

FREQUENTLY ASKED QUESTIONS FOR OUR WEBSITE

Magnetic Resonance Imaging:

How big is the MR machine? Will any part of my body be “sticking out”?

MR machines are often compared to large doughnuts. They are large enough to allow the human body to be imaged by passing the body or parts of the body through a cylindrical tube. The part of the body being imaged needs to be in the center of the machine; therefore, other parts of the body may remain outside of the cylinder. For example, an MRI of the knee requires the knee to be at the center of the machine and, in most patients, the head and neck remain outside of the cylinder. Precise position depends upon the height of the patient.

What is the difference between an MRI and a CAT scan?

The MRI measures the effect of radio waves and magnetic fields on various parts of the body, while a CT scan uses x-rays to directly produce images. MRI does not involve radiation, while CT does. Your referring doctor will determine which exam is right based upon the clinical problem.

Can I have an MRI if I have a pacemaker?

The magnetic field involved in MRI may distort components of a pacemaker and could effectively change the effectiveness of the pacemaker. Other implantable machines, such as insulin pumps, spinal cord stimulators, etc., are also unsuitable for MRI examination. Most nonfunctioning implants, such as hip replacements, surgical staples, etc., are completely safe in the MRI environment.

Why can't I have more than one part of my body scanned while I am already in the machine?

The body part being examined needs to be at the center of the machine; therefore, only one part of the body can be imaged at one moment. If your referring physician requests more than one part of the body imaged, we will allocate a longer appointment time to accommodate such a request. For instance, it is common in patients to have MRI examinations of their head and their neck, or their neck and their lower lumbar spine.

What is gadolinium?

Gadolinium is a man-made compound that is used as a contrast agent (“dye”) to help visualize suspected abnormalities not seen without such gadolinium enhancement. The gadolinium reacts with the local tissues and may produce a more diagnostic examination in certain instances. Some parts of the body are less well visualized and gadolinium will help to highlight hard-to-see areas. The gadolinium begins to leave the body over 6-8 hours. It is dependent upon the amount of fluid the patient drinks. Women who are breastfeeding should inform the technologist and ask how to proceed.

I am claustrophobic; what are my options?

For patients who are fearful of being in the MR machine, we offer a number of options. If the patient is accompanied by a driver, we can offer the patient an oral sedative to help calm anxiety. These agents do not produce sleep and should not be mistaken for an anesthetic; there are merely anti-anxiety drugs. Secondly, an anesthesiologist may be available for those patients who are too afraid to be awake during the procedure, or are in too much pain to lie still for the 30-60 minutes of the examination. Such anesthesiology-assisted exams are scheduled on an individual basis. Finally, we do have the use of an open MRI machine at our Westwood location. For patients in whom the first two options are not desirable, the open MRI may prove helpful.

What is the difference between an open and a closed scanner?

In an open MRI scanner, there are no sidewalls to the machine. Rather than being a tube, the MR scanner has a component of the machine above and below the patient but the sides remain completely open. A closed scanner is a complete cylinder. Typically, open MRI scanners are less powerful than the traditional closed scanner and for certain clinical problems, may not be suitable. Your physician must approve an examination to be done in an open MRI scanner.

What are all the different noises that I hear during the MR scan?

The noises occur when the radio waves transmitted to the magnet change. To produce images, the magnet is constantly being turned on and off like a light switch, only infinitely faster, and the noises you hear are changes in the radio waves. It is true that the noises can be loud, and it is essential that every patient wear earplugs or a music headset to minimize the noise produced during the scan. In certain instances, we are able to show a movie of your choice via a headset.

Why does an MRI take so long?

Many different images are being produced during the examination. Each exam consists of four to eight imaging sequences, each taking 2-10 minutes. Each sequence provides specific information and a specific degree of clarity in a specific orientation. To learn more about how the MRI is performed, click here _____,

Why can't I move if the machine isn't on?

The initial part of each examination orients the patient in the machine. Each subsequent set of images is based on the position of the body at the time of that first set of pictures and any motion will change the orientation.