

Having an MRI scan

What is an MRI?

MRI stands for Magnetic Resonance Imaging. An MRI scan uses a strong magnetic field and radio frequency waves to create detailed anatomical pictures of soft tissues, organs and other structures inside your body.

What happens during the MRI?

- An MRI scanner is a short tunnel that is open at both ends. You will lie on a motorized bed that is moved inside the scanner. You will enter the scanner either head first or feet first, depending on the part of your body being scanned.
- The MRI scanner is operated via a computer, which is located in the control room (next to the scanner) to keep it away from the magnetic field generated by the scanner.
- The radiographer (x-ray professional) operates the computer from the control area, so he or she will also be out of the room while they are controlling the scan. You will be able to talk to them via an intercom system, and they will be able to see you at all times via a window.
- Scan times can be lengthy with MRI but it is extremely important that you keep extremely still or it results in a longer scan time due to images needing to be repeated. If you struggle to lay flat for any period of time, consider taking pain relief to improve your comfort and ability to lie flat. Please note, the MRI department staff cannot prescribe any kind of pain relief.
- As part of your scan you may require an injection (contrast media), the radiographer will always pre-warn you about this.
- MRI scans can be very noisy, consequently headphones and/or earplugs are provided to wear during the scan. These headphones will play music (selected at time of booking in) to pass the time and try to make the experience more tolerable.

Is everyone suitable for MRI?

Importantly, from a safety point of view, not everyone is suitable for an MRI scan due to the use of a strong magnetic field. If you have ever had the following, you should let the department know as soon as possible prior to arriving for your appointment:

- Cardiac pacemaker
- Cochlear implant
- Metal fragments in your eyes
- Artificial heart valves
- Aneurysm clips
- Claustrophobia
- Any operations in the last 6 weeks
- Any electrical implants

For females of child-bearing age it is also important to tell the department if you are (or think you may be) pregnant. Also if you are currently breastfeeding you must tell the department, as this may impact on certain scans that require an injection of a contrast media.

On arrival

Certain scans require you to starve prior to the appointment, please always read your appointment letter carefully prior to attending.

Please arrive 10 minutes before the time of your appointment (unless otherwise stated).

Once a receptionist has checked you in, you will be required to complete a safety questionnaire. A radiographer (X-ray professional) or healthcare assistant will then greet you in the waiting area to bring you round for final preparations prior to scan.

A relative or friend can usually accompany you; however, no childcare facilities are available.

An MRI examination can take between 15 minutes and 1 hour to perform, so please allow for this within your day.

Clothes and belongings

Because of the magnetic field, we have to be careful that metallic objects do not get too close to the scanner. For this reason we may ask you to change into a gown or set of theatre scrubs. If you prefer your own clothes, a tracksuit without a zip or metal poppers or similar clothing may sometimes be worn, or you may bring pyjamas and dressing gown. A changing cubicle is provided. We ask you not to wear excessive amounts of hair spray, hair gel or eye makeup as they can interfere with some scans. Due to the metallic pigment used in some cosmetics you may be asked to remove all make-up prior to the scan.

You will be asked to remove any metal, magnetic or electrical objects such as spectacles, watches, coins, keys, hair grips, credit cards, phones and some jewellery. While a locker can be provided, we do not accept any responsibility for their loss. It is better, where possible, to leave these items at home.

Claustrophobia

This is an important issue with MRI. The scanner is cylindrical in design with an open ended tunnel in the middle and requires the body part that is being scanned to be in the middle of this tunnel. This can feel very enclosed for certain patients. There are different

approaches the department can try to help claustrophobic patients. Eye patches can be used to cover the eyes or a mirror can be placed for certain scan procedures to give the impression you are looking out of the scanner.

Sedation

Sedation is another tactic that can be used for anxious / claustrophobic patients. Please note, the MRI department cannot provide sedation for you during the MRI scan. If you feel anxious or worried about the examination, please contact us to discuss your worries or maybe pay us a visit where we will be happy to show you the scanner and go through the details of your scan. If you feel that you need something to help you relax during the examination, your GP may be able to prescribe this for you. You must be accompanied by a friend or relative if you have been prescribed sedation for your scan and you must not drive yourself home.

Are there any risks with this test?

This test uses a magnetic field as opposed to ionising radiation (x-rays). Any patient-specific issues, such as claustrophobia or those listed in the “Is everyone suitable for MRI?” section of this document should be highlighted and discussed by the doctor who requests an MRI scan for you. Safety questionnaires are checked just prior to entering the room to ensure no one enters the room where it’s not safe for them to do so.

After the MRI

As there are no side effects, no recovery period is required after the scan (unless otherwise instructed by appointment letter/staff). The images are sent across on the computer network to be reported on via a consultant radiologist. The images/report will be accessible by the hospital doctor/GP who requested the scan.

Further information

www.nhs.uk/conditions/mri-scan/

More information is available on the Trust website: www.royalberkshire.nhs.uk

This document can be made available in other languages and formats upon request.

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