

MRI (MAGNETIC RESONANCE IMAGING)

Smithfield Imaging 919-938-7190
Clayton Imaging 919-585-8450
Scheduling 919-938-7449

WHAT IS A MRI?

MRI uses a powerful magnetic field, radio frequency pulses and a computer to produce detailed pictures of organs, soft tissues, bone and virtually all other internal body structures. The images can then be examined on a computer monitor, transmitted electronically, printed or copied to a CD. MRI does not use ionizing radiation (x-rays). Detailed MR images allow physicians to evaluate various parts of the body and determine the presence of certain diseases.

HOW IT WORKS

Your physician may order the MRI with or without a contrast agent depending on your diagnosis. If contrast material is used, it will be injected through an intravenous line (IV). The contrast material most commonly used for an MRI exam is called gadolinium. Because gadolinium does not contain iodine, it can be used safely in patients with contrast allergies.

Guidelines about eating and drinking before an MRI exam vary with the specific exam. Unless you are told otherwise, you may follow your regular daily routine and take food and medications as usual. Women should always inform their physician or technologist if there is any possibility that they are pregnant. MRI has been used for scanning patients since the 1980s with no reports of any ill effects on pregnant women or their babies. However, because the baby will be in a strong magnetic field, pregnant women should not have this exam unless the potential benefit from the MRI exam is assumed to outweigh the potential risks. Pregnant women should not receive injections of contrast material.

WHAT TO EXPECT

The test may require you to lay flat, lay on your stomach, or on your side. You must be still during the exam, because movement causes blurred images. You may be told to hold your breath for short periods of time. You may request earplugs or headphones to reduce the noise of the MRI scanner, which produces loud thumping and humming noises during imaging. If you have not been sedated, no recovery period is necessary. You may resume your usual activities and normal diet immediately after the exam.

HOW TO PREPARE

Follow these guidelines:

- Please bring your current home medications or a list of your medications with you the day of the test.
- You may be asked to remove some or all of your clothes and to change into a hospital gown.
- If you are age 40 or older or a diabetic; you will need labs drawn prior to your contrasted exam. Please consult your physician in regards to these labs.

Metal and electronic objects are not allowed in the exam room due to the strong magnetic field of the MRI unit. These items include:

- jewelry, watches, credit cards and hearing aids, all of which can be damaged
- pins, hairpins, metal zippers and similar metallic items, which can distort MRI images.
- removable dental work
- pens, pocket knives and eyeglasses
- body piercings

People with the following implants cannot be scanned and should not enter the MRI scanning area:

- internal (implanted) defibrillator or pacemaker
- cochlear (ear) implant
- some types of clips used on brain aneurysms
- some types of metal coils placed within blood vessels

You should tell the technologist if you have medical or electronic devices in your body, because they may interfere with the exam or potentially pose a risk, depending on their nature and the strength of the MRI magnet. Some implanted devices require a short period of time after placement (usually six weeks) before being safe for MRI examinations.

Examples include but are not limited to:

- artificial heart valves
- implanted drug infusion ports
- artificial limbs or metallic joint prostheses
- metal pins, screws, plates, stents or surgical staples

Patients who might have metal objects in certain parts of their bodies may also require an x-ray prior to an MRI. You should notify the technologist or radiologist of any shrapnel, bullets, or other pieces of metal which may be present in your body due to accidents. Foreign bodies near the eyes are particularly important. Plain film x-ray clearance will be done for any question of metal foreign bodies to your eyes.

If you have claustrophobia (fear of enclosed spaces) or anxiety you can be sedated for your exam. Please remember that you must have a driver with you at your appointment time in order to receive sedation. All of our medications for sedation are given by mouth. We are only staffed to sedate until 3:00 p.m. Monday thru Friday. If your appointment is scheduled after 3:00 p.m. you will need to ask your physician for a prescription for a mild sedative. All sedation requires a driver.

RESULTS

A radiologist will review your images and send a report to your doctor who ordered the test in 48 hours. You'll get a call from your doctor's office to discuss the results and next steps. To check your results in our secure, online patient portal, My UNC Chart, visit www.myuncchart.org.