

## **MRI: Musculoskeletal Scan**

### *How to prepare and what to expect*

*This handout explains how an MRI musculoskeletal 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 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 easily be seen in an MRI picture.*

### **How does the scan work?**

An MRI scan usually involves taking 6 or more sets of pictures. Each set lasts 1 to 5 minutes and will show a different section of your musculoskeletal system. The parts of the musculoskeletal system that are most often scanned with MRI are the hips, knees, and shoulders.

### **For Your Safety**

#### **Health Review**

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

- Have any problems with your liver or kidneys
- Need a liver or kidney transplant
- Are on dialysis
- Have allergies to any drugs or contrast material
- Have had any surgeries
- Are pregnant or may be pregnant



*A musculoskeletal MRI image of a hand.*

## **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

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* will be placed around the area that will be scanned.
- The MRI technologist will move the table so that you are 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 at any time through an intercom.
- The scan usually takes 30 to 60 minutes.
- You will be asked 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.
  - 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, you will be asked to wait until the pictures are checked for quality. We will take more pictures if needed.
- When we are done taking pictures, the surface coil will be removed.

### **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. 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 MRI 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 primary care or referring doctor. This doctor will give you the results.

#### **Questions?**

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

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