

MRI Scanning

Information for patients, relatives and carers

For more information, please contact:

MRI Unit York Hospital

Wigginton Road, York, YO31 8HE

Telephone: 01904 721017

or

MRI Department Scarborough Hospital Woodlands Drive, Scarborough, YO12 6QL

Telephone: 01723 342044

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Please read the whole of this leaflet. It contains important information about your scan.

What is MRI?

MRI stands for Magnetic Resonance Imaging. MRI is a scanning method that uses powerful magnets and radio waves to build up a detailed picture of your body.

What are the benefits of an MRI scan?

MRI gives accurate information about a wide range of medical problems. This gives your doctor important information required for deciding on any treatment you may need.

Is it safe?

Unlike X-rays and CT scans, MRI scanning does not use radiation. Therefore, someone can have repeated MRI scans without any problems.

During an MRI scan energy is generated which can cause the tissues of your body to heat up. The heating effects on tissues are reduced by both the scanner's operating system and the use of protective equipment during your scan. Your normal body processes automatically move heat around your body in order to maintain your normal core body temperature.

On very rare occasions heat can build up in the tissues and burns can occur. Protocols and procedures are in place to minimise this risk.

Important Safety Information

It may not be possible to have an MRI scan if you have:

- A heart pacemaker or implanted cardioverter defibrillator
- 2) An aneurysm for which you have surgical clips within your head
- 3) A cochlear (inner ear) implant
- 4) Metal fragments within your eyes or your head
- 5) Neuro electrical stimulators
- 6) Any other implanted electronic device.

If you have any of the above, please contact us as soon as possible.

Please also contact the MRI Unit/Department if:

- 1) You know or think you are pregnant
- 2) You have ever had an incident when metal fragments have entered your eyes or head
- 3) You work or have ever worked with metal at high speed for example a metal grinder, as it may be hazardous to scan you
- 4) You currently weigh more than 22 stone (140 kilograms)
- 5) You use a hoist to transfer
- 6) You have had or are awaiting a liver transplant; also if you are under the care of a kidney doctor or have had a kidney transplant.
- 7) If you are unable to independently answer the safety questionnaire.

Please note you can still have your MRI scan if you have fillings.

Before your scan

We cannot do your scan if you have silver dressings on the part of your body we are scanning. You must get these replaced with non-silver dressings prior to coming for your appointment.

Please **do not wear eye make-up** if you are attending for a head scan.

Please remove all earrings, body piercings, dermal piercings, magnetic eyelashes and hair extensions containing metal before attending your scan.
You can keep your wedding ring on, but you must remove all other jewellery. If you do not or cannot remove your jewellery or piercings, we may not be able to scan you.

Please remove **all** medicated skin patches (including pain relief, nicotine, HRT and glucose monitoring) before your MRI scan. You should bring new patches to replace them afterwards.

If you use an insulin pump and/or a continuous glucose monitoring device (e.g. Freestyle Libra or Dexcom), immediately prior to your MRI this will need to be removed. You should bring a replacement to re-apply after the scan.

About your appointment

We need to undertake safety checks prior to your scan. Further details are contained in your appointment letter, please read the appointment letter carefully. It is important that you arrive in good time, as late arrivals may not be scanned.

We will ask you to remove anything metal or magnetic before your scan. This includes money, keys, mobile phones, watches, hearing aids, jewellery, hairclips and bankcards. You must also remove all dentures/removable dental plates containing metal/magnetic parts before entering the scan room.

Do I need to get changed?

We ask that you try to wear clothing without metal fastenings (such as zips, straps and buttons) although we may need to ask you to change into a gown and trousers for your scan.

Please do not wear sports clothing or underwear with silver/anti sweat technology as this contains metallic fibres that can cause heating and may result in a burn.

Your personal belongings will be locked up safely, but please bring as few with you as possible.

What will the scan involve?

An MRI scan is a painless procedure, but you do need to keep very still and lie quite flat. The scanner makes a loud banging noise whilst it is in operation. We will give you headphones and earplugs that you must wear during the procedure. Sponge padding may be placed around your body to give you protection from heat which can be generated by the MRI scanner.

The MRI scanner may look intimidating but there is no need to be nervous. The scanner is open at both ends and it remains open, so you are never totally enclosed. Most scans involve lying on your back, and being moved into the scanner so that the part of your body to be scanned will be in the centre of the scanner. Some scans require you to be positioned head first and others feet first. During the scan you may feel tingling in your hands and feet and an increase in body temperature. These are normal sensations.

If you suffer from claustrophobia and feel you may not manage the scan, please contact the MRI department.

How long will my scan take?

It usually takes about 30 minutes to scan one part of your body. It will take longer to scan more than one part. The length of your scan also varies depending upon the problem that your doctor is trying to find out more about. It is important to remember that just because your scan takes a little longer it does not necessarily mean that there is something wrong.

Will I need an injection?

You may need to have an injection of a gadoliniumbased contrast agent, used in MRI to aid diagnosis. The contrast agent circulates in your blood stream and makes the vessels and organs easier to see. The injection is usually given into a vein in your elbow, the same place as a blood test.

If you are breast-feeding it is not necessary to suspend breast feeding after injection of MRI contrast as only a tiny amount of the injection can be absorbed by the baby. If you prefer to suspend breast feeding there is no need to do this for more than 24 hours.

Are there any side effects?

Like all medicines, the contrast agent can cause side effects. In a small number of cases (less than one in one thousand) patients may experience a hypersensitivity or allergic reaction to the contrast agent.

Potential side effects following the administration of the gadolinium-based contrast agent, (which are very rare) include mild headache, nausea, dizziness, numbness and tingling. On rare occasions, (one in ten thousand patients) more serious reactions can occur which may lead to vomiting, hives, skin rash and breathing difficulties.

Gadolinium based MRI contrast agents, when used in patients with acute renal failure, have been associated with a rare disease called nephrogenic systemic fibrosis. This has been associated with the use of at least four different gadolinium-containing agents, which are **not** used in MRI at York and Scarborough Teaching Hospitals NHS Foundation Trust.

Gynaecological pelvis and all abdominal scans

We may need to give you an injection of a muscle relaxant called Buscopan. This reduces spasm and movement from the abdominal contents and improves the MRI images. It can cause a dry mouth, blurred vision or a fast heart rate.

This happens rarely, but if you develop painful red eyes with loss of vision or haloes around lights within 24 hours of the injection you must seek urgent medical attention.

Allergic reactions are very rare.

If you experience any visual disturbance after your scan, you must not drive or operate machinery until your vision returns to normal.

Can I eat and drink normally?

Please check your appointment letter for any specific instructions, otherwise you may eat and drink normally and **continue to take** any medication before and after your scan.

What can I expect after the scan?

There are no aftereffects from the scan. Therefore, you can return to your normal activities as soon as the scan is over.

A radiologist (a specialist doctor) or a specially trained radiographer will look at your scan pictures and write a report. We will send the report to the doctor who requested your scan.

Please do not ask the radiographer for the results, as they will not be able to give you them.

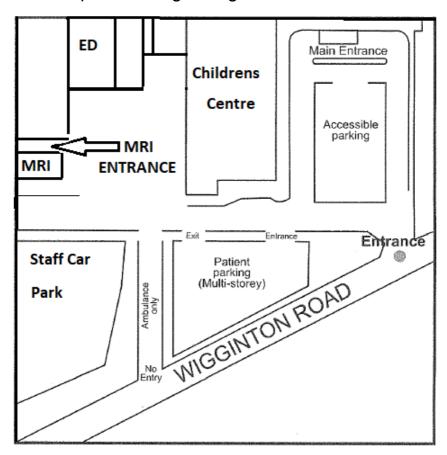
Who do I contact if I have any further questions?

If you have any problems or queries, please phone 01904 721017 (York MRI) or 01723 342044 (Scarborough MRI) and ask to speak to the MRI appointments clerk. If they cannot help you, they will find someone who can.

How to find the MRI Unit - York

The York MRI Unit is located at the front of the Hospital to the left-hand side of the Emergency Department (ED).

You should allow plenty of time to find a parking space as this can sometimes take a while. The car park is pay on exit so please bring change for the ticket machine.



If the hospital car park is full there is a public car park in Union Terrace, which is just on the city centre side of the hospital and within walking distance.

How to find the MRI Department - Scarborough

The Scarborough MRI Department is located on the ground floor within the Radiology department which is signed from the main hospital entrance on Woodlands Drive.

You should allow plenty of time to find a parking space as this can sometimes take a while and parking charges are in operation.

Tell us what you think of this leaflet

We hope that you found this leaflet helpful. If you would like to tell us what you think, please contact:

Julie Caddick, MRI Principal Radiographer, York Hospital, Wigginton Road, York, YO31 8HE or telephone 01904 721017.

Jane Cullingworth, MRI Principal Radiographer, Scarborough Hospital, Woodlands Drive, Scarborough YO12 6QL or telephone 01723 342044.

Teaching, training and research

Our Trust is committed to teaching, training and research to support the development of health and healthcare in our community. Healthcare students may observe consultations for this purpose. You can opt out if you do not want students to observe. We may also ask you if you would like to be involved in our research.

Patient Advice and Liaison Service (PALS)

PALS offers impartial advice and assistance to patients, their relatives, friends and carers. We can listen to feedback (positive or negative), answer questions and help resolve any concerns about Trust services.

PALS can be contacted on 01904 726262, or email yhs-tr.patientexperienceteam@nhs.net. An answer phone is available out of hours.

Leaflets in alternative languages or formats

If you would like this information in a different format, including braille or easy read, or translated into a different language, please speak to a member of staff in the ward or department providing your care.

Patient Information Leaflets can be accessed via the Trust's Patient Information Leaflet website: www.yorkhospitals.nhs.uk/your-visit/patient-information-leaflets/

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