



University of Michigan
C.S. Mott Children's Hospital

Magnetic Resonance Imaging (MRI)

What is an MRI?

Your child's doctor ordered a radiology test called **Magnetic Resonance Imaging**. This test is more commonly known as "MRI" or just "MR". This test uses a strong magnet in order to create pictures. MRI does not use any radiation.

How will I prepare my child for the test at home?

You and your child will receive specific instructions from the radiology department prior to the test via a phone call 2 business days before the test. Depending on the type of MRI that is going to be done, your child may not be allowed to eat prior to the test.

MRI uses a strong magnet to make the pictures. For this reason it is important to know whether your child has had surgery before and whether they have any metal devices in their body. A common example for a metal device is a pacemaker put in to help with heart problems, but there are other types of metal devices that are left in the body after surgery. If you think your child may have something like this, please contact your doctor or call the radiology department.

Your child should not wear anything made out of metal or have any jewelry on when they arrive for the test. We recommend wearing sweats or athletic clothing.

If your child is awake for the MRI test you might want to bring an MP3 player or iPod for your child to listen to music or a story during their test.

Some children need anesthetic medicine in order to be able to hold still during the MRI, so the test produces the best quality results. If anesthesia is needed, your child will be scheduled with the anesthesia team. You will receive a phone call one business day before the test, with instructions on what your child can eat and drink before the MRI. They will also inform you about when and where to check in.

An anesthetic is a medicine to control pain or movement during a medical procedure or surgery.

How is the MRI performed?

Before the test your child will change into a hospital gown. We will provide you with a locker to hold your child's regular clothes.

Some MRI tests require your child to have an IV (intravenous catheter) so we can inject a special contrast (sometimes called a "dye") during the test. If your child needs an IV, it will be placed prior to the test. If needed, the IV will be placed by specially trained pediatric radiology nurses.

The MRI machine looks like a tunnel and is in a special room. The opening of the tunnel is about 2 ½ feet wide. During the test, your child will lie on a special table that moves into the opening of the "tunnel". Depending on the body part being imaged, your child may have their head, body or legs in the tunnel. There will also be a thick plastic blanket (called a "coil") that lies on top of the body part being scanned during the test. If the MRI is done to examine the brain or head, we will use a loose fitting helmet instead of the thick plastic blanket.

The MRI machine makes loud banging or buzzing noises. To reduce the noise we will give your child headphones or earplugs to wear. If you brought an MP3 or iPod device the technologist (the specialist who operates the MRI machine) can connect it to the headphones.

The MRI test can take anywhere from 20 minutes to over 1 hour, depending on the part of the body and the specific type of test being done. The technologist will be able to talk to your child through the headphones throughout the test. The technologist will give your child a special ball to squeeze if she needs to stop the test for any reason.

What is the parent's role during the test?

One parent is allowed in the room during the study if your child is awake. If you choose to be in the room, you must make sure that there is no metal on your clothing. We will ask you a series of questions to make sure that you don't have any metal devices in your body (like a pacemaker). This is for your safety and for your child's safety, as the entire room with the MRI machine can be affected by the magnet during the test. Your child may not be able to see you while they are in the "tunnel" but it may be comforting to them just to know that you are in the room.

As the parent, you can be a great source of support for your child before and after the study, helping them to feel comfortable and safe. You can also help the radiologist and the technologist by assisting your child in following the instructions before the test.

A **radiologist** is a medical doctor who specializes in the reading and interpretation of X-rays and other medical images.

We encourage you to ask questions both before and after the MRI. If you have questions during the test, please ask them after the test is finished.

How will I care for my child after the test?

There are no special instructions to follow after the test. Your child may feel dizzy or tired (just from laying down for a long time during the test), so we encourage you to move slowly and carefully as you get dressed and leave the department.

After the images are completed, they will be reviewed carefully by a radiologist with special training in reading children's medical images. (pediatric radiologist). Your doctor will receive a report with the results of the MRI.. Please make arrangements with your doctor to get the results.

I have more questions about MRI. Who can I call?

Pediatric Radiology Nurse (734) 936- 7907.

Child Life Specialist (734) 232- 6744

We are available Monday-Friday between 8am-4pm.

Disclaimer: This document is for informational purposes only and is not intended to take the place of the care and attention of your personal physician or other professional medical services. Talk with your doctor if you have Questions about individual health concerns or specific treatment options.

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