

MRI Patient Information

A magnetic resonance imaging (MRI) scan is a non-invasive diagnostic test that produces clear, detailed images of internal organs and structures in your body. It is commonly used to diagnose problems of the brain and spinal cord, as well as to visualize problems within your joints and soft tissue. MRI scanners have different magnet field strengths, which are measured in Tesla units (T). We operate a Siemens 3T Skyra and Siemens 1.5 T Espree.

How it works:

MRI images are formed when signals emitted by body tissue are processed by software and turned into clinical cross-sectional images. These signals are generated using a safe magnetic field in combination with radio waves of a specific frequency. Different tissue characteristics are revealed through this process and translated into different contrast levels on the image. Unlike an X-ray, which is very good at showing bones, an MRI shows structures made of soft tissue, such as tendons, ligaments and organs in the chest, abdomen and pelvis.

Preparing for the MRI:

You will be asked to remove your jewelry, watch, hairpins, hearing aids, removable dental work and glasses. These items may interfere with the scan, causing significant errors, called artifacts, in the images. Inform staff prior to your scan of any surgeries, pacemaker, aneurysm clips, history of working with metal, an intrauterine device, as well as any transdermal, nicotine or hormone patch, and if you think you might be pregnant.

During and after the exam:

An MRI is one of the easiest and most comfortable exams you

can have. You will lie on a table that moves into a circular shaped apparatus, which is open on both ends. You may hear loud sounds while the pictures are being taken. The noises range from a grafting sound to a tapping sound as the scanner changes to different sequences. For your comfort, we offer headphones and will play your choice of music during the exam. You will be asked not to move during the imaging process, but between sequences some movement is allowed. The technologist will be in contact with you while the scanner goes through the series of sequences. Depending on the scan your physician ordered, you may be given an intravenous contrast injection of gadolinium to assist with highlighting certain tissues for closer examination. This contrast agent does not contain iodine. Most of the scans will take approximately 30 minutes. A radiologist will analyze the images and send a signed report to your healthcare provider.