



# PIPER BREAST CENTER™ Communiqué

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## **NEW TECHNOLOGY AT THE PIPER BREAST CENTER**

~ by Deborah L. Day, MD

The electronic revolution is sweeping through the Piper Breast Center. Abbott Northwestern Hospital and the Piper Breast Center are transitioning to a completely paperless and filmless environment due to implementation of an automated medical records system. Additionally, we are moving forward with the goal of becoming a completely digital imaging department. Charts, orders, history forms, consultations and radiology reports are now directly entered and down-loaded into computers.

New digital technology also allows us to complete breast imaging without film. We have replaced two film mammography units and currently use one film unit and two full field digital mammography systems. Our digital mammograms, breast ultrasound images, and breast MRIs are stored in a Picture Archive Communication System (PACS). With this advanced technology, images are retrieved electronically and displayed on individual computers for the doctors and on large screens for physician discussions during patient care conferences.

As these changes occur, the work flow within Piper Breast Center is frequently being evaluated and modified. We are continuously transitioning between paper and electronic records or film and digital imaging. Interpretation of mammograms is also a blend of both worlds. When radiologists compare a patient's new digital mammogram with those from prior years, they often compare digital images with film. As a result, the Piper Breast Center still maintains view boxes in addition to the electronic equipment for digital mammography. It will be necessary to maintain both until a time in the future when the entire medical community uses digital imaging exclusively.

This is an exciting and challenging time for the Piper Breast Center as technological changes are happening quickly. We continue to strive toward the vision of accessing patients' history and chart information, reviewing X-rays and retrieving reports with only a few clicks of the computer keyboard. As our physicians and staff balance the new technological systems with the older ones, they also continue our strong commitment of providing women with the gold standard of breast care, signature only to the Piper Breast Center.

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

This year's attendance at the Race for the Cure was nearly 48,000. Piper Breast Center staff and physicians joined in the event and distributed breast health education materials. Inspired by these cancer survivors, their families and friends, all of us are energized as we continue to make progress in the fight against breast cancer.

Each year the Burnsville Women of Today organization provides a significant monetary gift specifically for the care and comfort of Piper Breast Center patients. This year's benefit event will be an evening of dining and entertainment on Oct. 6. If you would like to join us, contact Wendy Appel at 651-460-4422.



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## THE PATHOLOGY OF LACTATION ~ by John F. O'Leary, MD

While breast feeding is a normal process, lactation, which is the secretion and yielding of milk by the mammary gland, can be associated with some unique concerns for new mothers.

The most common is an increase in lobulation. (Lobules are the structures within the breast that produce milk). This increase is caused by natural lactational changes. As a result, the breast normally becomes larger and more "lumpy," sometimes causing concern for the patient or health care practitioner.

Another possible issue for a nursing mother is a milk duct that may become plugged. On occasion, this may cause a breast infection. The practitioner usually treats this problem by recommending continued breast feeding, antibiotics, and occasionally, needle aspiration. In severe cases, the physician may suggest an incision and drainage of the affected area.

Sometimes an undrained lobule in the breast will form a milk-filled cyst called a galactocoele. An ultrasound, to visualize the tissue within the breast, or aspiration of fluid can be done to confirm the diagnosis. A galactocoele generally does not need drainage or specific treatment because it will resolve by itself when the mother stops

breast feeding. The skin integrity could be compromised either spontaneously or inadvertently by a medical procedure, and milk will leak through the skin. This rare event is called a milk fistula, and the resolution would be to discontinue breast feeding.

Tumors of the lactating breast can include cancer, but this is fairly uncommon. A benign (noncancerous) mass that can be seen in the breast during late pregnancy and lactation is called a lactating adenoma. These often appear in the third trimester and continue during lactation but spontaneously disappear when breast feeding ceases. Though these masses can be large, an ultrasound can be used for diagnosis. A core needle biopsy may also be necessary to rule out cancer.

Fibroadenoma, a benign mass seen both in women who are and who are not lactating, may also occur. Again, an ultrasound is the first step toward diagnosis. Surgical or open biopsies of these lesions are generally avoided during lactation since they are associated with the development of milk fistulas, which have been reported even with needle biopsies.

While all of these are unique problems associated with lactation, breast feeding is still highly encouraged for mothers and their newborn children.

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## OBSESITY AND BREAST CANCER ~ by Crystal Tessier Schlösser, MD

Obesity has long been linked with higher risk of certain cancers – especially breast, uterus, colon, rectal and prostate. The ability of fat to change certain hormones to estrogen occurs in both men and women. The more fat in a body, generally the higher the estrogen level that exists. Elevated estrogen levels are thought to increase the rate of growth of cancers sensitive to estrogen, like those listed above.

This, however, may not be the only influence. New research points to changes in the immune system of obese people, especially those with "morbid" obesity (100 pounds more than the ideal body weight or a body mass index more than 40). Such degrees of obesity can cause inflammation throughout the body, frequently resulting in asthma, joint pain, urine leakage, blood clots in the legs and early heart disease.

Diabetes is another manifestation of this inflammation, but surprisingly is related to high levels of insulin, to which the obese body is abnormally resistant. Many cancers

have insulin receptors on the surface of the cancer cells. These insulin receptors can be thought of as "locks" to which insulin is the "key," opening a door to increased rates of growth of cancer cells. So high levels of insulin from obesity can hasten the growth of cancers, and may play an important role in beginning the process of creating a cancer.

The response to treatment of cancer can also be influenced by these immune system changes, as shown by a 33 percent higher death rate for obese postmenopausal women, as compared to optimal weight women.

Future treatments for breast cancer, as well as other cancers associated with obesity, may include ways to decrease inflammation or reduce the sensitivity of cancer cells to insulin. As obesity rates skyrocket in America, the impact on cancer rates may be dramatic, and add to the burden of death and disability in obese people. This highlights our need to identify, treat and, most importantly, *prevent* serious obesity.

## QUESTIONS AND ANSWERS

~ by Carol Bergen, RN and  
Clinical Manager, Piper Breast Center

Going out into the communities to speak to women about breast health often allows a spontaneous and relaxed opportunity for questions. Information regarding mammography, risk factors, abnormal breast changes and breast cancer makes up the majority of discussions. However, there are always additional questions, sometimes related to everyday issues that may affect women of all ages.

### *Can underwire bras cause breast cancer?*

While there is no conclusive research linking underwire bras to breast cancer, a bra that fits poorly can cause discomfort in the form of chafing, pressure points, compression lines and other skin irritation. A well-fitting bra provides support and comfort. Certified fitters, who are specially trained in fitting garments for women who have had breast surgery, can also fit any other individual. Many women who have elected this opportunity are surprised to find they have chosen incorrect sizes for years.

### *Will creams increase breast size?*

The United States Food and Drug Administration and the Better Business Bureau have issued statements stating that no breast enhancement products, in the form of a cream or lotion, that are applied to the breast has ever been proven to increase breast size. Why then can companies sell and claim these results? Most consumer products such as these do not require government approval or testing as you would see for drugs ordered by doctors. The regulation of some "beauty products" is limited. The FDA does regulate labeling of ingredients and color additive use, but other than this, many companies do as they wish. Outrageous or false claims may be made by some companies that manufacture these products. The Federal Trade Commission (FTC) can file complaints against companies making false claims. In fact, as a result of the FTC, one company was ordered to return millions of dollars to customers who bought their product based upon false advertising.

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Medical editor ~ Beverly Trombley, MD

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