

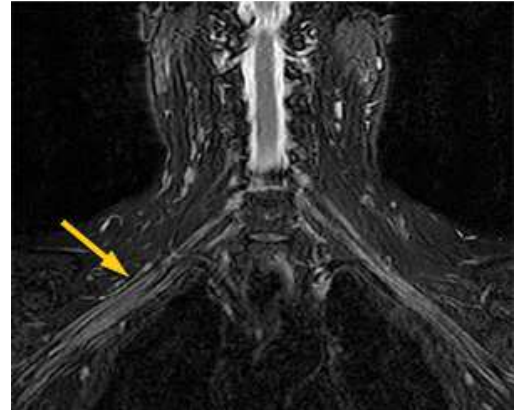
MRI: Neurogram Scan

How to prepare and what to expect

This handout explains how an MRI neurogram scan works, how it is done, how to prepare for it, what to expect during the scan, and how to get your results.

What is an MRI?

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 provide clear and detailed pictures. Even different types of tissue within the same organ can be easily seen.



An MRI image. The arrow points to the brachial plexus, the group of nerves that sends signals from your spine to your shoulder, arm, and hand.

What is an MRI neurogram scan?

An MRI neurogram scan takes pictures of nerves in the body.

How does the scan work?

An MRI neurogram scan usually involves taking 4 or more sets of pictures. Each set lasts 3 to 7 minutes and shows a different section of the area being scanned.

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
- Need a liver or kidney transplant
- Are on dialysis
- Have had any surgeries
- Have allergies to any drugs or *contrast* (X-ray dye)
- Are pregnant or may be pregnant

Metal Review

We also need to know if you have any **metal in or on your body** before we give you an MRI scan. The strong MRI magnet will pull on any *ferromagnetic* object, such as iron and some other metals.

If you have any metal on or in your body, an MRI can harm you. Even small amounts that will not harm your body can distort the MRI picture.

Please tell MRI staff if you have:

- Aneurysm clips, a heart pacemaker (or artificial heart valve), an implanted port, an infusion catheter (with brand names such as Port-o-cath, Infusaport, or Lifeport), an intrauterine device (IUD), any metal plates, clips, pins, screws, or surgical staples, a prosthetic hip, or any implanted metal object in your body

In most cases, surgical staples, clips, plates, pins, and screws are not a risk during MRI if they have been in place for more than 4 to 6 weeks. If there is any question of metal fragments, an X-ray may be done to check for them.

- 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 the MRI, but fillings and braces may distort pictures of the face or brain.

Please also **remove any other items that might contain metal** and affect your MRI pictures. These include:

- Hairpins
- Jewelry
- Glasses, hearing aids, and any removable dental work

How is the scan done?

- You will lie on a sliding table. A device called a *surface coil* is in the table. Another surface coil will be placed over the area of your body being scanned.
- The MRI technologist will move the table so the area being scanned is halfway inside the MRI unit. The technologist will then leave the room to take the MRI pictures.
- You will be able to talk with the technologist through an intercom at any time.

- The scan usually takes 20 to 45 minutes.
- We will ask you to hold very still as each picture is taken.
 - If your neck is being scanned, keep your mouth and head as still as possible.
 - If your low back, elbow, or knee is being scanned, keep that area as still as possible.
 - No matter what area is being scanned, do your best to keep your entire body still. Moving any part of your body could cause blurry pictures.
- Sometimes, an injection of contrast is used to make certain tissues or blood vessels easier to see. If you will receive contrast:
 - Your doctor will talk with you about it before your scan.
 - 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.
 - We will remove the surface coil that was placed on top of the area that was scanned.

What will I feel during the scan?

- An 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. You may receive 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.
- 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.
- If a contrast injection is needed, you may feel discomfort at the injection site. You may also feel a cool sensation at the site during the injection.

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 provider who referred you for the scan. Your own provider will talk with you about the results of your scan.

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

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

Questions?

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

- UWMC Imaging Services: 206.598.6200
- Harborview Imaging Services: 206.744.3105