

# Information for Patients and Carers

## Magnetic Resonance Imaging (MRI) Scan Liver



# 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.



## Are there any risks with MRI?

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 Gadolinium - MRI contrast (dye)
- You have a history of severe allergic reactions
- You are on a low sodium diet
- You have cardiovascular disease, are taking antiarrhythmic drugs or beta blockers
- You have congenital long QT syndrome

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?

You can eat and drink as normal before the scan, unless we advise you otherwise. It would be helpful if you could leave any valuables at home and remove any jewellery before arriving for your appointment.

If you arrive with piercings that are difficult to remove or are unable to be removed, your scan may be delayed or rescheduled.

## What happens when I arrive at the MRI 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.

A radiographer or imaging assistant will call your name and go through a safety questionnaire with you, explain the procedure and answer any questions that you may have. You may be asked to change into a hospital gown. You will also be asked to remove anything that may contain metal from your person, such as watches, jewellery, mobile phones, keys, money, credit cards, hair grips, wigs and body piercings before entering the scan room. Blood glucose monitoring devices and medicated skin patches may also need to be removed.

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 will happen 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.

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. You will be asked to hold your breath for a short period of time for most of the pictures.

## **Is MRI 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 liver more visible. This is given through a cannula in your arm or back of your hand by a qualified member of staff.

## **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. 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.

A radiographer will go through a checklist with you to make sure you are suitable for an injection of Gadolinium, advise you of possible side effects and answer any questions you may have.

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

Normally, you can go home immediately following your scan; however, you are advised to stay in the MR department for 30 minutes after an injection of contrast dye. There are no side effects from the scan itself.

## 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 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.accessable.co.uk](http://www.accessable.co.uk)

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

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

<https://bepartofresearch.nihr.ac.uk/>

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[www.lancsteachinghospitals.nhs.uk/patient-information-leaflets](http://www.lancsteachinghospitals.nhs.uk/patient-information-leaflets)

Lancashire Teaching Hospitals is a smoke-free site. Smoking is not permitted anywhere on any of our premises, either inside or outside the

buildings. Our staff will ask you about your smoking status when you come to hospital and will offer you support and advice about stopping smoking this will include Nicotine Replacement Therapy to help manage your symptoms of withdrawal and the opportunity to speak to a nurse or advisor from the specialist Tobacco and Alcohol Care Team.

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.**

Our patient information group review our leaflets regularly, if you feel you would like to feedback on this information or join our reading group please contact on email address:

[patientexperienceandinvolve@LTHTR.nhs.uk](mailto:patientexperienceandinvolve@LTHTR.nhs.uk)

**Department:** Radiology/MRI

**Division:** Diagnostics and Clinical Support

**Production date:** August 2025

**Review date:** August 2028

**JR 1329 v1**