

PATIENT INFORMATION - MRI

WHAT IS MAGNETIC RESONANCE IMAGING (MRI)?

Magnetic Resonance Imaging (MRI) is a diagnostic imaging technique which enables us to visualise internal structures within the body with high quality images.

The human body is predominately made of water molecules which contain hydrogen protons. When you are placed in a strong magnetic field the tiny magnetic fields of the hydrogen protons, which normally move around randomly, are aligned to the magnetic field. A brief radio pulse is rapidly switched on and off. This makes the protons' magnetic fields spin round in unison and emit a weak radio signal.

By altering the timing of the radio wave applications it is possible to produce images which show up the various body tissues as shades of grey. This contrast depends upon whether the hydrogen protons are linked to fat, muscle, water, etc.

During the scan, the main magnetic field strength is altered using electromagnetic coils. This causes a wide range of sounds during the scan including banging, buzzing and rumbling noises.

WHO WILL I SEE?

You will be cared for by a small team, including a Radiographer, who is highly trained to carry out MRI scans and is a registered clinician with the Health and Care Professionals Council (HCPC). You may also have contact with a Radiologist who is responsible for writing your report. A Radiologist is a doctor specially trained to interpret MRI images.

ARE THERE ANY RISKS?

There are no known side effects from MRI scanning.

MRI scans should not be undertaken on female patients who are within the first trimester of pregnancy.

Unlike traditional X-rays and CT Scans, MRI does not require the use of ionising radiation. MRI scans can therefore be performed repeatedly without adverse effect.

MRI must NOT be performed on people with certain metal implants in their bodies such as pacemakers, cochlear implants, some surgical clips and some artificial heart valves. You will be provided with an MRI safety questionnaire to complete prior to your examination. If you answer yes to any of the questions you should contact the diagnostic centre as soon as possible to discuss whether the examination should continue. The Centre staff will also be able to answer any other questions you might have about your examination.

If you have ever had metal fragments in your eyes due to a penetrating injury, you may require an X-ray of your eyes to ensure there are no fragments still remaining. Patients with body tattoos may experience an increased sensation of heat over the area of the tattoo during their MRI scan. This sensation is sometimes experienced due to the metallic content of the tattoo ink that is commonly used. Please let the Radiographer know if you experience any discomfort from your tattoo during the MRI scan.

Some facilities are able to play music through a headset during your scan, if you wish to bring a CD with you, we will do our best to accommodate your request.

The banging noise the scanner makes is loud and we will supply you with earplugs or headphones.

The scanner has a patient weight limit. Please contact us if you weigh over 137kg (22st).

AM I REQUIRED TO MAKE ANY SPECIAL PREPARATIONS?

You may eat, drink and continue to take any medications prior to your MRI scan. However, if you are having a scan of your abdomen you may be asked to fast for four hours before your scan.

Please come dressed in loose fitting clothes with no zips or metal buttons.

If you suffer from Claustrophobia, please notify a member of staff prior to your examination. The staff are used to dealing with claustrophobic patients and will endeavour to assist you in overcoming this.

CAN I BRING A RELATIVE/FRIEND?

Yes, you may be accompanied if you suffer from claustrophobia or are anxious. Please note they will need to complete the same medical and health and safety questions as you. Although we will try and support your request to be accompanied, it may however, not always be possible for a family member/ friend to accompany you in certain facilities.

WHEN YOU ARRIVE

Please go to the reception desk in the Centre. You will be shown where to wait until collected by a Radiographer or other member of staff.

Within the Centre, the toilets are clearly signposted should you need to use them at any time.

UPON COLLECTION

You might also be asked to fill in a questionnaire about your health and medical history, if you have not already done so. The Radiographer will go through the safety questionnaire with you to ensure that you are safe to enter the magnetic field and proceed with your MRI examination. You will also be asked to sign a consent form.

You will be shown to a private cubicle where you may be asked to take off your outer garments and remove jewellery, including all body piercings, cash, keys, credit cards, watches, etc. You may be asked to put on an examination gown or you may wish to bring your own dressing gown. You should place your clothes and personal belongings either in a basket which you will keep with you or in a secure locker if provided by the centre.

WHAT HAPPENS DURING THE MRI?

You will be taken into the scan room and made comfortable lying on the couch. Some MRI scans may require the injection of a contrast medium into a vein in the arm; if this is required, the Radiographer will discuss this with you before the scan commences. The team will complete your scan from the control room but you will be able to talk to them via an intercom. They will be watching you throughout the scan. Upon completion, you will be escorted back to your cubicle to change, then you are free to go.

HOW LONG WILL IT TAKE?

The process of taking the images takes about 15 to 30 minutes per body part and your total time in the centre is related to this.

ARE THERE ANY SIDE EFFECTS?

No. You can drive home afterwards and return to work straight away.

CAN I EAT AND DRINK AFTERWARDS?

Yes, do so normally. Patients who receive a contrast injection are recommended to drink extra fluids before and after the examination to avoid dehydration.

WHEN WILL I GET THE RESULTS?

After the scan, the images will be examined further by the Radiologist, who will prepare a report of the findings. This may take some time to reach your referring doctor, but is normally within two days, however allow at least 7 – 10 days before you contact your doctor to allow them time to review the report. The results for some specialist scans may take longer at some centres.

IF I HAVE A QUERY

If you have a query about having the MRI scan, please call the centre during normal business hours.

CAN I LEAVE FEEDBACK ON MY EXPERIENCE?

Yes, please complete a patient experience survey when you have finished your examination.

APPOINTMENT REMINDER MESSAGE

A large number of appointments are wasted every year, where patients either forget the date and time of their visit or simply do not inform the centre that they are unable to attend as originally expected. If you or your referring clinician have supplied InHealth with a mobile telephone number, we will send you an SMS reminder message 24 hours before your scheduled appointment. This message will remind you about your appointment and will ask you to contact the centre if you are not expecting to attend as originally planned.

Please notify your InHealth diagnostic centre if you wish to opt out of receiving this reminder message.

www.greater-manchester-cats.nhs.uk