



WHEN SHOULD I HAVE A MAMMOGRAM?

WHAT IS A MAMMOGRAM?

A mammogram is an x-ray of the breast for the purpose of breast cancer screening or breast cancer diagnosis in the evaluation of a symptom. The screening process is performed to search for abnormalities in the breast, whereas the diagnostic mammogram is used to evaluate specific symptoms. The symptoms may vary from nipple discharge to lumps in the breast.

WHEN SHOULD I HAVE A MAMMOGRAPHY?

Most women under the care of a physician decide to have a mammography for the purpose of breast cancer screening. Other women decide based on the presence of certain risk factors. Some of those risk factors for breast cancer are:

- Evidence of breast cancer in the past
- Family history of breast cancer (such as mother, sister or daughter)
- Genotypic carrier of BRCA1 or BRCA2
- Presence of certain benign tumors in the breast
- Two or more test for benign breast disease in the past

HOW IS A MAMMOGRAPHY PERFORMED?

After the top layer of clothes has been removed, the breasts are placed between two plastic plates. The plastic plates flatten the breast as much as possible in order to maximize the detection of abnormalities. Two x-ray views are taken of each breast. One x-ray view is taken from above and the other is taken at an angle from the side. You will be asked by the technician to hold your breath, but each view only takes a few seconds. The technician will immediately develop the film and check the pictures for clarity. If the pictures are not clear, the technician will repeat the x-rays to ensure a quality diagnosis.

IS THE PROCEDURE PAINFUL?

Some women experience a feeling of slight discomfort after a mammography, but the pain usually passes quickly. The following list of suggestions may help to reduce the discomfort.

- Schedule a mammography around the menstrual cycle, because the breasts are least likely to be tender just after your period.
- Reduce your intake of caffeine two days before the exam.
- Take acetaminophen or ibuprofen approximately one hour before the procedure.

HOW IS A MAMMOGRAPHY PERFORMED WITH BREAST IMPLANTS?

If you have breast implants, make sure that your mammography is performed at a testing center where the technician and radiologists have experience with implants. The breasts must be compressed and moved into different positions in order to expose all of the breast tissue. Some breast implants, such as silicone, are opaque and may block the view of the tissues beneath them. This is especially true when the implant is placed over the chest muscle. However, the technician must be trained to manipulate the breast carefully to avoid rupturing the implant. Distortions in the x-ray may occur if a patient is experiencing leakage or scarring around the implant. A physician can advise you regarding the necessity of a mammography if you have received breast implants following a mastectomy.

HOW IS A MAMMOGRAM READ?

A physician called a radiologist reads a mammogram. Radiologists specialize in the evaluation and interpretation of x-rays. The x-ray is carefully examined for shadows, distortions, masses, unusual patterns of tissue density and variances between the two breasts. Distinctions between the shapes of a mass are important. For example, a cyst is usually round with distinct borders, whereas a cancerous mass may be irregular and have tendrils extending into surrounding tissue area. Calcifications are deposits of calcium that appear as white spots. Macrocalcifications are large, irregular deposits that are usually caused by aging or old injuries and inflammation. Macrocalcifications are usually harmless, but when clusters of the deposits are visible, this may be an early sign of breast cancer. Sometimes the clusters indicate the presence of rapidly dividing cells or malignancy. The results of a mammography can be read incorrectly, especially in pre-menopausal women. This is largely due to the density in the breasts. As women age the breasts develop more fatty tissues. The fatty tissues make it easier to see abnormalities.

NEW TECHNIQUES IN DIAGNOSIS

New techniques utilizing digital and computerized images rather than film x-rays are now being used to aid in the diagnosis of breast cancer. This new technology allows radiologists the ability to manipulate, and magnify the images found in the breast tissue. They are also able to change, contrast or view slices of the tissues. This gives them a better visual concept of suspicious areas. Through the incorporation of this new technique, doctors are hoping to find tumors in earlier stages. The number of repeat mammograms may even be reduced by this technique. Another clear advantage is the ability to store and send the digital

images electronically, allowing women in rural and remote areas to have their mammograms transmitted to a hospital and read immediately. It is less expensive to process and store digital mammography on a computer disk.

HOW TO PREPARE FOR A MAMMOGRAPHY

The following tips may help to alleviate the apprehension that is sometimes experienced by women on the day of the examination.

- When you set the appointment, make sure that your medical records, including prior mammography has been sent to the new testing facility.
- On the day of your examination do not use deodorant, powder, lotion, perfume or other substances on your breast area or underarms. Cosmetics can sometimes affect the clarity in an x-ray.
- For easy removal, wear a two-piece top.

THOMAS G. STOVALL, M.D.

Dr. Stovall is a Clinical Professor of Obstetrics and Gynecology at the University of Tennessee Health Science Center in Memphis, Tennessee and Partner of Women's Health Specialists, Inc.

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Health Information Provided by Women's Health Specialists

7800 Wolf Trail Cove, Germantown, TN 38138, (901) 682-9222, www.whsobgyn.com

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