

What is MRI?

Magnetic Resonance Imaging (MRI) is a safe, painless and non-invasive way to look inside the human body without using radiation (X-rays).

An MRI scanner uses a powerful magnet and radio signals to cause the hydrogen atoms of the body to send out tiny radio signals of their own. [Since approximately 70% of the human body is composed of water (H₂O), there is an abundance of hydrogen atoms in every part of the body, from head to toe.]

A highly sensitive antenna placed around or near the region of the body that is being scanned detects these signals and sends them to computers that use them to make pictures, or images.

A specially-trained radiologist reviews the images in search of anything unusual or perhaps to rule out certain kinds of problems. The radiologist then gives your doctor a full report.

How do I prepare for my MRI exam?

No special preparation is required. You can take all your regular medications and follow your usual eating schedules.

However, it is important that you dress properly for your MRI exam. Since the MRI uses a magnetic field to make images, anything metallic on your clothing or on your person near the region under examination might degrade the images and cause you to come back to repeat the exam.

We suggest you wear a sweat suit because "sweats" are comfortable and have little or no metal in them. Remove jewelry, hairpins, body-piercing jewelry, coins, keys and eyeglasses.

Remove your makeup and notify the staff if you have any tattoos, including permanent eyeliner and eyebrow tattoos.

What can I expect?

Once the MRI technologist has positioned you and initiated the scan, try to be as still as possible. Body movement can degrade or blur the pictures. If you move too much, you might have to come back at another time to repeat the scan.

You won't feel anything throughout the scan, but you will hear a muffled rumbling sound. That's just the sound of the scanner doing its job.

Most scans take 20 to 30 minutes. It could be longer if your doctor has ordered additional scans. The MRI technologist will be able to tell you how long it should take.

Important Safety Precautions

Because an MRI scanner uses a strong magnetic field, it can be harmful to people who have metal inside them.

If you have a cardiac pacemaker, do not allow yourself to have an MRI scan. It can be fatal. Likewise, visitors who have cardiac pacemakers must not enter the MRI scanner.

If any of the following applies to you, inform the MRI staff as soon as possible:

- Cardiac Pacemaker
- Previous Surgery of the Heart or Heart's Valves
- Previous Brain Surgery
- Cerebral Aneurysm Clips
- Pregnancy or Possible Pregnancy

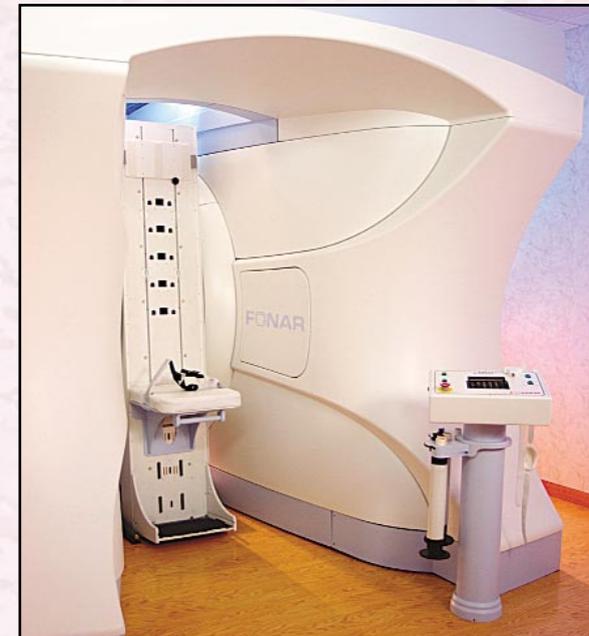
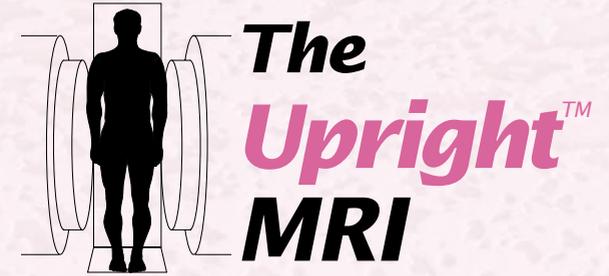
Other Precautions

If any of the following applies to you, tell the MRI staff. In most cases you will be able to have the scan anyway, but please, leave that decision to the professionals!

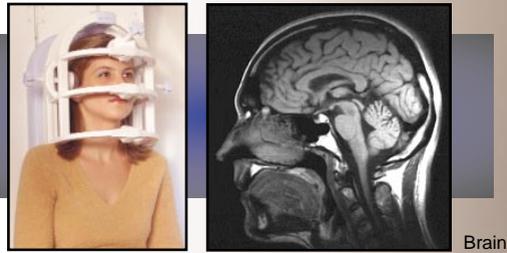
- Hearing Aid
- A Foreign Metal Object in an Eye
- Metal Filings in the Eye
- Neurostimulators (Tens Unit)
- Metal Implants
- A Drug Infusion Device or Pump
- Ear Implants
- Inferior Vena Cava Filter
- Surgical Staples or Wires
- Bone or Joint Pins or Replacements
- Metal Plates, Rods, Pins or Screws
- Contraceptive Diaphragms or Coils
- Permanent Dentures
- Penile Implants
- Shrapnel, BB Shots or Bullet Wounds
- Vascular Coils and Filters

Leave these in a safe place outside the scanner room:

- Hearing Aids
- Bank Cards
- Watches
- Cell phones
- Credit Cards
- Pagers



Position™ Imaging



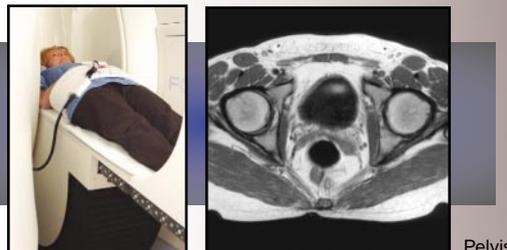
Brain



Knee



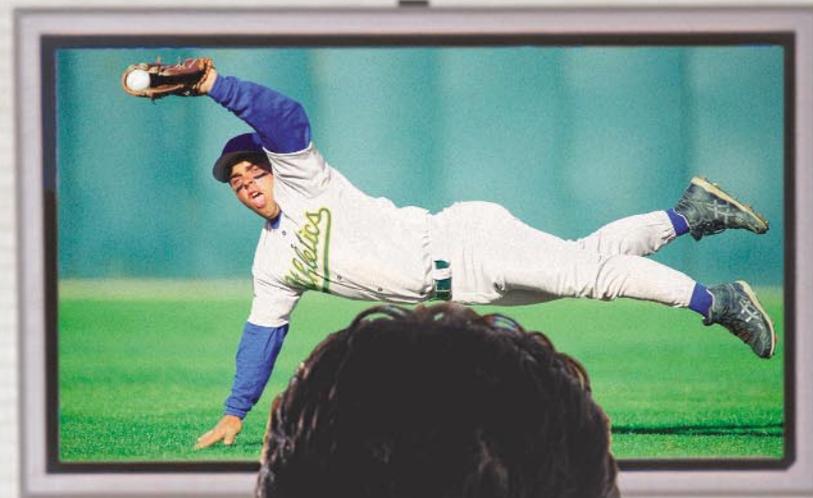
Spine



Pelvis

Patients can be scanned sitting, standing, tilted back at an angle, bending or lying down, depending upon the anatomical region to be examined and the patient's particular problem. MRI images can be made of the cervical and lumbar spine in positions that are impossible to assume in any other kind of MRI scanner: flexion, extension, lateral bending, and rotation. Only the Upright™ MRI enables patients to be scanned in their positions of pain or other symptoms, including weight-bearing positions. Some problems are not detectable or cannot be fully evaluated when the patient is lying down. The Upright™ MRI has the ability to put the patient in the position necessary to provide the most accurate diagnosis.

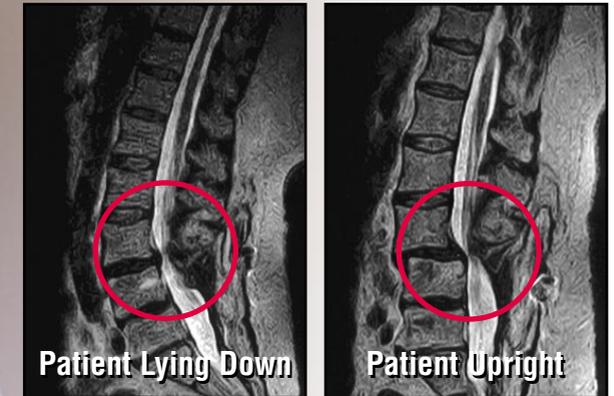
The Only True Open MRI



As you can see, while being scanned in a Upright™ MRI, the only thing in front of the patient is a big-screen TV.

Patients can watch the programs of their choice throughout their scans in a quiet and comfortable environment. Large patients can be accommodated and the problem of claustrophobic reactions has been completely eliminated. It is no wonder that the Upright™ MRI has the reputation for being the Patient-Friendly MRI™.

The Proof is in the Picture



same patient...same scanner...same day

These are lumbar spine images of a patient who had undergone back surgery but was continuing to experience pain. The MRI image on the left was acquired with the patient lying down. It shows a normal alignment of the vertebrae. However, when the patient was scanned in an upright position on the same MRI scanner on the same day (right image), a dramatic spinal instability was clearly revealed. This problem was visible only when the patient was scanned upright and would have gone undiagnosed on a conventional, lie-down MRI scanner. (Images courtesy of M. Rose, MD; Rose Radiology Centers)

The Upright™ MRI operates at 0.6 Tesla, making it twice as powerful as most Open MRI scanners. Together with its advanced software capabilities and a full range of whole-body applications, the Upright™ MRI produces images of exceptional quality and diagnostic value.



The front- and top-open design of the Upright™ MRI allows it to accommodate very large patients. This over-350-pound patient underwent an MRI examination of his lumbar spine without any difficulty. (Melville, NY)

