

# *What is Breast MRI?*

Breast MRI (Magnetic Resonance Imaging) is a diagnostic tool used primarily to supplement mammography when evaluating breast problems. Unlike mammography, which uses low dose x-rays to image the breasts, MRI generates pictures using a very powerful magnet and radio waves.

Breast MRI was FDA approved in 1991 to expand the ability to diagnose breast cancer, but mammograms are still our best screening tool for early detection. At the present time, mammography is the only FDA approved method of screening for breast cancer.

## *How Is MRI Used?*

MRI is used to:

- Further investigate abnormalities found during mammography, physical exam or ultrasound
- View breast implants and the tissues around them
- Determine the stage of breast cancer after diagnosis
- Screen women with a proven mutated BRCA1 or BRCA2 breast cancer gene
- Screen women with very dense breasts when mammography is ineffective
- Check for multiple breast tumors prior to breast conservation surgery
- Assess multiple tumor locations
- Determine if cancer has spread beyond the surgical site after a breast biopsy
- Check the progress of chemotherapy
- Distinguish between scar tissue and a recurrent tumor after breast cancer surgery

## *How do You Prepare for an MRI?*

- Try to schedule your exam during days 7-14 of your menstrual period. The technologist will be able to get the best pictures during this time.
- If you've had a recent mammogram at another facility, please bring your film to the exam. The technologist will compare the two pictures.
- Be sure to answer any questions about prior surgeries or procedures honestly.

## *What Happens Before the Exam?*

On the day of the exam, you can eat, drink and take any medications as you normally would.

- Plan to wear a two-piece outfit to your exam, and make sure that your clothing from the waist down has no metal parts such as zippers, snaps or belts. You will change into a hospital gown, so you will be asked to remove your clothing above the waist.
- You'll also take off anything that may have metal such as jewelry, glasses, hearing aids or dentures.
- Before the exam, you'll talk with a nurse or technologist. If you're prone to claustrophobia (fear of enclosed spaces) please let someone know at this time. You may have an IV inserted into your hand or arm at this time. The IV is a way to make injecting medicine fast and easy.

## *What Happens During the Exam?*

During the exam you will lie face down with your breasts falling into cup-shaped holes on an exam table. Unlike mammography, the breasts are not compressed during the exam, so there is no discomfort. You'll be asked to lie very still and breathe normally. Your breasts may feel slightly warm, but this is normal. The exam table will move in and out of a cylinder-shaped machine where the images are taken. During this time you will hear the machine make loud thumping and humming sounds as the images are taken. You may be given hearing protection to quiet the noise. Most MRI machines are equipped with intercoms, so you'll be able to speak with the technologist throughout the exam.

In some instances you may be asked to kneel on the MRI table and lean your stomach and chest on a smaller padded table which contains the coils. This is usually done in situations when the MRI machine is used for many things besides taking pictures of the breasts. Please feel free to let the technician know if you have concerns about your positioning for the procedure.

## *Why Might I Need an Injection for the Exam?*

Breast MRI is performed with a contrast material, called gadolinium, which is usually injected into the arm part-way through the exam. The contrast agent is a very safe substance that will move into the bloodstream and highlight the blood flow to any tumors or abnormal tissues.

### *Without contrast material MRI can show:*

- Density of breast tissues
- Breast cysts
- Breast ductal system
- Hematomas (collections of blood)
- Ruptured or leaking breast implants

### *When a contrast agent is administered MRI can show:*

- Breast abnormalities
- Difference between benign (non-cancerous) or malignant (cancerous) lumps
- Size and location of a suspicious lump
- Enlarged lymph nodes in the chest and underarm area

### *How Long Will the Exam Take?*

Plan one-and-a-half hours for your Breast MRI examination to allow time for changing clothes and filling out forms. The actual exam will take between 45 minutes and an hour.

### *What Happens After the Exam?*

There are no side effects from breast MRI and all normal activities can be resumed immediately after the exam. The radiologist will interpret your images and will send a report to your physician. An MRI takes hundreds of pictures, so your report will probably not be available while you wait. Ask your technician when your doctor will have the report.

### *Every Woman's Best Chance Against Breast Cancer Includes:*

- Proficient breast self-exam
- Clinical breast exam by a healthcare provider
- Mammography on the recommended schedule

## BREAST MRI



“IT’S TIME TO PLACE YOURSELF IN TRAINED HANDS . . . YOUR OWN.”