

# Information for patients and carers

## Magnetic Resonance Imaging (MRI) Scan

### Small Bowel

A decorative graphic at the bottom of the page consisting of three overlapping, wavy horizontal bands in shades of blue, transitioning from a lighter blue at the top to a darker blue at the bottom.

## 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 (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**



## Is there any preparation for the scan?

It is very important that you do not eat or drink anything for the six hours before the scan. Food in your stomach can make it difficult to obtain diagnostic images. You may continue to have clear fluids such as water or diluted squash/cordial up to 2 hours before your scan. If you are diabetic and are concerned about fasting for six hours prior to the scan, please inform us.

Your referring doctor will have prescribed you a bowel preparation. This prescription is usually sent straight to the MRI department prior to your appointment. Please inform us if the prescription is given to you. Do not take it at home, as it needs to be drunk in the MR department before your scan.

It would be helpful if you could leave any valuables at home and remove any jewellery before arriving for your appointment.

## **What happens when I arrive at the department?**

When you arrive at the MRI 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 may be asked to complete a safety questionnaire. A radiographer will then go through the questionnaire with you, explain the procedure and answer any questions that you may have. The MRI staff will then give you the bowel preparation in liquid form to drink over a 40 minute period before the scan. This will expand and coat the bowel which is very important for us to get diagnostic pictures. You will be asked to change into a hospital gown. You will also be asked to remove anything that may contain metal, such as jewellery, hair grips, wigs and body piercings before entering the scan room. To avoid any delays, please try and remove any body piercings at home before you attend your appointment. You will be provided with a locker to put your clothing and belongings into whilst you have your scan.

## **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 MRI 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 on your abdomen and pelvis.

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 an MRI scan, and we will provide you with earplugs and headphones to protect your ears. You will be asked to hold your breath for a short period of time for most of the pictures.



## Is an MRI scan safe?

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

## Will I need an injection?

You will need to have an injection of MRI contrast (dye) called Gadolinium to make the small bowel more visible. This is given through cannula in your arm or back of your hand by a qualified member of staff. We also need to give you an injection of hyoscine butylbromide (a muscle relaxant, similar to Buscopan) through the cannula. This helps to reduce the movement of your bowel and make the pictures clearer.

## Is MRI contrast safe?

As with all medication, a very small number of patients may be allergic to MRI contrast. Allergic reactions are rare and when they do occur, most of them are mild.

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.

A radiographer will go through a checklist with you to make sure you are suitable for an injection of Gadolinium.

## **Is Hyoscine Butylbromide safe?**

Hyoscine butylbromide is a widely used medication that reduces bowel spasm in MRI examinations. However, if you are experiencing other medical problems there may be occasions when its use is not recommended. You may experience some blurring of vision after the injection but the effects of hyoscine butylbromide are short-lived and last about one hour. You are advised not to drive until any effects have worn off. In the very rare event that following the examination you develop painful, blurred vision in one or both eyes, you must attend hospital immediately for assessment. A radiographer will go through a checklist with you to make sure you are suitable for an injection of Buscopan.

The side effects and risks of these injections will be discussed with you before your scan and the radiographer will answer any questions that you may have.

## **How long will the scan take?**

The scan will take approximately 30 minutes but please be prepared to be in the department for up to three hours as your appointment time also includes the time for us to check your safety questionnaire and prepare you for your scan. On rare occasions emergency patients must be scanned first and this may lead to a delay. However, we will keep you informed of any delays.

## **What happens after the scan?**

You are advised to stay in the MR department for 30 minutes after the injection of contrast dye. The mixture we ask you to drink when you arrive for the scan can cause loose motions for a day or two. There are no side effects from the scan itself. You can also eat and drink as usual after the scan. If you have any concerns, then please inform a member of staff.

## 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**.

## Sources of further information

[www.lancsteachinghospitals.nhs.uk](http://www.lancsteachinghospitals.nhs.uk)

[www.nhs.uk](http://www.nhs.uk)

[www.patient.co.uk](http://www.patient.co.uk)

[www.accessable.co.uk](http://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](http://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.**

**Department:** Radiology/MRI  
**Division:** Diagnostics and Clinical Support  
**Production date:** October 2024  
**Review date:** October 2027  
**JR 1223 v1**