

MAGNETIC RESONANCE IMAGING (MRI)

What is MRI?

MRI is one of the most significant advances in medical imaging this century. It allows physicians to see inside the human body with remarkable detail. MRI does not use X-rays to create images. Instead, it combines magnetic fields with radio waves and uses specially designed computers to produce detailed images of internal body structures.

While X-rays may be best for showing bones, doctors use MRI to examine "soft" tissue such as muscle, nerves, cartilage, ligaments, tendons, vertebral discs and various internal organs.

What Happens During MRI

Although MRI is an advanced medical technique, the exam itself is relatively easy and comfortable for most people.

You will be asked to lie on a cushioned table. A device called an imaging coil will be placed over or under you. When you are comfortably positioned, the table will move into the magnet. From the control area, the technologist will stay in constant contact with you, both visually and through an intercom.

As the exam begins you will hear a variety of muffled thumping or clicking sounds. These sounds are normal during the exam and should not be cause for concern. Other than the muted sounds you will hear, MRI produces no bodily sensations.

Exams take anywhere from 30 - 60 minutes depending on your particular procedure.

Preparation

The day of your exam, it is best to wear loose, comfortable clothing such as a sweatshirt and sweatpants. If possible, avoid clothing with metallic objects such as zippers, snaps and grommets as metal may interfere with the imaging process. If you must wear clothing with metal, hospital gowns will be provided. Make-up and hairsprays should also be avoided.

Before your test, you will be asked to remove all metallic objects, such as eyeglasses, jewelry, wristwatches, etc.

There are no restrictions of foods prior to your MRI. You should however, avoid coffee and other caffeinated beverages since you will be required to lie still for several minutes at a time.

Depending on the type of exam you will be having, you may receive an injection of contrast material (similar to x-ray dye).

If you are allergic to any medications, or have had a previous allergic reaction X-ray dye, please tell your doctor, the Radiologist or the technologist.

Your Role

To ensure the best possible exam, it is important that you lie still during the procedure and pay careful attention to the instructions given by the technologist.

While MRI is considered safe for most people, there are some reasons not to have the exam. Before proceeding with your examination - for your safety - please inform your doctor or the technologist if you have:

- Aneurysm clips
- A Cardiac Pacemaker
- An artificial heart valve
- A metal plate, pin or other metallic implant
- An intrauterine device, such as a Copper-7 IUD
- A previous gunshot wound
- Ever been, a metal worker
- A permanent (tattoo) eyeliner

Afterwards

Your exam will be carefully reviewed by a Radiologist, a physician specially trained to interpret the MRI images. He will provide your doctor with a detailed report. Your doctor will discuss these results with you and explain what they mean in relation to your health.

Note:

Any woman who is pregnant, or thinks she might be, should let her doctor know before proceeding with the exam.