

What is a MRI?



MRI Stands for Magnetic Resonance Imaging. MRI is a safe and comfortable imaging technique used to diagnose various medical conditions. It does not use a traditional x-ray or radiation to produce images; instead, it brings together a powerful magnet with an advanced computer system, using radio waves to produce accurate, detailed pictures of organs and soft tissues. Soft tissue is muscle, fat, blood vessels, and other parts of your body that connect, support, and surround other structures.

MRI exams provide very detailed and precise images of what is happening inside the body.

A MRI scanner consists of a large and very strong magnet in which the patient lies. A radio wave antenna is used to send signals to the body and then receive signals back. These returning signals are converted into images by a computer attached to the scanner. Pictures of any organ or tissue can be obtained at almost any particular angle.

MRI scanners are good at looking at the non-bony parts or "soft tissues" of the body. In particular, the brain, spinal cord and nerves are seen much more clearly with MRI than with regular x-rays and CAT scans. Also, muscles, ligaments and tendons are seen quite well so that MRI scans are commonly used to look at knees and shoulders following injuries. A MRI scanner uses no x-rays or other radiation

Who Benefits From an MRI?

At JFK, our state-of-the art open-bore MRI accommodates patients of all sizes and is even ideal for those who get anxious when confined to small spaces. Due to its shorter design, the majority of MRI exams can be done with the patient's head outside the system. And, due to the larger opening (or bore) of the MRI, patients with lumbar spine problems who may not be able to tolerate a traditional MRI can be scanned with their knees bent to relieve pressure on the lower back.

How safe is an MRI?

An MRI is quite safe and effective. The MRI exam does not cause pain nor does it produce harmful radiation. However, as it uses a magnet, patients with implanted medical devices such as aneurysm clips in the brain, heart pacemakers and cochlear (inner ear) implants as well as pieces of metal close to or in an important organ (such as the eye) may not be scanned. Some pregnant women should not have an MRI examination. Of course there are other safety considerations and exceptions based on individual circumstances.

Additionally, certain metal objects that we commonly have on our persons — such as watches, jewelry, credit cards, hair pins, writing pens — may be damaged by the MRI scanner or pulled away from our bodies when entering the MRI room. (But, don't worry about your dental fillings, braces or undergarments; the type of metal used is not attracted to the magnet.

Furthermore, metal can sometimes cause poor pictures if it is close to the part being scanned. For these reasons, patients are asked to remove these objects before entering the MRI scanner.

What can I expect during an MRI?

The majority of the times a patient does not need to disrobe when undergoing MRI. The patient lies on a special table that moves into the center of the MRI. Before the MRI procedure begins, earplugs will be provided to reduce the "hammering" noise that occurs as the MRI prepares to scan and take pictures. (Some of our MRIs are equipped with headphones for music and a two-way communication system to speak with the technologist anytime during the exam.)

Depending on the targeted body part, an MRI can last anywhere from 30 to 90 minutes. For additional information, please call **732.321.7000 ext. 61438**.

For on-line scheduling of an MRI, please click [here](#) or call **888.535.6762**.