists, breast radiologists and radiation oncologists who provide multidisciplinary care for patients with breast cancer.

Communication between breast care providers is enhanced by weekly multidisciplinary conferences attended by breast surgeons, medical oncologists, radiation oncologists, breast radiologists, pathologists, social workers, and research staff. Patient care is discussed and input is sought from all involved specialties. Through active participation in the Community Clinical Oncology Program, we also offer patients opportunities to participate in clinical trials when appropriate.

For the last three years, the David C. Pratt Cancer Center Radiation Oncology Department has employed the Active Breathing Coordinator (ABC) device to eliminate radiation to the underlying heart

Five-Year Breast Cancer Survival Rate



during left-sided breast radiation. Mercy is the only facility in St. Louis utilizing this important heart-avoidance technology. In addition, CT-based 3D radiation planning (3D-CRT) is used to produce very uniform dose distributions throughout the breast, and IMRT/IGRT using Tomotherapy is also available when appropriate. Mercy has the most active MammoSite HDR brachytherapy program for accelerated partial breast irradiation (PBI) in the St. Louis area, and was the only local center to participate in the national MammoSite Registry Study.

Support services are essential to care of the whole patient as they progress from diagnosis to survivorship. We offer a complete range of services including counseling, physical therapy, occupational therapy, myofascial release, lymphedema therapy, exercise programs and support groups. Additional programs are now available through collaboration with the Cancer Support Community.

Advances in the Treatment of Thyroid Cancer

By James Boyd, MD
Otolaryngology • Cancer Committee/Co-Chair

For reasons that are not yet clear, the incidence of well-differentiated cancer of the thyroid, a commonly occurring malignancy, is gradually increasing in the United States. In general, it is thought to be a low-grade malignancy with an overall excellent prognosis. Cure rates are quoted at 20 years because mortality from the disease is unlikely before an extended period of time. Despite this, there are subsets of the disease that behave much more aggressively and result in death despite conventional therapy.

The well-documented approach to most thyroid cancers includes surgical removal and adjuvant therapy with radioactive iodine, Iodine 131. This is followed by ongoing suppression with synthetic thyroid hormone. For tumors greater than one cm in size, this is the treatment of choice according to the American Thyroid Association Guidelines Taskforce on Thyroid Nodules and Differentiated Thyroid Cancer. Involved local lymph nodes are resected as needed. Although this therapy results in an excellent survival rate at 20 years, disease recurrence is common (15-30 percent) even in early stage disease. With this in mind, it is important to diagnose individuals at risk for recurrence as early as possible to implement more aggressive therapy and monitoring.

The oncogene BRAF V600E mutation has recently been linked as a marker of aggressive behavior in papillary thyroid cancer. It is reported to result in upregulation of EG-VEGF (endocrine gland derived vascular endothelial growth factor) with a resultant increase in angiogenesis and cancer progression in solid tumors including the thyroid. BRAF mutation is present in as many as 45 percent of papillary thyroid cancers but the BRAF V600E mutation is detected in over 80 percent of cancers with an infiltrative pattern. In patients with metastatic nodes and an infiltrative pattern, it is present in almost 100 percent of the cases.

Knowledge of this specific mutation provides a new target for innovative therapy for more aggressive thyroid cancer. While conventional therapy has not relied on chemotherapy as a treatment modality, several drugs are now being studied to treat refractory recurrent patients. They include Sutent (sunitinib), Nexavar (sorafenib) and Recentin (cediranib), kinase inhibitors which have demonstrated significant success in treating well-differentiated thyroid cancer. At Mercy Hospital St. Louis, an ongoing Phase II study is currently available for patients with Iodine 131 - refractory disease utilizing another kinase inhibitor, cediranib and lenalidomide.

Other advances relevant to the management of thyroid cancers relate to surgical management. While surgical removal of the thyroid is uncontroversial, the approach is variable. A minimally invasive surgical approach with smaller incisions, endoscopic techniques and robot-assisted techniques continues to minimize the impact of the surgery on the patient. The management of metastatic adenopathy with selective neck dissection is often needed as well. All of these therapies must comply with the expectations of low morbidity and virtually no mortality.

In summary, many recent advances in the treatment of thyroid cancer should continue to improve already excellent survival rates while preserving normal function and quality of life.