

## WHAT IS AN MRI?



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## **What is an MRI?**

MRI stands for “Magnetic Resonance Imaging.” An MRI takes pictures using a large, very strong magnet. This is one way for doctors to take pictures of the inside of your body. Just like a camera at home, you don’t feel anything when the MRI machine is taking pictures.

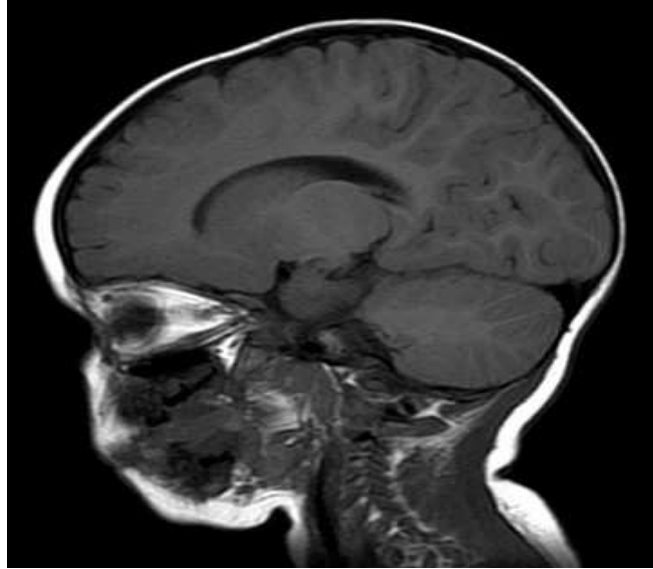
## What does an MRI machine look like?

The MRI looks like a machine, but it is just a big camera with a tunnel going through the middle. For the pictures, you lay on a bed that is part of the MRI camera and the bed slides into the tunnel. This is a picture of the MRI machine at Dayton Children's.



## What does an MRI picture look like?

MRI pictures are different from x-rays. An x-ray only shows pictures of your bones. An MRI can show pictures of everything else, like your muscles, heart or brain. It makes your pictures by sending them from the MRI camera to a computer. The computer shows the pictures that are being taken on its screen. This is a picture taken by an MRI camera.



## What do I need to do to get ready for my MRI?

You will need to lie very still so that the pictures are the best they can be for the doctors. While you are waiting your turn you can:

- 1) Practice lying still for a long time – like for two cartoons or for an entire TV show. This will help when you have to lie still during the MRI.
- 2) If you are wearing anything metal, like earrings or a watch, take them off and put them in a safe place. During the MRI you won't be able to bring any metal things in the room. Why? Because the MRI is a magnet and will want to stick to anything that is metal.

## What will happen after I get to the MRI area at Dayton Children's?

When it is your turn, a nurse or a technologist will call your name. She will help you to get ready for your MRI. She may have you stand on the scale to see how much you weigh. Then she will bring you to a room for only you and your parents.



You may have to have a short check up before your MRI. The nurse may listen to your heart and your lungs with a stethoscope. She may also put a small red light that feels sticky on the end of one of your fingers. This is called a pulse-oximeter. It tells the nurse how well you are breathing. The nurse will ask your parents some questions.



We have toys for our patients to use while they are waiting for their turn. Ask the nurse if you can find one to play with in your room.

## Can I wear my own clothes?

Most of the time you can wear your own clothes. If your clothes have any metal buttons or snaps, you will be asked to change into one of our hospital gowns to wear while we are taking your pictures.



## **Will I need to have any medicine?**

The doctor will decide if you are going to have an Awake MRI or a Sleeping MRI. If you are going to have a Sleeping MRI, the nurse will give you some sleepy medicine.

Sometimes our patients have to have another kind of medicine called contrast. The contrast will make the MRI pictures come out bright and clear. The contrast will go into your body through a vein. Your veins look like little blue lines under your skin. You can usually see some on the backs of your hands.



## **How will the medicine be put into my vein?**

To put the contrast into the vein, the nurse will need to use a needle. This is called an intravenous or an IV for short. Ask your parents or a nurse if you have to have an IV before your MRI.

If you need to have an IV, your mom or dad can stay with you. You might sit on your parent's lap or lay down on the bed. You can ask the nurse if you can help choose where the IV will go. Sometimes the nurse can put a special numbing gel on your skin. This special gel helps you not to feel the needle so much. You may not feel it at all. The IV will be taken out when the MRI is over.



Your job will be to hold as still as you can. Some children take deep breaths to help relax their bodies. Some sing songs. Others count to 10. You can choose to do what will help you the most.

## What happens when I have an MRI?

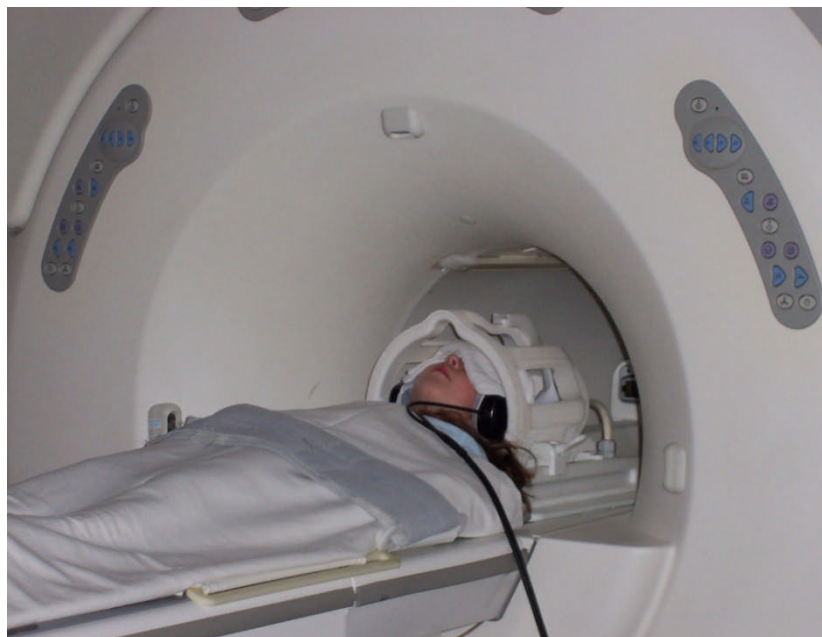
When it is your turn, you will go into the MRI room. The room might feel cool. We can give you a blanket if you need one. If you brought a favorite blanket or stuffed animal, ask the nurse if you can bring it with you into the MRI room. If you are having an Awake MRI, your parents can stay with you.



At Dayton Children's we have special headphones for our patients to use during their MRI. You can wear them to listen to music or a book on CD. We also have special goggles to watch a movie while we are taking your pictures. You can bring your favorite CD or DVD from home or you can use one of ours. You can also choose to listen to the radio. Ask the nurse or technologist if this is something you can do.



You will lie down on the narrow bed and put your feet or your head close to the tunnel. You may have to wear a seat belt or special brace around your body to help you to remember to lay still. Or you may need to wear a special helmet. You can see, hear and talk with the helmet on your head.



The technologist will be watching you from a room next door. He will talk to you through a microphone while you are in the tunnel. You can talk back, except not while the pictures are being taken. You will be given a special button to push if you need to ask an important question or if you need help during the MRI.



## What does having an MRI feel like?

The MRI camera will make some very loud buzzing and knocking noises while it takes your pictures. The MRI camera never touches you. The camera is taking pictures all around you. Having an MRI doesn't hurt. But remember, you have to lie very still. If you wiggle or move just a little bit, the pictures will look fuzzy and you will need to start all over.



## How long will the MRI last?

The MRI can last for fifteen minutes (about as long as half of a TV show) to one hour and a half (about as long as a movie). Before you know it, the technologist will tell you that the pictures are done.



## **Remember!**

If you have any questions, the people that work at Dayton Children's will be happy to answer them. If you don't want to ask yourself, ask your parent to ask for you.



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