



Information for patients having an MRI scan

What is an MRI

MRI (magnetic resonance imaging) is the name given to a technique which builds up cross-section pictures of the internal organs of the part of the body under investigation. The scanner contains a 'tunnel', about 1.5m long, through which a patient lying on the attached table can pass.

It 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 'slices' can be obtained in any direction.

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

Are there any risks?

As far as is known at the 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, 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 MR examination.

If you have had a history of metal fragments in your eyes, it is necessary to have an ordinary x-ray done to prove there are no metal bits left. If you have a pacemaker, metal heart valves or metallic clip on an artery at the base of your brain, then there is a risk that these may move during an MR 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 the doctor referring you or a member of staff in the radiology department knows as soon as possible in advance. MR scans may 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 (except your wedding ring), cash, keys, credit cards and watches etc. This is



because anything containing metal may interfere with the magnetic field of the MRI unit. Metal and electronic objects are not allowed into the examination room.

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

What happens during the MRI?

You will be taken into the special 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, which occasionally causes a warm feeling for a short while. The table will be moved slowly to position the part of your body under investigation within the 'tunnel'. The radiographers will stay in the control room but you will be able to talk to them via an intercom, and they will be watching you all the time. It is important that you remain completely still while the images are being recorded. During the scan, you may find the machine very noisy; you may be provided with ear plugs if required. If you feel uncomfortable or worried, do mention it immediately to the radiographer.

How long will it take?

The process of taking 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 examined further by the radiologist, who will prepare a report on their findings. This may take some time to reach your referring doctor, but is normally less than 3 days. Please ask the radiographer or radiologist for indication of reporting time.