

MRI: Brain Scan

How to prepare and what to expect

This handout explains how an MRI brain scan works, how to prepare, what to expect during the scan, and how to get your results.

What is an MRI scan?

Magnetic resonance imaging (MRI) is a way to take pictures of your internal organs and tissues. It uses radio waves and a strong magnet to create clear and detailed images. Even different types of tissue are easily seen in an MRI image.

What is a brain scan?

During an MRI brain scan, we will take 6 or more sets of pictures of your head. Each set shows a cross-section (called a *slice*) of the head. It takes 1 to 6 minutes to take each set.

For Your Safety

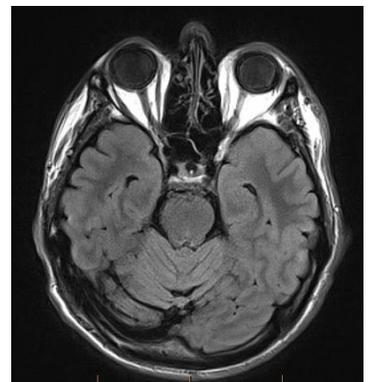
Health Review

We need to know about certain **health conditions** before giving you an MRI scan. Please tell us if you:

- Have any problems with your liver or kidneys or you need a liver or kidney transplant
- Are on dialysis
- Have allergies to any drugs or *contrast* (X-ray dye)
- Have had any surgeries

Screening for Metal

If you have any metal on or in your body, an MRI can harm you. The strong MRI magnet will pull on any *ferromagnetic* object, such as iron and some other metals.



MRI images of the brain.

This is why we need to know if you have any metal in or on your body before we give you an MRI scan. Even small amounts of metal that will not harm your body can ruin the MRI image.

Please tell MRI staff if you have:

- Aneurysm clips, a heart pacemaker (or artificial heart valve), an implanted port, an infusion catheter (such as Port-o-cath, Lifeport, or Infusaport), an intrauterine device (IUD), any metal plates, clips, pins, screws, or surgical staples, a prosthetic hip, or any implanted metal object in your body
 - Most times, surgical staples, clips, plates, pins, and screws are not a risk during MRI scans if they have been in place for more than 4 to 6 weeks. If needed, we may do an X-ray to check for metal.
- Tattoos or permanent eyeliner
- Medicine patches
- A bullet or shrapnel in your body
- Ever worked with metal
- Tooth fillings or braces
 - Dental work is not usually affected by MRI, but fillings and braces may distort pictures of the face or brain.

How do I prepare?

- Please talk with your provider if you have any concerns about managing pain or anxiety during your MRI scan.
- *Women:* Tell your provider if you are pregnant or breastfeeding, or if there is any chance you could be pregnant.

On the Day of Your Scan

- **Remove anything that might contain metal.** This includes:
 - Makeup and nail polish
 - Hairpins
 - Jewelry
 - Glasses, hearing aids, and any removable dental work
- If you have an insulin pump or a patch that delivers any type of drug, we will ask you to remove it before your scan.

- *Women:* Before the scan begins, tell the technologist if there is any chance you could be pregnant.

What happens during the scan?

- You will lie on a sliding table. A device called a *surface coil* will be placed around your head.
- The table will be moved so that your head is inside the MRI machine. The technologist then leaves the room and takes the MRI pictures.
- You will be able to talk with the technologist at any time through an intercom.
- Based on how many pictures are needed, the scan will take about 30 to 90 minutes.
- The technologist will ask you to hold very still while the MRI pictures are taken so that the images are clear. Even moving your eyes or clearing your throat during the sequence will cause blurry pictures.
- Sometimes, an injection of contrast is used to make some tissues or blood vessels easier to see. If you need the contrast:
 - Your doctor will talk with you about it before your scan.
 - *Women:* Tell your doctor if there is any chance you could be pregnant.
 - You will receive the injection about halfway through the scan.
 - It will be injected through a small needle and an *intravenous* (IV) line in your arm or hand vein.
- After the scan, we will ask you to wait until we check the pictures for quality. We will take more pictures if needed.
- After the scan is done, we will remove the surface coil.

What will I feel during the MRI scan?

- MRI does not cause pain.
- Some patients who have an MRI in an enclosed unit may feel confined or uneasy (*claustrophobic*). Please tell the doctor who referred you for the MRI if you are claustrophobic. We may give you medicine to help you relax.

- You may notice a warm feeling in the area where the pictures are taken. This is normal. If it bothers you, please tell the technologist.
- If you need contrast injection for your scan, you may feel discomfort or coolness at the injection site.
- You will hear loud tapping or knocking noises during the scan. We will provide earplugs and headphones with music to help block some of these sounds.

Who interprets the results and how do I get them?

A radiologist skilled in MRI will review and interpret your MRI images. The radiologist will not talk with you about the results, but will send a report to your primary care or referring doctor. Your own provider will give you the results.

You and your provider will then decide the next step, such as treatment for a problem, as needed.

You may also read your results on your MyChart page. If you need copies of your images on disc, call 206.598.6206.

Questions?

Your questions are important. Call your doctor or healthcare provider if you have questions or concerns.

- UWMC - Montlake Imaging Services: 206.598.6200
- Harborview Imaging Services: 206.744.3105
- UWMC - Northwest Imaging Services: 206.668.2061