

# Magnetic Resonance Imaging (MRI)

General MRI scan



**Information for patients**

Radiology



**PROUD TO MAKE A DIFFERENCE**

SHEFFIELD TEACHING HOSPITALS NHS FOUNDATION TRUST





## What is an MRI scan?

MRI is a simple way of saying Magnetic Resonance Imaging which is a scan that uses a powerful magnet to obtain images of your body.

The scanner is open at both ends and the radiographer (the person who performs your scan) can see you at all times.



## Why do I need an MRI scan?

MRI can take pictures of almost all parts of the body and shows many different diseases. Your doctor should have discussed with you their reason for wanting a scan. If you are still unsure as to why the scan is necessary, it is usually best to talk to your doctor who will have all your details.

## Is MRI safe?

MRI does not use any X-rays and there are no known harmful side effects. Because the magnet is so strong it can have an effect on metal, or electronically or magnetically activated implants. As the magnet cannot be switched off, anybody who goes into the examination room has to answer a questionnaire to ensure that they have no metal in their body that could be affected. If you have ever had any metal fragments in your eyes (from welding, grinding etc) we may need to take an X-ray of your eyes first. Also, if you have had any surgery on your brain we may need to take an X-ray to ensure that no metal clips were used.

## **What if I'm claustrophobic?**

You should discuss this with the doctor who is referring you. The staff in the MRI department are used to helping patients who are anxious and claustrophobic and will do everything they can to support you through the test.

## **Are there any alternatives to having this scan?**

MRI is often part of a number of other tests that you will be having. If you don't want to have this scan you should discuss this with your doctor to discuss what alternatives there are. We will not complete the scan without your consent.

## **Will I need to have an injection?**

We sometimes need to give an injection to show us more detail. If required, a member of staff will put a cannula (a small plastic tube with a needle) into your arm for the duration of your scan. The liquid we inject is a contrast medium called Gadolinium. When the injection is given some patients often feel a cooling sensation in their arm as it enters the blood stream and this is normal.

In rare cases some patients (0.004%) can have an allergic reaction to the dye which causes a feeling of nausea, itch or a rash. These reactions usually occur within minutes of the dye being given and are dealt with immediately.

## **How do I prepare for the MRI scan?**

You will have a letter with details of your appointment time and where to go. Please read this information carefully, ensuring that you attend the correct hospital and arrive on time. Arriving late could mean that we have to rebook your scan due to time constraints.

You should have been sent a questionnaire with your appointment letter. Please fill this in carefully. If you are unsure how to answer any of the questions, please call us to ask for clarification.

If you answer 'yes' to any of the questions above the red print you should call the Radiology Call Centre on **0114 226 8000**. This will allow us to deal with any potential problems and organise any X-rays before you arrive for your scan. If you have answered 'yes' to any questions and do not contact us, it may be necessary to cancel or postpone your appointment.

Please do not assume that your doctor has informed us of all your past medical history.

For some scans we may need you to change into a hospital gown, but if you come dressed appropriately with no metal on your clothes you may not need to get changed. We also advise that you remove any piercings prior to arriving for your appointment.

We suggest items of clothing such as jogging bottoms or skirts with no zips or metal eyelets, tops with no zips or metal buttons and, for women, sports bras with no metal adjusters, underwires or hooks.

Please note: if you are having a scan of your brain, head, face or eyes (orbits) we advise that you remove any makeup, as many cosmetics contain traces of metal which can affect the pictures.

We advise you not to bring valuables where possible and to leave jewellery at home as you will need to remove all metal items, except wedding rings.

**(Please note the hospital cannot be held responsible for any lost valuables that you have brought with you against our advice.)**

## What happens during the MRI scan?

You will be asked to lie on the scanner bed and remain still for the duration of the scan. For some scans you will lie head first in the scanner and others feet first.

Depending on what your scan is for, different pieces of equipment may be placed on or around the area of your body that we are scanning. These are the aerauls and are required to produce the pictures.

You will be given a contact buzzer. If you experience any problems you can squeeze the buzzer and the radiographer will talk to you.

The MRI makes a loud repetitive knocking sound which changes throughout the scan. This is all normal and you will be provided with headphones to protect your ears from the noise.

Scans typically last between 20 and 60 minutes, depending on what type of scan you are having.

**(Please note that from time to time we have to accommodate emergency scans which can mean that your appointment may be delayed, but we will inform you if this is the case.)**

## What happens after the scan?

Once the scan is finished, you will be able to get changed and go home. If you had an injection for your scan, the cannula will be removed before you leave the scan room. You will not get any results on the day of your examination.

## How do I get my results?

The images will be looked at by a radiologist who is a doctor that specialises in MRI and X-rays. The radiologist will write a report that will be sent to the doctor who requested the scan. If you have an appointment to see your doctor, the results will be discussed with you

then. Otherwise we recommend you wait to hear from the doctor / clinic.

## **What do I do if I still have any questions?**

If you still have questions you can contact the doctor that referred you or telephone the MRI scanning department; details of the contact number are on your letter. Otherwise you can talk to the radiographer when you arrive for your scan.

You can either discuss your referral with your doctor or contact the department using the number on the letter.

There are many patient information leaflets on the Sheffield Teaching Hospital website:

- **[www.sth.nhs.uk/patients/patient-information/find-a-leaflet/search-for-a-leaflet](http://www.sth.nhs.uk/patients/patient-information/find-a-leaflet/search-for-a-leaflet)**



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