

Information for patients and carers

Magnetic Resonance Imaging (MRI) Scan

Arthrogram

A decorative graphic at the bottom of the page consisting of three overlapping, wavy horizontal bands in shades of blue, ranging from a light sky blue to a dark navy blue.

What is an Arthrogram?

An MRI arthrogram is performed in two parts to allow a detailed view of your affected joint. Firstly, an arthrogram is performed, where an injection of contrast agent (dye) called Gadolinium is put into your joint. This will be done under x-ray guidance to ensure accurate administration. The contrast makes the internal structure of your joint more visible on the second part of the procedure, the MRI scan.

What is an MRI scan?

Magnetic Resonance Imaging (MRI) is the name given to a technique which takes very detailed pictures of the inside of your body. It uses a powerful magnetic field and radio waves, together with an advanced computer system to build up a series of images. The scanner is an open ended tube, surrounded by a large circular magnet.

Important information

It is very important to contact us before coming for your appointment if you have, or have had, any of the following:

- A pacemaker or implanted defibrillator
- A neuro-stimulator
- A cochlear implant
- An aneurysm clip
- A shunt in your head
- A penetrating eye injury with metal fragments
- A shrapnel injury
- Any surgery which involved placing metal implants or clips
- A recent endoscopy procedure involving clips or swallowing a capsule

Or if any of the following apply:

- You are pregnant or think you may be pregnant (Although MRI is not known to be harmful, it is not advisable in pregnancy unless there are special circumstances)
- You weigh over 200 kg (approx. 31 stone)

- You need an interpreter. Please tell us this when you receive your appointment so that we can arrange an official interpreter for you
- You have problems weight-bearing and need a hoist to transfer
- You are unable to keep still or lie flat
- You have had a previous allergic reaction to MRI contrast agent Gadolinium (dye)

If you fail to inform us, we may not be able to scan you on the day of your appointment.

Preston MRI appointments: **01772 523999 / 522014.**

What happens when I arrive at the x-ray department?

When you arrive at the x-ray department you should go to the reception desk where you will be booked in and asked to have a seat in the



waiting area. You will then be taken into the x-ray room where the first part of the procedure will be performed. The radiographer will complete a checklist with you to make sure you are able to have the dye and that you are safe to enter the MRI scan room. A radiologist (a doctor who specialises in imaging procedures) will then explain the injection procedure to you and answer any questions you may have and then you will be asked to sign a consent form. You will be asked to change into a hospital gown and to remove anything that may be metallic, such as jewellery, hair grips, wigs and body piercings. To avoid any delays, please try and remove any body piercings at home before you attend your appointment.

Can you bring a relative or friend with you?

Anyone can accompany you to the hospital, but they will not usually be allowed into the room when you have your MRI scan. Please note that we do not have childcare facilities, so we ask that you do not bring small children with you unless accompanied whilst you have your scan.

What happens during my arthrogram x-ray?

The radiologist will perform the injection under sterile conditions. You will be asked to lie on the x-ray table. The radiologist will then clean the skin around the affected joint using an antiseptic solution. A small amount of local anaesthetic will then be injected to numb the area. A fine needle will be introduced into the joint under x-ray guidance; the contrast will then be injected to fully outline the joint, ready for the second part of the procedure. The needle will be removed, and a dressing applied over the injection site. You will then be taken directly to the MRI department to undergo the MRI scan of your joint. The first part of the procedure will take approximately 30 minutes to complete.

What happens in the MRI department?

The receptionist will book you in for your scan.

There may be a very short wait before you are called in for your scan.

The radiographer will go through the safety questions with you again before you enter the scan room. You will be provided with a locker to put your clothing and belongings into whilst you have your scan.



During the scan you will lie on the scanning table with the area of your body being scanned in the centre of the tube.

Equipment known as a coil will be placed over the area that is being scanned.

The purpose of the coil is to improve the quality of the MRI images. Once you are comfortable and in the correct position, it is important that you remain very still during the scan, as any movement will affect the quality of the pictures.

You will be given a buzzer to press in case you need to contact the radiographer during the scan.

The radiographer will be able to see you through a window during the scan and will talk to you through an intercom in between the pictures. Throughout the scan you will hear repeated loud banging, buzzing and tapping noises which stop and start.

These noises are normal during a scan, and we will provide you with earplugs and headphones to protect your ears from some of the noise.

Are there any risks?

Following the injection, your joint may feel tight and/or stiff for a short while.

There is a rare risk of infection in the joint from the injection. The radiologist will offer advice at the time of your examination about this. There are some small risks involved with the use of x-rays but the minimum amount of radiation is used to produce the images. The x-rays will allow the radiologist to inject the dye into the correct place inside your joint so that the MRI arthrogram can give useful information about your condition. The benefits of having the x-rays far outweigh the small radiation dose you will receive.

The MRI scan poses no risk when appropriate safety guidelines are followed. All staff follow appropriate safety measures before, during and after the scan.

Is MRI contrast safe?

As with all medication, a very small number of patients may be allergic to MRI dye. Allergic reactions are rare and when they do occur, most of them are mild. Please inform the radiographer if you have any allergies, any kidney problems or are breastfeeding.

It is known that small amounts of Gadolinium may remain in the brain or other tissues after an injection, although there is currently no evidence that these small amounts cause any harm.

What happens after the scan?

There are no side effects from the scan itself. Providing you have had no reactions to the dye you may get changed and go home after the scan. If you are employed in a particularly heavy or physical job, it is advisable that you do not return to work immediately. You will be given advice by the radiologist at the time of your examination.

When will I get the scan results?

The radiographer will not be able to give you your results on the day of your scan as the MRI images will need to be interpreted carefully by a radiologist. The results will be sent back to the person who referred you for the scan.

Contact details

If you have a query about the MRI scan or you have any other questions, worries or doubts, do not hesitate to contact us prior to your appointment on **01772 523999 / 522014**

Sources of further information

www.lancsteachinghospitals.nhs.uk

www.nhs.uk

www.patient.co.uk

www.accessable.co.uk

<https://www.rcr.ac.uk/our-services/all-our-publications/clinical-radiology-publications/guidance-on-gadolinium-based-contrast-agent-administration-to-adult-patients/>

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www.lancsteachinghospitals.nhs.uk/patient-information-leaflets

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If you want to stop smoking, you can also contact Smokefree Lancashire on Freephone **08081962638**.

Please ask a member of staff if you would like help in understanding this information.

This information can be made available in large print, audio, Braille and in other languages.

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Division: Diagnostics and Clinical Support

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