



What is an Arthrogram?

Your doctor or surgeon has referred you for an arthrogram as part of an MRI or CT to look at the soft tissue structures inside the joint. If the radiologist carrying out the test feels that using MRI or CT without contrast injection will provide sufficient information, then an arthrogram might not be done.

An arthrogram is a picture of the inside of a joint (e.g. shoulder, knee, wrist, ankle) after a contrast agent (sometimes referred to as a contrast media or “dye”) is injected into the joint. An arthrogram provides a clear image of the soft tissue in the joint (e.g. ligaments and cartilage) so that a more accurate diagnosis about an injury or cause of a symptom, such as joint pain or swelling, can be made.

Under the guidance of ultrasound, CT or X-rays, an injection of contrast agent can be accurately directed into the required joint. The procedure is performed by a specialist doctor called a radiologist.

Once the injection is finished, images of the joint are taken using magnetic resonance imaging (MRI) or CT. While a plain MRI or CT can provide some information of the soft tissue structures, an arthrogram can sometimes provide much more detailed information about what is wrong within the joint. Improvements in technology and X-ray imaging equipment mean that the use of arthrograms is becoming less common.

How long will the procedure take?



The injection of contrast takes approximately 15 minutes. Please allow time to register at reception and 15-45 minutes for the scan. You will be requested to wait up to 30 minutes after the procedure so our staff can be sure that you are ready to be discharged home. In total, you will be in the department for up to 2 hours.

Is there any special preparation?

It is recommended that you wear loose clothing to the examination to allow easier access to the joint.

No special preparation is required; however, you may need someone to drive you home after the procedure. Our staff will advise you if this is required, so that you can make appropriate arrangements.

At the time of your booking please inform the staff before the procedure if you have any allergies, you take blood thinning medication or you are pregnant or breast feeding.

Please list or bring all of your prescribed medications, those medications that you buy over the counter, including herbal remedies and supplements.

What do I need to bring with me?

On the day of your appointment, please ensure you bring:

- Your referral form (if you have it)
- All previous relevant scans or x-rays
- Medicare and healthcare cards (e.g. DVA or healthcare concession card)
- List of all medications

It is recommended that you wear comfortable clothing with easy access to the joint being examined.

What happens during the procedure?

A preliminary scan will be used to assist the radiologist in identifying the injection site; this may be marked on your skin with a pen. To reduce the risk of infection an antiseptic solution will be used to clean the skin.

You will remain awake during the procedure. To prevent discomfort the area may be numbed using local anaesthetic which causes a pinprick and stinging sensation that is uncomfortable for a few seconds.

CT or X-rays will be used to guide the accurate placement of the needle into the joint. The contrast will be injected into the joint. Then you will be taken to the MRI or CT scanner, where detailed imaging of the joint will be carried out. You may have to wait for a few minutes until the scanner is available.

Are there any after effects from the treatment?

Many people referred for an arthrogram have symptoms of a sore joint. Some patients can experience tenderness and/or a fullness of the joint after the contrast has been injected. For a few days following the procedure you may experience some increased discomfort. This is often relieved with simple pain medication and applying ice to the area. The joint will then return to feeling the way it was before the test.

What happens after the procedure?

Our staff will advise you of ways to look after yourself following an arthrogram. This includes information such as: avoiding strenuous activity for a few days, arranging a follow up appointment with your referring doctor and how to look after the injection site.

What are the benefits?

The injection of contrast medium into the joint improves the quality of the MRI or CT to more accurately show damage to the internal structure of the joint.

Some common reasons for an arthrogram are:

- In the shoulder – where the joint is unstable or if an ultrasound or plain MRI has not shown a suspected tendon tear.
- In the hip – to show any tear of the cartilage labrum (or rim of the joint).
- In the wrist – to show any tear of the small ligaments of the wrist.

There are many other individual situations where your referring doctor may feel that the additional information obtained by an arthrogram could help to determine the best course of treatment.

Are there any risks?

In referring you for this injection, your doctor is of the opinion that the benefits of this procedure for you are greater than the risks. It is a very safe procedure and complications are unusual.

There are some risks and minor complications associated with joint injections, including arthrograms. The most serious complication is an infection of the joint. This is usually caused by organisms from the patient's skin being transferred into the joint during the injection of contrast, and for this reason the procedure should not be carried out if there is broken or infected skin over the joint.

Slight bleeding or bruising at the procedure site, this is more common if you take a blood thinning medication.

Nerve damage is possible; however, this is usually temporary and should improve over a period of time. Permanent nerve damage is rare. Damage to surrounding structures such as blood vessels, organs and muscles is also possible. The use of x-rays (CT or X-rays) or ultrasound to guide the procedure minimises the risks of such damage.

Some people may have an allergy to injected contrast or the procedure may not be possible due to medical and/or technical reasons.

The use of x-rays (CT or X-rays) or ultrasound to guide the procedure minimises these risks. Although CT and X-rays use ionising radiation to produce images, the radiation doses associated with guiding joint injections are minimal and the associated risks are negligible.

Before the injection the radiologist (or delegate), will discuss the procedure with you in detail, including any risks specific to you. You will be provided with the opportunity to ask questions. It may be necessary to do a formal consultation to make sure that the procedure is the most appropriate for you.

When do I get the results?

The radiologist will send a report outlining the procedure to your referring doctor/surgeon and your regular GP. It is important that you make a follow-up appointment with your referring doctor/surgeon to discuss the results.

I still have questions, who can I ask?

Medical information can be complex, and you may receive information that you do not fully understand. It is important for you to consider the risks and outcomes of the procedure as well as your personal needs before making a decision to undergo the procedure.

If you have read this online information and are still unsure if this is the correct procedure for you; before making a booking, you should discuss your questions or concerns with your referring doctor in the first instance. Your regular GP and/ or your family may also be a useful resource. Your referring doctor can answer questions about the risks and benefits of not having the procedure and other options for treatment.

If you have questions before your appointment about what is involved on the day, our staff would be happy to assist. Please contact the practice where you have made your appointment.