

MRI: Musculoskeletal Scan

How to prepare and what to expect

This handout explains how an MRI musculoskeletal scan works, 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 are easily seen in an MRI image.

What is a musculoskeletal scan?

The *musculoskeletal system* is made up of the body's bones (the skeleton), muscles, cartilage, tendons, ligaments, joints, and other *connective tissue*. This system supports the body, allows motion, and protects vital organs.

The parts of the body that are most often scanned with a musculoskeletal MRI are the hips, knees, and shoulders.

How does the scan work?

An MRI usually involves taking 6 or more sets of images. Each set will show a different area of your musculoskeletal system. It takes 1 to 5 minutes to take each set.



A musculoskeletal MRI image of a hand.

For Your Safety

Health Review

We need to know about certain **health conditions** before giving you an MRI scan.

Please tell us if you:

- Are on dialysis
- Have any problems with your liver or kidneys or need a liver or kidney transplant
- 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.

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, 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
 - Most times, 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 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

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
- You must change into a hospital gown before your scan. We will give you a gown when you arrive in the MRI department.

- If you have an insulin pump or a patch that delivers any type of drug, we will ask you to remove it.
- *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. We will place a device called a *surface coil* around the area that will be scanned.
- The technologist will move the table so that you are inside the MRI unit. The technologist will then leave the room to take the pictures.
- You can talk with the technologist at any time through an intercom.
- The scan usually takes 30 to 60 minutes.
- We will ask you to hold very still as each picture is taken.
- Sometimes, an injection of a *contrast material* is used to make certain 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 while we check the pictures for quality. We will take more pictures if needed.
- When we are done taking pictures, we will remove the surface coil.

What will I feel during the 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.
- 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 or coolness at the injection site.

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 provider. 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