Magnetic Resonance Imaging (MRI)

A magnetic resonance imaging (MRI) exam is a special way of looking inside your body. It is different from an X-ray. It uses a magnetic field and radio waves to create the pictures. During the test, a contrast agent (dye) may be given. This makes certain parts of your body appear brighter on the pictures.

The exam time depends upon the area to be scanned and the information needed by your doctors. Most exams last about 45 to 60 minutes. The MRI is done in the Radiology (X-ray) Department. Northwestern Memorial Hospital offers the option of 4 locations:

- Feinberg Pavilion at 251 E. Huron St.
- 441 E. Ontario St.
- 1913 W. North Ave. in Chicago’s Bucktown neighborhood.
- Prentice Women’s Hospital at 250 E. Superior St.

Before the Test

Please tell your doctor if you might be pregnant, are trying to become pregnant or are breastfeeding.

Also, please notify your doctor if you are on dialysis or have known kidney disease. If you are on dialysis, you will need to schedule dialysis on the day of your MRI, as well as the following day. This helps rid the body of any contrast dye used during the MRI exam.

Every MRI patient will be screened to ensure that certain safeguards are in place. Please tell your doctor or MRI staff before the exam if you have any metal inside your body. This may include:

- Pacemaker
- Aneurysm clip
- Ear or eye implant
- Joint or bone rods or clips
- Metal plate
- Bullets or shrapnel
It is also helpful to talk with your doctor if you:

- Cannot lie flat for about an hour.
- Have claustrophobia (are uncomfortable with closed-in spaces).

Please ask your doctor if you need to make any changes in your diet before this exam. Otherwise, there is no special preparation for this test.

On the day of the test, plan to arrive 30 minutes before your test time. Also, be sure to bring:

- Your doctor’s written order for the test.
- A list of all your current medications (prescription and over-the-counter).
- Medical insurance information.
- Medicare card (Medicare patients only).

If plans were made to give you any medicine to help you relax, you also will need a responsible adult to take you home. Also, there are special diet instructions. The scheduling MRI staff will discuss these with you before the exam.

Upon arrival, you will be asked to complete an MRI safety questionnaire and a medical history form.

Prior to the test, you will be taken to a locker room to change into a hospital gown and store your belongings. It is important that you remove all metal, including jewelry, credit cards, keys and dentures. The staff nurse then reviews your completed forms with you. An IV (into the vein) line is started in your arm or hand.

**During the Test**

Once you are taken into the exam room, you are introduced to the technologist (tech) and nurse who will perform the test. They can answer any questions you may have.

You are asked to lie on a table attached to the MRI machine. The nurse and tech help position you comfortably on the exam table. You are given a hand-held device to help you contact the tech during the test as needed. Ear plugs also are provided. If medication to relax you was ordered, it is injected into the IV at this time. You may be given an IV contrast agent (gadolinium dye) during the test. As the dye is injected, you may feel warm or flushed or you might notice a metallic taste in your mouth. This is normal. However, please notify the staff right away if you have shortness of breath, hives or itching.
Your body and the machine are lined up so that the proper area of your body can be examined. Then the table moves so that you are in the center of the machine. The tech keeps in contact with you throughout the exam. During the MRI, you will hear a loud drumming noise. It is very important that you lie still and follow instructions. Between scans, the drumming noise stops. You may be asked to hold your breath several times during the test.

When the exam is over, you will be assisted off the exam table.

**After the Test**

If relaxing medication was given, you must remain in the department for about an hour. Your blood pressure, heart rate, and oxygen level will be monitored by a nurse. Unless told otherwise, you may resume your normal activities and diet after the exam. It is helpful to drink extra fluids if a contrast agent was given. The contrast agent does not discolor your urine.

Most often, initial findings are sent to your doctor within 48 hours. A full report follows in about 5 business days.

**Health Information Resources**

For more information, visit one of Northwestern Memorial Hospital’s Health Learning Centers. These state-of-the-art health libraries are located on the third floor of the Galter Pavilion and on the first floor of the Prentice Women’s Hospital. Health information professionals are available to help you find the information you need and provide you with personalized support at no charge. You may contact the Health Learning Centers by calling 312-926-LINK (5465) or by sending an e-mail to hlc@nmh.org.

For additional information about Northwestern Memorial Hospital, please visit our Web site at www.nmh.org.