

FIRST HILL DIAGNOSTIC IMAGING

A Swedish Outpatient Imaging Center

MRI Breast Imaging for Cancer Detection

Swedish First Hill Diagnostic Imaging utilizes advanced breast imaging for the detection of breast cancer. MRI is used in high-risk patients or when breast cancer is suspected, but other breast imaging studies have been inconclusive. Other uses of MRI breast imaging include staging (evaluating the extent of the cancer), monitoring response to treatments such as chemotherapy, and visualizing suspected areas for MRI guided biopsy.

You will be asked to fill out a brief medical history and an MRI safety form. Anything metal such as hearing aids and jewelry should be removed and metal free clothing is provided. A locker is available to store your personal items.

We will start an IV. A small blood sample which is used to evaluate kidney function is collected if you have a medical condition that may affect the kidneys or are older than 60.

During the exam you will wear hearing protection because the scanner makes loud banging noises as it acquires the images. You will be positioned on your stomach with the breasts resting in a special "breast coil" which receives the MR signal from the area being examined. Contrast is injected through your IV after the first 5 minutes of imaging. You are asked to lay still and breathe quietly during the imaging which will take about 20 minutes.

The images produced are three-dimensional and have high resolution and clarity. Breast MRI is capable of detecting tumors as small as four to five millimeters in diameter, roughly the size of a pea. One of our medical directors pioneered this technique of breast imaging in the Northwest in 1992 and our MRI scanner, radiologists, and MRI technologists have been accredited by the American College of Radiology.

After the scan, we use a special computer aided diagnostic tool (CAD) which helps evaluate the contrast enhancement of the breast tissue. The kinetics or speed of contrast enhancement is demonstrated by color which is overlaid on the breast images. This aids the radiologist in identifying areas of increased suspicion for breast cancer.

Preparation

If you are still menstruating and the exam is not urgent, we strongly recommend the MR exam be performed 5 to 10 days from the first day of your menstrual period. There are no dietary restrictions or other preparations for this exam.

Risks and complications

There is no ionizing radiation associated with MRI and hearing protection is provided. The contrast agent is FDA approved and considered safe. Very few people are allergic to MRI contrast (Gadolinium). Please inform the technologist of any prior allergic events. If you experience symptoms such as hives, itching, or sneezing, medications are dispensed under the direction of a radiologist.

Appointment Time

Although imaging typically only takes less than 20 minutes, you should plan on being in our office for about 1 hour to allow for registration, IV access, and imaging.