

Information for patient having an MRI scan

What is MRI?

MRI (Magnetic Resonance Imaging) is the name given to an imaging technique which acquires cross-section images of the internal organs of the part of the body under investigation. The scanner contains a bore about 1.5m long, which the patient lying on the scanner table will enter.

MRI uses a magnetic field and radio waves, together with an advanced computer system to build up a series of images, each one showing a thin slice of the area being examined.

These images are very detailed and can show both bones and soft tissues in the body and can therefore provide a great deal of information for the clinicians. By means of the computer, the images can be obtained in any direction.

Detailed MRI images allow clinicians to better evaluate parts of the body and certain diseases that may not be assessed adequately with other imaging method such as x-ray, ultrasound or computed tomography (also called CT or CAT scanning).

Are there any risks?

Based on current medical literature and results so far, this is an extremely safe procedure. It does not involve the use of x-rays. You are placed in a very high magnetic field, consequently, if you have any small pieces of metal inside your body, you should inform the radiographer as in some cases you may not be able to undergo an MRI examination.

If you have a history of metal fragments getting into your eyes, it is necessary to have an ordinary x-ray done of your orbits to prove that there are no metal bits left. If you have a pacemaker, metal heart valves or metallic clip on an artery within your brain, then there is a risk that these may move during an MRI scan, consequently, a different examination will need to be arranged instead. However, any shrapnel or metal sutures, such as stitches, that have been in place for a long time should not create a problem.

For female patients, if you are pregnant or may be pregnant, you must make sure that the doctor referring you or a member of staff in the radiology department knows as soon as possible in advance. MRI scanning may be not be advisable in early pregnancy, only under special circumstances.

Upon collection

You will be shown to a private cubicle where you may be asked to take off your outer garments and remove jewellery, cash, keys, phones, credit cards, watches, hearing aid etc. This is because anything that contains metal may interfere with the magnetic field of the MRI unit. Metal or electronic objects are not allowed into the examination room.

You will be cared for by a small team including the radiographer who will perform the examination. The radiologist may look at the images directly on the computer screen during the examination, or may simply look at the final images later, before writing your report.

What happens during the MRI?

You will be taken into the special scanning room and made comfortable lying on the table. Straps and pillows may be used to help you stay still and maintain your position during imaging. You may be given a contrast medium (a dye) which helps to produce a more detailed image. The contrast medium would be injected into a vein in your arm. The table will be moved slowly to position the part of your body under investigation within the bore of the magnet. The radiographers will stay in the console room, but you will be able to talk to them via an intercom; you will have an alarm buzzer in your hand and the radiographers will be watching you all the time. It is important that you remain completely still while the images are being acquired. During the scan you may find the scanner to be very noisy. If you feel uncomfortable or worried, do mention it immediately to the radiographer.

How long will the examination take?

The process of acquiring the images (examination time) usually takes about 20-30 minutes. If you receive iv. contrast medium, we may ask you to remain within the unit for 15 minutes for observation purposes.

Are there any side effects?

No. You can drive home afterwards and return to work as necessary.

Can you eat and drink afterwards?

Yes, do so normally.

When will you get the results?

After the scan the images will be further analyzed by the radiologist, who will prepare a final report on the findings. The final report may take some time to reach your referring doctor, but it is normally less than 2 weeks time. Please ask the radiographer or radiologist for indication of reporting time.