



PIPER BREAST CENTER™
Communiqué
CELEBRATING OUR 10TH ANNIVERSARY

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MRI IN NEWLY DIAGNOSED BREAST CANCER

~ by Deborah L. Day, MD

Magnetic resonance imaging (MRI) is a very sensitive modality that has been used in the last three to four years for evaluating the breast. At the Piper Breast Center, the most common use for breast MRI is staging newly diagnosed breast cancer. It is most useful in evaluating cancer in dense breasts. More extensive disease than evident on a mammogram, multiple cancers in the affected breast and cancer in the other breast may be evident on breast MRI. Metastatic disease to the armpit lymph nodes, bones and liver may also be seen on breast MRI.

As with all imaging studies, there are limitations to breast MRI. MRI can detect up to 95 percent of infiltrating ductal cancers, the most common type of breast cancer. However, detection of infiltrating lobular cancer, very low grade infiltrating cancers and ductal carcinoma-in-situ is less accurate. Breast MRI also lacks specificity—that is, MRI may detect abnormalities that demonstrate cancer-like blood flow and shape yet are not cancer. This can lead to additional diagnostic studies and biopsy procedures, thus increasing cost as well as the patient's anxiety level.

Because of the high magnetic field in the MRI suite, it is not possible to use traditional breast biopsy instruments for MRI-guided biopsies. However, in the last several months we have purchased a biopsy system and developed the technique of doing MRI-guided biopsies for evaluation of abnormalities seen only on breast MRI.

Studies have shown that MRI can detect findings that may alter treatment plans in up to a third of women with newly diagnosed breast cancer. As our experience increases and breast MRI technology continues to improve, this tool will become increasingly important in evaluating breast cancer.

Did You Know ...

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

Fifty thousand people participated in this year's Race for the Cure, which was held at a new location – the Mall of America. The Piper Breast Center was a significant sponsor of this year's event. Many of the Center's staff participated in the Health Expo and distributed breast health information to many race participants.

The Piper Breast Center's team of physicians welcomes Margaret MacRae, MD, a medical oncologist with the Minnesota Oncology Hematology, P.A., and Carol Grabowski, MD, a radiation oncologist, medical director of Abbott Northwestern's Radiation Therapy Department and a member of Minnesota Radiation Oncology.

The Piper Breast Center's 10th Anniversary Celebration will be held Oct. 8 at the Walker Art Center.

For more information, call the Abbott Northwestern Hospital Foundation at 612-863-4126.



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Cancer Institute**

COMPLEMENTARY THERAPIES AND SUPPORT SERVICES AVAILABLE TO PIPER BREAST CENTER PATIENTS

Patients seen at the Piper Breast Center are offered access to a full spectrum of complementary therapies through Abbott Northwestern Hospital's **Institute for Health and Healing**. These therapies—including acupuncture, massage therapy, healing touch, nutrition consultation and mind-body skills—emphasize caring for the whole person and focus on healing as much as curing.

The Institutes also offers the services of a healing coach, who works with patients newly diagnosed with breast cancer to address concerns and feelings, help develop and implement a healing plan, and facilitate an understanding of the life-changing nature of a cancer diagnosis. Numerous Piper Breast Center patients have benefited from working with a healing coach since the program began several years ago. For more information about the healing coach, call 612-863-3333.

Other support and educational resources offered to Piper Breast Center patients include:

- a monthly breast cancer support group facilitated by two registered nurses with a wealth of experience in working with breast cancer and its diverse challenges and complexities.
- Look Good Feel Better, a program designed to teach women undergoing cancer treatment the skills to cope with changes in physical appearance that may occur during radiation and chemotherapy.
- Patient Partner, a one-to-one confidential phone call or personal visit with a volunteer who has had a personal experience with cancer and can provide emotional support.
- the Virginia Piper Cancer Institute's Living Room™ Resource Center, where patients can obtain information on breast cancer, treatment options and support services.

For more information about the services listed above, call 612-863-4633.

STAGING EVALUATION FOR PATIENTS WITH BREAST CANCER

~ by Thomas P. Flynn, MD

Once a diagnosis of breast cancer is made, an evaluation to determine the stage of the cancer is performed. The “stage” refers to how extensive the cancer is at the time of diagnosis, which is critical in determining the best treatment.

Staging takes into account characteristics of the primary tumor (such as size and extent of invasion into normal tissues), whether there are tumor cells in the lymph nodes under the arm (axilla), how many nodes are involved and to what extent. To determine these tumor characteristics, a pathologist examines tissue removed from the breast and the axilla. Finally, staging involves determining whether the cancer has spread beyond the lymph nodes to other parts of the body.

The first part of the staging evaluation is based on the patient's symptoms and a doctor's examination, which includes assessing the size of the tumor, determining

whether axillary nodes are enlarged and looking for signs of spread to other areas of the body.

Additional tests may be needed depending on the extent of the tumor and whether the lymph nodes are involved. For a small tumor with no lymph nodes involved, simple blood tests and a chest X-ray may be sufficient to complete the staging evaluation.

More tests may be needed to search for possible spread of the cancer in patients with larger tumors—particularly if lymph nodes are involved. For example, a bone scan is often performed if a few lymph nodes are involved. With more extensive lymph node involvement, CT scans of the chest and abdomen may be done. If these scans are inconclusive, a newer type of scan—called a PET scan—may be performed.

DIRECTING RADIATION THERAPY TO THE AREA OF BREAST CANCER RESECTION USING MAMMOSITE

~ by Carol Grabowski, MD

A new and exciting branch of breast cancer research is the evaluation of partial breast irradiation (PBI) methods, which are used to treat the surgery (resection) cavity and a small area of normal breast tissue in large doses over one week. Standard treatment of whole breast radiation therapy following lumpectomy requires daily outpatient visits for six weeks. Outcomes of the new PBI techniques will be compared with the standard therapy.

One PBI method currently being evaluated by the Piper Breast Center is the balloon catheter device Mammosite. Using ultrasound guidance, it is placed into the breast cancer resection cavity one to three weeks after the original surgery. If the Mammosite device meets several important safety criteria regarding placement within the breast, it is then used to deliver high doses of radiation to the surgical cavity surface and one centimeter beyond that surface. The radiation is delivered by a radioactive seed placed through the hollow center of the Mammosite device. Because of the small treatment area, higher doses of radiation can be given. Treatments are typically delivered two times a day for five days.

The potential advantages of Mammosite include patient convenience, shorter treatment time and fewer short-term side effects. The long-term cancer control rates and long-term side effects are uncertain. Because of these concerns, the Piper Breast Center has partnered with the University of Minnesota to conduct a clinical trial investigating the use of Mammosite in patients with non-invasive breast cancers. For more information on radiation therapy and breast cancer research, call 612-863-4060.

Communiqué is produced for friends of Abbott Northwestern's Piper Breast Center, 800 East 28th Street, Minneapolis, MN 55407-3799, 612-863-3150.

Medical editor ~ Beverly Trombley, MD