

DEPARTMENT OF RADIOLOGY

Magnetic Resonance Imaging (MRI)

The Radiology Department

The Radiology Department carries out radiological examinations of patients using a range of X-ray equipment including CT, MRI and Ultrasound Scanners and a Nuclear Medicine Gamma Camera. There is a multidisciplinary team of Radiologists (doctors who have been specially trained in Radiology), Radiographers, Sonographers, Nurses, Assistant Practitioners, Radiology Department Assistants and Clerical Staff working in the Radiology department.

What is an MRI?

MRI is the name given to a technique which uses a magnetic field and radio waves together with an advanced computer system to build up a series of images. Each image represents a thin slice of the body, by combining these slices the computer can create a cross sectional image of the part of the body under examination. These images are very detailed and can show both bones and soft tissues in the body and therefore give a great deal of information. By means of the computer, the slices can also be obtained in any direction.

Are there any risks?

As far as is known at present, this is an extremely safe procedure. It does not involve the use of X-rays. You are placed in a very powerful magnetic field and if you have any small pieces of metal inside your body, there is a risk that these may move during an MRI scan.

If you have, or think you have, any of the following you **must** contact the MRI department **before** your scan:

- History of metal fragments in your eyes
- Pacemaker or replacement valves of any kind
- Metallic clip on an artery at the base of your brain

It may be necessary to have an ordinary X-ray before your scan to prove there are no pieces of metal inside your body.

Failure to inform us of any metal in your body may cause your scan to be cancelled on the day.

Safety Questionnaire

You will be sent a safety questionnaire with your appointment letter.

This **MUST BE COMPLETED BEFORE YOUR ARRIVAL** in the MRI department.

Jewellery and Body Piercings

Due to the magnetic field, jewellery and body piercings may have to be removed.

Please telephone for advice on what needs to be removed before attending. Patients may wear wedding bands, but are asked to leave all other valuables at home. Failure to remove certain jewellery and piercings may result in the cancellation of your scan.

Tattoos

There is a very slight risk with tattoos that they may heat up and potentially cause a skin burn. You must inform the radiographer of the position of any tattoos before the scan. Tell the radiographer immediately if the area around your tattoo becomes warm during the scan.

Female Patients

If you are or might be pregnant you must make sure the doctor referring you or a member of staff in the MRI Department knows as soon as possible. MRI scans are not advisable in early pregnancy, unless there are special circumstances.

What are the benefits?

The benefits from making a diagnosis and consequently giving you the right treatment outweigh any risk involved. Indeed the risk to your health from not having the examination is likely to be much greater than that from the MRI scan itself.

Are you required to make any special preparations?

Usually you do not need to make any special preparation for an MRI scan. Unless you have been told otherwise, you may eat and drink normally.

Injections

Occasionally we may need to give an injection of a contrast medium via a vein in the arm. This helps us to see anatomy in more detail.

The injection will be explained at the time of your appointment.

Can you bring a relative/friend?

Yes, but everyone who enters the scan room will have to undergo safety checks. They will also have to place metallic objects in a locker.

Please do not bring young children with you.

When you arrive

A radiographer or other member of staff will check your answers to the safety questionnaire. For some scans you will be required to undress and put on a hospital gown. You will be asked to place cash, keys, credit cards, watch, specific jewellery and your clothes in a secure locker.

What happens during the MRI?

In the scan room you will be asked to lie on a couch. The couch will be moved slowly to position the relevant part of your body within the scanner. The staff will return to the control room but you can talk to them via an intercom and they will be watching you whilst the scan is in progress.

During the scan the machine is very noisy so you will be given earplugs and/or earphones. If you feel uncomfortable or worried tell the Radiographer immediately.

Music can sometimes be played whilst you are in the scan room. You may bring your own CD if you wish.

Will it be uncomfortable?

Apart from any machine noise you will not be aware of anything happening. Most patients do not mind lying with their body within the scanner, but some find it claustrophobic. If this makes you feel worried, do tell the Radiographer immediately. However, if you suffer badly from claustrophobia, you should talk to the Radiology Department as soon as possible **before** your appointment.

How long will it take?

The scan usually takes about 20-30 minutes and, unless an emergency patient causes a delay your total time in the department is likely to be about 45 minutes. More complex procedures may take up to an hour.

Aftercare

There are no side effects.
You will be able to eat and drink normally.

When will you get the results?

The Radiologist will study the images and send the results to your referring doctor. You will be able to discuss these results at the next appointment with your doctor.

The MRI staff will not be able to give you any results immediately after the examination.

If you have a query

If you have a query about your MRI scan, please ring 01438 284030 between 9am and 5pm, Monday to Friday.

Feedback

The Radiology Department welcomes feedback on our service and our information leaflets. Alternatively you may wish to contact the Patients Advice & Liaison Service.

Public Transport

Please visit www.intalink.org.uk or phone 0300 123 4050 for details of bus and train routes, timetables and fares.

Health Shuttle

Door to door journeys to Lister can be booked on the Health Shuttle from certain areas. Please phone 01438 726219 for fares and details.

Patient Advice & Liaison Service (PALS)

Tel no: 01438 284779 (Lister)
01707 229045 (QEII & HCH Hospitals)