

MRI: Arthrogram

How to prepare and what to expect

This handout explains how an MRI arthrogram exam works, how it is done, how to prepare for it, what to expect, and how to get your results.

What is an MRI arthrogram?

An MRI arthrogram exam is an imaging study. It is used to take detailed pictures of your joints. MRI stands for *magnetic resonance imaging*.

This exam has 2 parts. First you will have an arthrogram and then an MRI. This 2-part exam shows more details of your joint than an MRI by itself. It will help your healthcare provider decide which treatment is best for your medical condition.

Arthrogram

During the arthrogram, *contrast* will be injected into your joint. Contrast helps make areas of your body easier to see during imaging exams. It will help your radiologist see what is happening inside your joint.

Your radiologist will use a *fluoroscope* to inject the contrast in exactly the right place. A fluoroscope is an X-ray machine that shows live pictures. It will also help your radiologist see the dye as it moves through your joint.

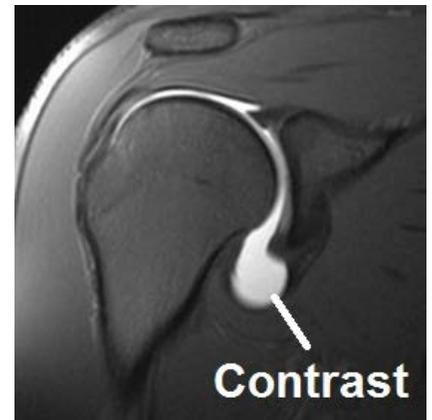
The contrast used for your arthrogram is a mix of X-ray dye, lidocaine, and MRI contrast. This mixture helps the radiologist see the contrast during both the arthrogram and the MRI. The lidocaine will help ease pain in your joint during the MRI.

MRI

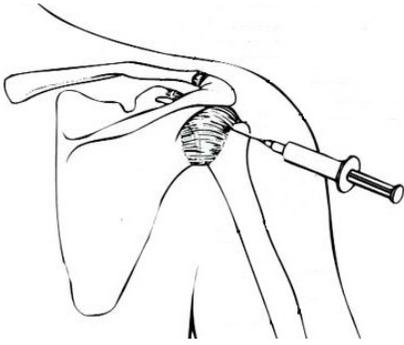
MRI uses radio waves and a strong magnet to provide clear and detailed pictures of body tissues.

Why am I having an MRI arthrogram?

Joints such as knee, hip, and shoulder are made up of 2 bones that fit closely together. Other tissues (*cartilage*, *tendons*, and *ligaments*) support and cushion your joints. An MRI arthrogram helps your doctor see small tears or other problems in these tissues.



Contrast helps your doctor see inside your joint.



During the arthrogram, a small needle is used to inject contrast into your joint space.

The results of this exam will help guide your treatment. It will also help your doctor keep track of problems in your joint.

How is the MRI arthrogram done?

Part 1: The Arthrogram

- The arthrogram is done in a special room in the Radiology department.
- Your skin will be cleaned with an antiseptic soap.
- The radiologist will then use a needle to numb the area with a local *anesthetic* (a numbing medicine).
- When the area is numb, a needle will be placed into your joint space. A fluoroscope will be used to guide the needle.
- When the needle is in the correct place, contrast will be injected. Your joint may feel “full,” or you may feel some pressure in the joint.
- X-ray images will then be taken.
- The arthrogram will take about 30 minutes. Then, you will be sent to the MRI room for part 2 of the study.

Part 2: The MRI

- You will lie on a sliding table. The MRI technologist will help you get into position for the exam.
- A device called a *surface coil* will be placed around the joint that is being examined.
- The technologist will slide the table inside the MRI unit and then leave the room to take the MRI pictures.
- You will be able to talk with the technologist at any time through an intercom.
- You will be asked not to move while the pictures are being taken.
- Your MRI may take up to 45 minutes.
- After the exam, you will be asked to wait until the pictures are checked for quality. More pictures will be taken if needed.
- When your scan is over, the surface coil will be removed.

What will I feel during the exam?

- MRI does not cause pain. But, if you have pain in your joint, you may feel some discomfort from having to be in position for the exam.
- Some patients may feel confined or uneasy (*claustrophobic*) when they are inside the MRI unit. 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.
- When the contrast is injected during the arthrogram, you may feel discomfort or coolness at the injection site.

How should I prepare for the exam?

- You will meet with the doctors before your exam.
- Bring a list of all medicines that you are taking.
- Prepare any questions you might have and ask them at this time.
- You must give written consent before your MRI arthrogram can begin.

Health Review

Please 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, contrast, or local anesthetics such as lidocaine or novacaine
- Have had any surgeries

Metal Review

MRI uses strong magnets. These magnets will pull on any *ferromagnetic* metal object, such as iron. If you have any metal in your body, the MRI can harm you.

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

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 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

Information We Need from You

Please call at least 24 hours before your exam if you need to reschedule or if you answer “yes” to any of the questions below. A “yes” may mean you will need to prepare in special ways for your exam.

- Are you allergic to contrast? It is also called X-ray dye, iodine contrast material, contrast agent, radiology dye, or MRI contrast material.
- Do you have diabetes?
- Do you take warfarin (Coumadin) or other blood thinners?
- Are you being treated now for any kind of infection?
- Have you ever had *claustrophobia* (feeling tense, anxious, or panicky in small, closed spaces)?

For Women

- Do you use a diaphragm or intrauterine device (IUD)?
- Are you breastfeeding an infant?
- Are you pregnant, or think that you may be pregnant?

After Your MRI Arthrogram

- You may leave the Radiology department right after your MRI. Do only light activity for the rest of the day.
- Your joints may be stiff or sore the next day from the contrast. This should get better in 1 or 2 days as your body absorbs the contrast.
- If you have a lot of pain after your exam, call the Radiology department or your referring doctor **right away**. Joint infection is a rare problem after this exam, but if it occurs it should be treated right away.

Who interprets the results and how do I get them?

A radiologist who is trained to interpret MRI will review your MRI and send a report to the doctor who referred you for this test. The radiologist will not talk with you about the results. Your doctor will give you your test results. Based on the findings, you and your doctor will decide the next step, such as treatment, 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 Radiology: 206.744.3105