

# Breast MRI

**Breast MRIs** can detect breast cancer and other abnormalities. This imaging technology utilizes a powerful magnetic field, radio frequency pulses and a computer to produce more in-depth images of the breast. Breast MRI is not a substitute for mammography. This tool can be used to either provide further information beyond the mammogram, ultrasound or clinical breast exam, or may be used as a screening tool for detecting breast cancer in women who may have a high risk of breast cancer.

## When is a Breast MRI Used?

As mentioned above, Breast MRI is not a substitute for the traditional breast health diagnostic tools, such as mammography, ultrasound, and clinical evaluation. Breast MRI is a tool to get a closer look at abnormalities for diagnosis and sometimes also used for screening in high risk women.

Your physician may suggest a breast MRI if you have abnormalities or have been diagnosed with breast cancer from any of the traditional breast health assessment tools. The American Cancer Society recommends screening for patients who have been treated for Hodgkin's disease. As a preventative measure, your physician may also request a breast MRI if you have a lifetime risk of 20 to 25 percent or greater, which may be calculated taking into account your family history and other risk factors. In addition, if you have a strong family history consisting of breast or ovarian cancer. Women with very dense breast may also be asked to do a breast MRI, since mammography is not always a good diagnostic tool for dense breast.

If you are not sure of your lifetime risk of breast cancer you can visit [www.cancer.gov/bcrisktool/](http://www.cancer.gov/bcrisktool/). In addition, please consult your physician for help with your personal risk.

## How to Prepare for the Exam

When scheduling your MRI, ensure that you let the facility know where you are in your cycle so that optimal timing can be arranged. Premenopausal women are suggested to have the exam at the beginning of their menstrual cycle.

Prior to the breast MRI ensure that your physician is aware of any allergies you may have or if you have any kidney problems. Breast MRIs are commonly performed with contrast to get better images.

Generally, breast MRIs are not recommended for pregnant women. Leave all metallic objects at home or remove them prior to your exam. Please inform your physician if you have any implanted medical devices, including a pacemaker, defibrillator, implanted drug port or artificial joint.

## **What to Expect**

The MRI has a large, central opening. If you have issues with small spaces, tell your doctor before the breast MRI. You may be given a mild sedative.

You will be asked to lie on your stomach onto a padded scanning table with your breast surrounded, not compressed, by an MRI imaging receiver called a breast coil. Once comfortable, an intravenous line (IV) is inserted into the vein of the arm with the contrast. The contrast normally used is called Gadolinium. This contrast helps detect abnormalities and enhances the appearance of the tissues or blood vessels on the MRI images.

Then the table will slide into the opening of the MRI machine. You will be instructed to breathe normally and will need to lie as still as possible. This MRI appointment may take about 30 minutes to an hour.

**Information and images provided by GE Healthcare, [www.gehealthcare.com](http://www.gehealthcare.com).**