



Thank you for choosing Emory Radiology for your MRI. On behalf of our team, I welcome you to our facility. As you will read in this guide, Emory Radiology's MRI program features physicians and scientists who are leaders in the science and development of MRI

technology. Together we provide you and your physician with subspecialized expertise, the latest in imaging technology and a multidisciplinary approach to diagnosis and care. At any time, please feel free to ask questions of any member of our team.

Sincerely,

Diego Martin, MD, PhD, FRCP
Director of MRI & MRI Safety Officer; Director of the Clinically Applied Body MRI Research Program



Magnetic Resonance Imaging (MRI)

MRI is a painless, safe, noninvasive diagnostic technology that uses a strong magnet and radio waves to produce 2-D and 3-D pictures, or images, of your internal organs and other soft tissue.

MRI creates images that can often provide more information than a biopsy or open surgery. MRI is also capable of creating images of biological functions, for example, the beating of your heart. Because MRI can produce clear internal images of your body from any angle, it provides doctors with a wealth of in-

formation both quickly and cost effectively. This information often cannot be obtained by any other method.

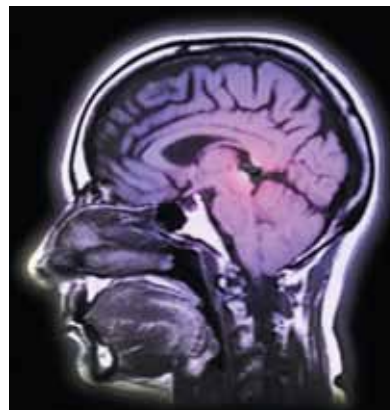
Doctors use detailed MRI images to diagnose internal injuries as well as to diagnose and determine the extent of diseases, including:

- Brain and nervous system disorders
- Major forms of cancer, including breast cancer
- Diseases of the gastrointestinal system, liver, pancreas and kidneys
- Gynecological, prostate and other disorders involving the soft tissues of the pelvis
- Diseases of the musculoskeletal system

In addition, doctors can use MRI to monitor the effects of medications and treatments inside the body and to detect tissue inflammation, which is an important indicator of injury.

Emory – Dedication to Advanced Technology

Because Emory Radiology is part of a world-class, university-based, health-care system, our team has access to some of the most advanced MRI technology available, including latest generation 1.5T and 3.0T systems. Some of our MRI technology was developed at Emory and is only available at our facilities. These state-of-the-art machines not only produce higher-quality, more useful images, but they also provide a more comfortable, quick and pleasant patient experience. In addition, new applications are being developed every day. We work closely with the equipment manufacturers to advance technology and to find better ways to diagnose disease.

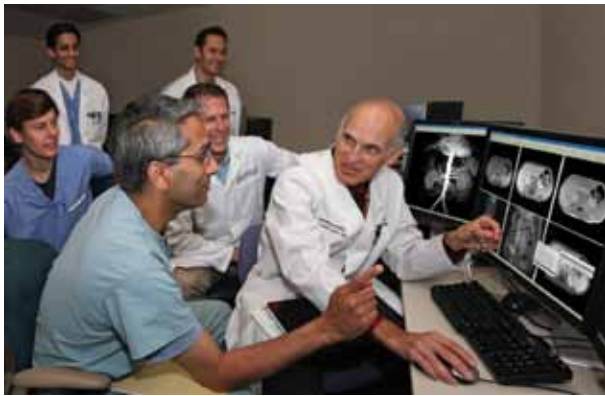


Our Team

At Emory, state-of-the-art equipment is only part of the story. While you may only have direct contact with the technologist who performs your exam, it is important to know there is a multidisciplinary team of specialized physicians and scientists responsible for making sure your exam is performed to the highest possible standards. This team interprets your exam results and develops an accurate diagnosis your doctor can use to create the right treatment plan for you.

Our radiologists also teach at Emory University School of Medicine and participate in cutting-edge, university-based research. As a result, they are uniquely qualified to provide the best, most up-to-date treatments and techniques with skill and confidence. And because they work within particular specialties – and even subspecialties – their training and exposure to specific diseases and conditions are unmatched in the community. This level of skill and training translates into more accurate results and fewer re-exams, saving valuable time and resources for everyone involved.

Our radiologists work closely with your primary doctor or specialist to formulate the most appropriate course of treatment for you.



MRI – Safe and Cost-Effective

The magnetic fields and radio waves used in clinical MRI produce no known tissue damage of any kind.¹ MRI does not use X-rays or any other form of ionizing radiation. This is one of the differences between MRI and computed tomography (CT) scans.

In the hands of skilled technologists and doctors like those who make up the multidisciplinary team at Emory Radiology, MRI can produce accurate, reliable images for diagnosis and reduce the need for repeat exams. Such precision saves you time and control costs.

Preparing for Your MRI

MRI procedures are typically covered by insurance plans, but you may be required to obtain authorization from your insurance provider prior to your exam.

You should call Fast Track Admissions prior to your exam date to pre-register. You may call up to 30 days in advance.

- For exams scheduled at Emory University Hospital, call 404-686-5270 or 1-800-640-9293.
- For exams scheduled at Emory University Hospital Midtown, call 404-686-1573.
- Fast Track Admissions may also be required for exams scheduled at The Emory Clinic. Please call 404-778-XRAY or ask your scheduler at the time you make your appointment.

Because MRI uses strong magnetic fields, certain metallic materials within your body may present a danger. Before scheduling your procedure, let your doctor know if you have any metal or implanted devices, such as a pacemaker, IUD, metal pins or screws, etc., in your body.

You should also tell your doctor if your occupation involves work with metal filings or particles. In addition, let your doctor know if you have ever had claustrophobic reactions to enclosed spaces. If so, you may be prescribed a sedative to take prior to the procedure.

If your doctor prescribes a sedative, you should:

- Arrange for a ride to and from the exam
- Not eat or drink at least four hours before the exam – take medications with minimal water
- Bring your medication with you
- Inform the receptionist at the check in desk you have medication for sedation
- You will be advised to take your medication with a sip of water 30 minutes before the MRI scan
- If your doctor has ordered and scheduled you for IV sedation during your MRI you should:
 - Not eat or drink at least 6 hours before the exam
 - Take prescribed medications with minimal sips of water
 - Arrange for a driver to accompany you to the exam, wait during the exam and drive you home

In the days leading up to your MRI exam, we may ask you to avoid using hair gel, hair spray, lotions, powders and cosmetics. If your doctor has not prescribed a sedative for you, you may eat and drink normally, unless your doctor or the technologist tells you otherwise.

The Day of Your MRI

Most MRIs take approximately 20 to 30 minutes to complete. If you are having more than one site imaged or a more complicated study, your MRI will take longer. You should plan to arrive 30 minutes prior to your exam for registration. If you require sedation, please arrive one hour prior to your appointment.

For your maximum safety you will be asked to change into hospital-provided attire.

Once at the MRI center, we will ask you about:

- Your medical history
- Any medications you take
- Any medication allergies you have
- Whether you are pregnant or trying to get pregnant
- Whether you have any metal objects in your body

We will ask you to remove any metal-containing items, such as jewelry (including body piercings), hairpins, hearing aids, glasses, wigs with metal clips and some nonpermanent dentures. We may take an X-ray beforehand if we have any concern about metal objects in your body. We will also ask you to remove all objects from your pockets. Your referring physician may request injection of an IV material called gadolinium that helps the radiologist read your exam results more easily. This contrast dye contains no iodine and is generally very safe and well tolerated.

The MRI Procedure

Please be advised that our image information-gathering process is not as simple as an ordinary X-ray. You will need to lie very still for periods of time while we acquire the images. Each image set may take from 5 seconds up to several minutes. We will make every effort to make you as comfortable as possible while you are being imaged.

For the exam, we will position you on a special moveable table. Depending on your medical condition, we may place monitors on you to keep track of your vital signs. We may also provide you with earplugs or headphones to help muffle the banging noise the MRI machine makes during the exam.

After you lie on the table your MRI technologist will slide you into the MRI cylinder. Your MRI technologist will leave the room in order to perform the MRI scanning from the control room. At all times, your technologist will be able to see you and speak to you, or hear you speaking through an intercom system. Your

technologist may provide you with explanations and instructions during scanning, such as to hold your breath momentarily. When your technologist is setting up a scan, and during scans you will hear knocking or buzzing sounds. The table may occasionally move in order to better center the area of your body being scanned within the magnet.

When the MRI exam is complete, we will take you out of the MRI scanner. If we placed an IV, we will remove it. We will ask you to remain in the waiting room until we review the MRI images for completeness.

Following Your MRI

If we gave you a sedative, you should not drive, operate machinery or make important decisions until after the sedative wears off completely. If you are breastfeeding and receive contrast dye during the MRI, wait at least 24 hours after the exam before breastfeeding again.

It is essential for you to monitor your condition after you leave the health-care facility and alert your doctor to any problems right away. If you received contrast dye, call your doctor immediately if any of the following occur:

- Itching
- Swollen or itchy eyes
- Nausea
- Tightness in the throat
- Hives or any other rash
- Trouble breathing

These reactions are rare and would usually occur at the time of contrast dye injection.

Your referring doctor will contact you once the results of your MRI are available and ready for review.

Contact Us

MRI is available at all Emory University Hospitals, as well as several Emory Clinic locations. For more information, visit www.emoryhealthcare.org/radiology or call 404-778-7777. For additional information about radiology exams in both English and Spanish, visit www.radiologyinfo.org.

Reference

1. Radiological Society of North America (RSNA). Safety: Magnetic Resonance Imaging (MRI). October 6, 2008.

