



# PIPER BREAST CENTER *Communiqué*

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## **NEW MAMMOGRAPHY TECHNOLOGY USED IN SCREENING MAMMOGRAMS**

~By Deborah L. Day, MD

The Piper Breast Center has recently added one of the newest technologies in breast health to its imaging capabilities – full field digital mammography. Instead of standard units that use film, full field digital mammography captures the image electronically and displays it digitally on a computer monitor. We now have four mammography units: the new digital system and three film units.

Through the generous gifts of our donors, we were able to purchase the full field digital mammography technology. Thank you to those who helped make this possible through their funding of the Piper Breast Center.

Digital mammography has several advantages. The technologist reviews the image immediately so, if needed, a patient can be repositioned while still at the Breast Center. The overall study time is typically reduced since films don't have to be processed. The greatest advantage is the radiologist's ability to manipulate the image, such as magnifying, inverting and changing contrast to better evaluate areas of concern. This image manipulation has decreased the callback rate by nearly 20 percent.

Eventually, we will become a 'filmless' breast center, eliminating film retrieval, storage and potential loss. Other computer techniques can be easily applied to digital

mammograms, such as computer-aided detection, which provides a 'second read' on mammograms.

Also unique is the telemedicine feature and, as the technology becomes more prevalent over the next decade, radiologists will be able to transmit the images to offsite locations with similar receiving equipment.

As with all advances, there are challenges with full field digital mammography. It requires more space, storage and is more expensive than the standard film machine.

The answer to the biggest question is unknown – is it possible to detect cancers earlier or more accurately with full field digital mammography? Both film and digital technologies are equal in their detection abilities. A government-funded multi-institutional study is going on to determine if one is more accurate, but results are several years away.

The Piper Breast Center has been conducting most patients' screening mammograms using full field digital mammography, and the physicians and technologists feel this is a great new technology. Over the next few years, our goal is to replace our film units with additional full field digital mammography units.

## **Did You Know ...**

~ By Stephanie Remark, RT(R)(M)

In recognition of October as National Breast Cancer Awareness Month and of October 18 as National Mammography Day, you can do a favor for a friend or someone you love by reminding her to have a mammogram, which is recommended yearly after the age of 40.

A *biopsy* is the removal or sampling of breast tissue for cancer diagnosis. The findings may show cancerous or non-cancerous results.

A *lumpectomy* is a surgical approach to breast cancer treatment that involves the removal of a breast tumor and some of the surrounding tissue.



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## COMMON MYTHS (AND FACTS) ABOUT BREAST CANCER

~ By Shari Baldinger, MS, John O'Leary, MD, and Beverly Trombley, MD

**MYTH:** Breast pain is frequently a sign of cancer.

**FACT:** An occasional rapid-growing tumor may be painful, but most breast tumors are painless. Breast pain is rarely associated with cancer growth.

**MYTH:** Cancerous breast lumps are hard while soft breast lumps are not cancerous.

**FACT:** It is true that most breast cancer you can physically feel is firm. Overlying tissue may soften the feel of cancers and be deceiving. Therefore, no new breast lump, soft or hard, should be ignored.

**MYTH:** Women younger than 40 don't get breast cancer.

**FACT:** Although rare, breast cancers can occur in a woman's teens and 20s, and are not uncommon in a patient's 30s. For women of any age, breast cancer may be a greater concern if there is heritable risk.

**MYTH:** Mammograms detect all breast cancers.

**FACT:** There is not any test, including a mammogram, that detects all breast cancers. Clinical breast exams are so important because mammography, while the best screening test available, misses approximately 10 to 15 percent of breast cancers.

**MYTH:** Digital mammography is better than standard film mammography.

**FACT:** As approved by the Federal Drug Administration, digital mammography is as equally reliable as film mammography in detecting breast cancer.

**MYTH:** MRI is the best tool for breast cancer detection.

**FACT:** Currently in breast health care, MRI is mainly used to evaluate breast implant ruptures and used occasionally alongside mammography. MRI has great potential to detect breast cancer, but for now does not have as much reliable data and study history as mammography. Look to future issues of *Communiqué* for more information about breast MRI.

**MYTH:** Ultrasound is a good screening test for breast cancer.

**FACT:** As described in the last *Communiqué*, ultrasound is very useful alongside a mammogram or clinical breast examination to assess areas of abnormality. Breast ultrasounds are not recommended as a screening tool.

**MYTH:** Biopsies cause the cancer to spread.

**FACT:** There is no evidence that either a surgical biopsy, done in an operating room, or a needle biopsy, done in the breast center or physician office, causes the metastatic spread of breast cancer.

**MYTH:** Most breast cancer runs in families.

**FACT:** Only approximately one-third of breast cancer patients has a family history of breast cancer. Even in these situations, there may not be a major inherited risk since cancer is typically the result of a complex interaction between a variety of genetic, hormonal and other environmental factors.

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## VOLUNTEER RECEPTIONIST CAROLE EPSTEIN RETIRES

After 10 years of service as a volunteer at Abbott Northwestern Hospital, Carole Epstein retired in August from her position in the Piper Breast Center reception area.

Yet she leaves as most dedicated volunteers do, with a promise to return and fill in when needed.

Carole began volunteering at Abbott Northwestern, and then Piper Breast Center, after she was a patient at the hospital. "I volunteer to help people have a pleasant experience," she said. "Who knows, I might need the favor returned someday."

Her commitment to volunteering began when her children were young. When Carole reentered the work force, she wanted to combine a career and volunteering. So, at the age of 49, she went back to college and received her degree in Volunteer Administration. After her career as a volunteer coordinator, Carole continued her passion with part-time volunteer positions.

For more information on Piper Breast Center volunteer opportunities, call Kathy Baker at 612-863-7445.

## NATIONAL AND IN-HOUSE RESEARCH KEY AT THE PIPER BREAST CENTER

~ By Edward Kraus, MD

During the development of the Piper Breast Center in the early 1990s, the planning committee and its consultants set participation in clinical research as a major goal. This emphasis has also been affirmed by national benchmarks.

The range of research at Piper Breast Center includes participation in large national trials sponsored by the National Cancer Institute and cooperative trials of other cancer centers and industry. The important National Surgical Adjuvant Breast and Bowel Program, the Eastern Cooperative Oncology Group and the North Central Cancer Treatment Group protocols are included.

In addition to chemotherapy, surgery and radiation therapy research, patients have enrolled in studies of nutrition through the Women's Intervention Nutrition Study and hormonal manipulation through the Study of Tamoxifen and Raloxifene. In a second hormone trial, a drug that prevents estrogen production is compared to tamoxifen's blockade of estrogen.

Research initiated at Piper Breast Center includes a study of sentinel lymph node biopsy. This important surgical procedure allows many patients to avoid removal of a large percentage of the lymph nodes in the underarm by removing and testing the sentinel lymph nodes first. The sentinel lymph nodes are typically the first to receive fluids from the breast, thus cancer cells tend to filter through there before draining through to other nodes. Related research is now addressing whether patients with even the smallest amount of cancer in the sentinel lymph node can also avoid underarm lymph node removal.

The Radiation Therapy Department is reviewing its local recurrence rate and whether guidelines on whom receive additional radiation affect that rate. The pathologists recently have published work evaluating tests of HER2 overexpression.

As with all important work at the Piper Breast Center, the strength and support of our research efforts cannot happen without engaged physicians, teamwork across the medical disciplines, and enlightened patients.