



## **MR Arthrography Patient Information Leaflet**

### **Introduction**

This leaflet tells you about MR Arthrography, a test to look at the internal structures of a joint, including the bones, cartilage, ligaments, joint lining and surrounding muscles and tendons. It explains how the test is done, what to expect, and the risks involved. It is not meant to replace informed discussion between you and your doctor, but can act as a starting point for such a discussion.

### **What is MRI Arthrography?**

Magnetic Resonance Imaging (MRI) is a non-invasive way of looking inside your body to help diagnose medical conditions and guide treatment.

An MRI (Magnetic Resonance Imaging) scanner is a short tunnel that is open at both ends. It uses a powerful magnet, radiowaves and a computer to produce images of the internal structures of the body. MRI does not use ionizing radiation (x-rays).

The scanner is operated by a Radiographer, who is a professional trained to carry out X-rays and other imaging procedures. The pictures are displayed on a computer workstation for examination by the Radiologist, who is a doctor specially trained to interpret the images and carry out more complex imaging examinations.

MRI scans provide good detail of internal organs, blood vessels and soft tissues so are often the preferred method of diagnosing and assessing a wide range of medical conditions such as cancers, infection, inflammation, trauma and musculoskeletal disorders. An MR Arthrogram uses an injection of contrast into the joint to visualize the joint space and lining on the MRI scan, in addition to seeing the surrounding muscles, tendons and soft tissues.

### **What do I have to do before my MRI scan?**

There is no specific dietary preparation for this test.  
You should continue to take all your normal medication.

You are advised to ask someone to bring you to hospital. This procedure can cause numbness in the joint injected for an hour or so afterwards so you should not to drive for a few hours following this test.

## **Females**

Females are asked to contact the Radiology department if you suspect that you may be pregnant. There is no evidence that MRI is unsafe in pregnancy, but as a precaution, we do not perform MRI on pregnant women unless it is essential.

## **MRI Safety Questionnaire**

The magnetic field used for MRI scans is very strong and can affect metal or electronic implants. Please take time to read through and complete the attached MRI Safety questionnaire, which asks about any metal implants, such as artificial joints and stents, or electronic devices, such as a pacemaker, that you may have inside you. If all of the answers are no then please bring the completed questionnaire to your appointment. If, however there are answers that are yes, then please return the completed questionnaire immediately to the Radiology department or telephone the MRI appointments desk for advice.

## **Where do I go when I arrive at the hospital?**

Please report to the reception desk in the Radiology department with your appointment letter. You will be asked to sit in the waiting area until called by a member of staff.

A member of the team will explain the test, go through the MRI safety questionnaire with you, and answer any questions.

You will be shown to a private cubicle and asked to change into a clean gown. You may be allowed to wear your own clothing if it is loose-fitting and has no metal fasteners, zips or buckles. Please do not wear items of jewellery, as they may need to be removed prior to the scan. Your clothes and valuables will be secured in a locker until after the procedure.

## **Can I bring a relative/friend?**

You may bring a relative or friend with you to the appointment but, for reasons of safety, they will not be able to accompany you into the examination room, except in very special circumstances. If the patient is a young child or is un-cooperative, a parent or health worker may stay in the scanner room.

If you need an interpreter please tell us when you receive your appointment so that we can arrange this.

## **Please let us know when you arrive for your test if you have any of the following conditions:**

- Diabetes
- Kidney disease
- Known allergies

## **What happens during the Procedure?**

Firstly you will be taken into the X-ray screening (fluoroscopy) room. Fluoroscopy uses low dose X-rays to obtain real-time images of a part of the body. You will be asked to lie on your back on the x ray table and the radiologist will mark a position on the skin as a suitable injection site by looking at the “real time” images on a monitor.

The radiologist will clean the skin with an antiseptic solution and insert a small sterile needle into the joint using x-ray guidance. A small amount of iodine-containing contrast (X-ray dye) will be injected into the joint. You may feel some pressure and fullness in the joint but it should not be painful. The needle will then be removed but the contrast will stay in the joint for a short time.

You will then be taken into the MRI Scanning Room and asked to lie down on the moveable scanner table. A receiving device will be placed around your body over the area to be scanned. You will be moved into the scanner ring until the joint is in centre of the ring. The MRI scan will then be performed and takes approximately 20-30 minutes to complete. You will be asked to remain still whilst the scans are taken. At certain times during the procedure, the MRI scanner will make a loud knocking noise caused by the magnets in the machine being turned on and off. You may be given earplugs or headphones to wear.

Occasionally a contrast material may be required during the examination. This will require a small tube, called a cannula, to be inserted into one of the veins in your arm. Additional scans will be performed after the contrast has been administered.

You will be alone in the MRI room during the scan but the Radiographer will be able to see, hear and speak with you at all times.

## **What happens after the test?**

You may experience some swelling and discomfort in the injected joint for 1-2 hours following the procedure. This may be eased with mild analgesics, such as paracetamol, if necessary and should resolve quickly. If the pain persists for more than 24 hours, please consult your GP.

You may eat and drink as normal as soon as the examination is finished.

## **Are there any risks?**

MRI is generally regarded as a very safe test. It is non-invasive and does not involve ionizing radiation. There is no known adverse effect of the magnetic field and radio waves used in MRI on living tissues.

A small proportion of people (2 – 5 %) find MRI examinations difficult because of the partly enclosed nature of the scanner, causing claustrophobia. Occasionally, mild sedation (relaxing tablets or injections) may be given to patients who know

that they will find the close surroundings of the magnet uncomfortable. This treatment reduces the anxiety about being in a confined space. If you are given a sedative injection, a plastic peg will be put on one of your fingers so that your pulse and breathing can be monitored throughout the examination. You are advised not to drive, travel alone or return to work for the rest of the day. If you know that you will need a sedating injection for the MRI exam, please arrange for someone to accompany you home after the test.

An MR arthrogram involves you having a contrast medium injected into the joint under X-ray (fluoroscopic) guidance to increase the quality of information obtained from the scan. The injection is a sterile procedure and the risk of introducing infection into the joint is very small. The risk of serious allergic reaction to the contrast is extremely rare, and radiology departments are well-equipped to deal with this.

Despite these slight risks, your doctor believes it is advisable that you should have this examination, and do bear in mind there are greater risks from missing a serious disorder by not having your scan.

### **How do I get my results?**

A specialist Radiologist will review the images from your MRI scan and send a report to your doctor. Your GP or hospital Consultant who referred you for the test will see you to discuss the results.

### **Any further questions?**

We will do our best to make your visit as comfortable and stress free as possible. If you have any further questions, or suggestions for us, please let us know.

If you would prefer information and advice in another language, please contact the Radiology department.

### **Further Information**

For general information about Radiology departments, visit The Royal College of Radiologists' website: [www.goingfora.com](http://www.goingfora.com)

For health advice or information you can call NHS Direct on 0845 4647 or visit the website: [www.nhsdirect.nhs.uk](http://www.nhsdirect.nhs.uk)

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