

Division of Imaging

Information for Patients

Magnetic Resonance Imaging (MRI)

What is an MRI scan?

MRI stands for Magnetic Resonance Imaging.

It is a painless medical scan of your body, which uses large magnetic field and radio waves to produce a picture of your body. A piece of equipment, called a 'coil', is placed next to your body to receive the small signals given out by your body to make the images that doctors can use to treat you.

MRI uses non-ionising radiation and so is considered safe for most patients.



(Image of a typical MRI scanner)

Important Information

The scanner uses a powerful magnet, it is important therefore that you complete the safety questionnaire. This should have been sent to you with your appointment letter. Please ensure you have read and understood it fully, in order to avoid any unnecessary delays.

On arrival a member of staff will review your safety questionnaire with you. It is important that you can answer any safety questions staff may have in the department. If you require an interpreter or have any communication difficulties, please contact the department, as we are unable to allow family members or friends to interpret for you.

If you have any metal implants, such as a cardiac pacemaker, neural stimulator or diabetic pump please contact the department before the scan date, as you may not be able to have an MRI scan.

If you are pregnant or think you may be pregnant, please contact the department.

What happens during a MRI scan?

After reporting to reception, you will be greeted by a member of staff.

- A trained specialist called a radiographer will perform you MRI scan.
- You may be asked to change into a hospital gown.
- You might be asked to remove certain items of clothing and jewellery.
- The person completing the procedure will ask you to confirm some details including date of birth and review your safety questionnaire

During the scan you will have to lie flat within the scanner. This is a 1.5 metre tunnel, which is open at both ends. If you suffer from claustrophobia you may require a light sedative, which can be obtained by you from your GP, and brought with you for the scan.

The scan is very noisy, and you will be given some headphones or ear plugs to wear. You can bring your own CD if you would like to listen to some music (NB this is not possible with some scans. The department staff will be able to advise you).

Occasionally you may be given an injection during the scan of special MRI dye into a vein in your arm.

If you are to be given the dye, a small amount of your blood may be taken to assess your kidney function.

The radiographer will monitor you during your scan and you will be able to talk to them through an intercom if you need assistance or feel unwell.

Please note, we cannot guarantee the gender of the person who will be looking after you when you attend your appointment.

Will I feel any pain?

You cannot feel magnetic field or radio waves from the MRI scan so the scan itself is painless.

However, it is important to get you into the correct position. Holding this position / lying on a table may, for some people, feel uncomfortable, but for the majority of patients this is not the case.

Are there any risks with this examination?

MRI is considered to be safe. It does not use X-rays and is not associated with any increased risk of cancer.

If you are pregnant, you can still have an MRI scan if this is deemed to be the most appropriate imaging technique. If you are pregnant or have any concerns, please contact the department before your scan.

Although MRI uses a magnet, some metallic implants are safe to scan. Please contact the department if you have any so we can assess if it is safe for you to have the scan, before you attend the department.

Contrast risk

We might need to give you contrast dye to make areas of your body show up more clearly.

One of the radiology staff will give you this using a small needle inserted into a vein in your arm or the back of your hand.

The radiographers will complete a checklist to ensure it is safe for you to have the dye and you will be asked to sign this form as a consent, the specific side effects are documented on the checklists that you complete.

The contrast dye that is sometimes used can cause allergic reactions however the staff available will be checking for any risks before we proceed.

Extravasation risk

Contrast dyes (liquids) that are given to patients having an MR scan are usually given by injection into a vein in your arm or hand. Occasionally the injection may leak out from your vein into the tissues under the skin – this is known as extravasation.

If this has happened, you may experience a stinging sensation where the contrast has gone into the tissue, and it can be painful. This will usually wear off after about 30 minutes.

Is there anything I need to inform you of before I attend for my appointment?

As mentioned previously in this leaflet:

- If you require an interpreter or have any communication difficulties, please contact the department, as we are unable to allow family members or friends to interpret for you.
- If you have any metal implants, such as a cardiac pacemaker, neural stimulator or diabetic pump please contact the department before the scan date, as you may not be able to have an MRI scan.
- If you are pregnant or think you may be pregnant, please contact the department.

How do I prepare for my MRI scan?

Timing:

You should plan to be in the department for up to 1hour. Your appointment letter will give you more details.

We will try to keep your appointment time, but occasionally we have to see patients urgently at short notice. This means that your appointment could be delayed. We will let you know if this is the case.

Sometimes we will advise you not to eat or drink before your scan. Your appointment letter will tell you how long before your examination to stop or if you are an inpatient, the medical on the ward will take care of the preparations.

If you are taking any medications, please continue to take these as usual unless you have been told otherwise by your doctor. If you are taking Metformin and have poorly functioning kidneys, please contact the department to review this as you may be asked to stop taking this medication 48hours prior to your appointment.

Clothes and accessories:

If you prefer, you can bring your own pyjamas or loose-fitting non-metallic clothing (such as a T-shirt and jogging bottoms/ shorts). To save any delay and to ensure your belongings are safe, it is advised that you try to remove any jewellery before attending and leave these at home.

Help and support in the department

If you have any medical problem which you feel may affect your safety in the department, or if you feel you may need any assistance, please let us know when you arrive.

Do I need to give my permission (consent)?

The radiographer will ask you if you are happy for the examination to go ahead. This is called verbal consent and might only involve the radiographer checking you are booked for the correct examination.

If you do not wish to have the examination or are undecided, please ask the radiographer so that they can answer any questions you may have.

Remember, it is your decision. You can change your mind at any time and your wishes will be respected.

However, not having the examination may delay your diagnosis as the referring clinician may not have all the needed information.

How long will it take?

Scans take between 10-45 minutes. This depends on which part of your body is being imaged.

The images are recorded, and the radiographer will check them briefly to make sure that they can be used to make a diagnosis.

When it is completed, you will be allowed to leave the examination room.

The radiographer will usually not be able to give you any idea of the results at that time.

What happens after the MRI scan?

The radiographer may ask you to wait in the department while they check that no more images are needed.

As soon as the radiographer is satisfied that no more x-rays are needed, you will be free to leave the department.

If you have had a contrast dye injection, we may ask for you to wait for 10minutes before you leave the department. This is to make sure that you are feeling ok and there is no sign of any allergic reaction to the dye you have been given.

Please drink plenty of fluids after you have had a contrast dye injection, this is to help the kidneys flush the dye out of your body.

You can eat and drink as normal and get back to your usual activities straight after the scan.

When will I get my results?

Specialist doctors will look at your scan and a report will be made available to the doctor who requested the scan.

The radiographer will tell you how to get your results and how long it will take, as this may be slightly different for each patient.

You may already have an appointment with the clinician who referred you. If not, please contact them to arrange a time to talk about the results and any treatment you may need.

If you are staying in hospital, the results will be given to the doctors looking after you on the ward.

What should I do if I have a problem?

You should not have any problems that is a result of the MRI scan.

If you feel your condition has changed, or you need further medical advice before receiving your results/after leaving the hospital, please make an appointment with the doctor that referred you, or in an emergency, go to your nearest Emergency Department (ED).

How can I provide feedback for the appointment I have attended today?

The Division of Imaging welcomes feedback from all our patients. We actively take part in the Friends and Family Test and we complete a patient experience questionnaire every month to obtain feedback on the experiences you have had. Please speak to a member of staff regarding the feedback or there are posters within the department with QR codes so you can complete these online.

Further Information

www.goingfora.com
www.nhs.uk

You can find a video about having an MR scan at Manchester Royal Infirmary at the following link:

www.youtube.com/watch?v=ZS_B_n_XEWY&list=PLM-Lo0FsBVIPI6HMKXOnYJBFwNbxEZGIR1&index=2

Contact us

For contact information please refer to your appointment letter or if you are an inpatient, please direct your queries to one of the medical staff on the ward.

Language and accessible support services:

If you need an interpreter or information about your care in a different language or format, please get in touch.

Your comments and concerns

If you would like to provide feedback you can:

- Ask to speak to the department lead / manager.
- Write to us: Patient Advice and Liaison Services, 1st Floor, Cobbett House, Manchester Royal Infirmary, Oxford Road, Manchester, M13 9WL.
- Log onto the Patient Opinion website www.patientopinion.org.uk/ click on 'Tell your Story'

If you would like to discuss a concern or make a complaint:

Ask to speak to the department manager – they may be able to help straight away. Inpatients can speak to a senior nurse or manager by contacting the Tell Us Today service on (0161) 701 1999.

Contact our Patient Advice and Liaison Service (PALS) on (0161) 276 8686 email: pals@mft.nhs.uk. Ask for our information leaflet.

We welcome your feedback so we can continue to improve our services.

NHS 111

This service offers medical help and advice from fully trained advisers supported by experienced nurses and paramedics. Available over the phone 24 hours a day.

Telephone: 111, 24 hours a day

Website: www.111.nhs.uk

Finally

Some of your questions should have been answered by this leaflet but remember that this is only a starting point for discussion about your treatment with the doctors looking after you. Further information can be obtained by contacting the radiology department that is performing the procedure.