

Patient Information

Radiology

MRI - Adult under general anaesthesia

Your doctor has advised that you have an MRI scan. In your case, this scan will be performed under a general anaesthetic (where you are asleep during the MRI scan and unaware of the scan occurring). This leaflet will explain what the examination involves.

Please use the contact information on your appointment letter if you have any queries or concerns. If you feel unhappy with your care, please ask to speak to the superintendent radiographer.

Please read this leaflet carefully. It will help you prepare correctly for the examination.

- Please contact the X-ray Department if your weight is 133 Kg (21 stone) or more. You may need a different type of examination.
- If you are over the age of 65 years and you need a contrast-enhanced scan, you will need to have had a blood test within 3 months of your MRI examination. This is to check your e-GFR before administering any contrast media.
- You must not bring children with you for your MRI scan appointment.

If you do not have a recent kidney function (eGFR) blood test

- If you have been referred by your GP, please ask your GP for an e-GFR blood request form.



Patient Information

- If you have been referred by a hospital doctor, nurse or other healthcare professional, then please contact the department you were referred from and ask for an e-GFR blood request form.
- You need to bring your blood test result to your appointment if you had your test within the last 3 months at a GP practice outside of the Coventry area.

If your blood test results are not available when you arrive for your appointment, it is unlikely that you will have your MRI scan.

Your appointment will need to be rearranged for after you have your blood test results.

Having a blood test

There are more than 30 blood test clinic locations in and around Coventry. You can book in advance at most clinics.

Visit www.uhcw.nhs.uk/bloodtests to find the clinic most convenient for you and to book an appointment.

Our main blood test clinics are based at:

- **City of Coventry Health Centre**, Stoney Stanton Road, Coventry CV1 4FS
- **University Hospitals Coventry and Warwickshire**, Clifford Bridge Road, Coventry CV2 2DX
- **Hospital of St Cross**, Barby, Rd Rugby, CV22 5PX
- **George Eliot Hospital**, College Street, Nuneaton, CV10 7DJ
- **Warwick Hospital**, Lakin Rd, CV34 5BW
- **Stratford Hospital**, Arden Street, Stratford Upon Avon, CV37 6NX

Points to remember

- Please bring any medications, sprays, or inhalers that you are taking with you.

Patient Information

- If you are on medication from your doctor, please continue to take them as normal.
- Please leave any valuable possessions at home.
- You will receive a separate letter informing you of where to arrive on the day of your scan.
- We may not be able to scan you if you arrive late. We will rearrange your appointment for another time if this happens.
- **You will need someone to drive you home after the examination. An adult must stay with you for 24 hours after your general anaesthetic.**
- **If your scan is performed under general anaesthesia, you must not operate heavy machinery, sign any legal documents, drink alcohol, drive, or return to work for 24 hours afterward.**
- We will not perform your scan if we cannot confirm MRI compatibility of any device which is within or attached to your body. A new appointment will be made once the correct information is made available to the department.

What is an MRI?

An **MRI** is a test which uses a powerful magnet and a computer to produce detailed images of the body. It does not use X-rays. An MRI is performed by a radiographer.

Preparation for your MRI scan

- On the day of your scan, you can have a light breakfast before 6am.
- After this, you can drink **water only** up until 10am.
- You must not chew gum or suck sweets after 6am on the morning of your scan.
- It is important that you follow these instructions otherwise, it will not be safe to perform your scan under general anaesthesia.
- Please also **refrain from smoking** on the day of the MRI scan.
- Attend your examination in clothing that does not contain metal fastenings, zips, or decorations. If this is not possible, our hospital team will provide a hospital gown.
- Complete the safety questionnaire that has been sent to you. Bring it with you to your appointment.

Risks of the procedure

No short-term harmful effects from MRI scans are known. The use of magnetic fields is not thought to be harmful, although long-term side effects are unknown.

Risks of the anaesthetic

General anaesthesia is generally very safe, but a small proportion of patients experience side effects. Your anaesthetist is trained to make sure that you remain as safe as possible and that these risks are reduced.

If the risk to you from having a general anaesthetic was high, we would have not offered you this option.

On the day of your scan, you will see an anaesthetist who will discuss the risks related with the general anaesthetic and answer any questions you may have.

You will be required to sign a consent form stating that you accept these risks and wish to proceed.

- It is common to experience mild discomfort during the injection of any medication.
- You may wake up with a sore throat or feel sick (nausea/ vomiting).
- Some patients experience a headache, itching, blurred vision, and dizziness.
- You may feel sleepy for the remainder of the day.
- Confusion can also happen after the anaesthetic.
- You may have general aches and pains from lying still during your scan.
- As you go to sleep or wake up, there is a small risk of injury to your lips, tongue, and teeth.
- There is also a small risk of damage to the cornea of your eye.
- Serious side effects are very rare but include developing a chest infection, worsening of an existing medical condition, heart attack or stroke, serious allergic reaction to medication (including any contrast media required for the MRI scan), equipment failure causing harm and awareness (becoming conscious during part of your procedure).

What is gadolinium contrast (dye)?

Gadolinium contrast is sometimes called “MRI contrast media” or “dye.” When injected into the body, gadolinium contrast helps improve the quality of the MRI scan pictures.

Gadolinium contrast is injected into a vein (intravenously) before your MRI scan and removed from the body through the kidneys.

Before the MRI scan, you will be asked about conditions that might mean a gadolinium injection would not be recommended, such as pregnancy, previous allergic reaction, and severe kidney disease. If you have any of these conditions, then you will more than likely not be given gadolinium.

Why do I need to have gadolinium contrast?

Gadolinium contrast is used to improve the clarity of the pictures of your body’s internal structures. This improves the diagnostic accuracy of the MRI scan. For example, it improves the visibility of inflammation, tumours, blood vessels and, for some organs, blood supply.

Contrast risks:

Pregnancy, possible pregnancy and breastfeeding

Please inform your doctor or radiologist before having an MRI scan if you are pregnant or think you might be pregnant. This is so that your doctor can discuss with you the risks and benefits of having an MRI scan and a possible gadolinium injection, for you and your unborn baby.

Where relevant, you will be asked about the possibility of pregnancy as part of the safety checks before any MRI scan. If you are pregnant or possibly pregnant, it is unlikely that you will have a gadolinium injection unless it is essential. Your doctor will discuss this with you before the injection if gadolinium contrast is recommended.

If you are breast-feeding, it is safe to continue breast-feeding after the gadolinium contrast is given. It is not thought to represent any danger to your child as the amount received by your baby is small.

Side effects from the gadolinium contrast

Gadolinium contrast is very safe. Side effects or reactions are uncommon but can happen. The most common side effects are headache, feeling sick (nausea) and dizziness. These occur in a small number of patients only, but if they do, they will be noticed within minutes of the injection.

An itchy skin rash might appear a few minutes after a gadolinium contrast injection in around 1 in 1000 patients. The rash will usually resolve by itself.

Severe allergic (anaphylactic) reactions to gadolinium contrast are extremely rare. These severe reactions can involve difficulty breathing and swelling of the lips and mouth. They occur in around 1 in every 10,000 people who have gadolinium contrast injection.

If you have had a history of a previous allergic reaction to a gadolinium contrast injection, or a severe allergic reaction to another material, please tell your doctor and the radiology team. This will affect whether a further gadolinium injection is recommended. If you experience any symptoms of allergic reaction during your appointment, you will be checked by a doctor before being sent home.

Nephrogenic systemic fibrosis (NSF) is a rare condition associated with gadolinium contrast when given to patients with severe kidney (renal) disease. Its onset can occur days, weeks, or months after receiving gadolinium contrast. Most cases occur within 6 months of the last dose. Since Radiology facilities began routinely screening patients for kidney disease, and withholding gadolinium from those with severe renal disease, NSF has become extremely uncommon.

If you do have a history of kidney disease, please be sure to tell the staff at the MRI practice, so that they can check whether the disease is severe enough to mean that you should not receive gadolinium. This might involve a simple blood test of kidney function (eGFR).

A very small amount of gadolinium contrast stays in your body. About 1% of the injected dose which stays in the tissues, mostly in the bones with very small amounts in the brain. This seems to be more likely with certain

Patient Information

forms of gadolinium contrast that have a higher risk for NSF. There are no known adverse effects from these very small amounts of retained gadolinium. This finding has made radiologists more careful and selective in recommending gadolinium contrast, only when it is likely to assist the diagnosis.

Safety

It may not be possible for some patients to have this examination due to the strong magnetic field produced by the MRI scanner. Patients who have a pacemaker, ear implants, surgical clips or any implants within their head or body should contact the MRI department using the phone number on your appointment letter.

If you have had an accident involving metal fragments penetrating your eyes, you should contact the MRI department using the phone number on your appointment letter. You will need to have an X-ray of your head to confirm there are no metal fragments remaining. This must be arranged before your MRI scan.

Patients aged 12 to 55 years: Although the risk to an unborn child from the MRI scan itself is minimal, there are risks associated with having a general anaesthetic if you are pregnant. You will be asked to confirm that you are not pregnant before the examination can proceed.

If you are pregnant, there are circumstances where the benefits of a scan outweigh the risks. You will decide this with your referring doctor.

What will happen when you arrive?

- You will be asked to arrive onto a ward, **not directly to the MRI department**, and exactly where and when to arrive will be explained to you in **another letter**.
- On the ward, a nurse and a doctor will ask you questions and complete some admission paperwork. You will also be seen by the anaesthetic doctor who will look after you during your scan to answer any questions about the anaesthetic.

Patient Information

- The scan may happen at any point during the afternoon. There is likely to be a period of waiting in the ward area. Please feel free to bring a book or magazine to entertain yourself while you wait.
- A porter will come to collect you from the ward when it is time for your scan. You will be taken to the waiting area in the MRI department.
- Please try to leave all of your valuables at home. You cannot take valuables into the scan room with you. Any credit cards, valuables and metal objects that are in your possession must remain on the ward.
- You will be asked to remove any spectacles, contact lenses, hearing aids and dentures before the examination.
- We will check your safety questionnaire with you.

During your examination

- You will have a tube (cannula) inserted into one of your veins which will allow the administration of anaesthetic medication and/or contrast media during the MRI scan.
- You will then be given anaesthetic medication through this cannula.
- While you are asleep, the anaesthetic doctor will remain with you to make sure that you remain asleep, safe, and comfortable for the duration of your scan.
- We will continually monitor your blood pressure, oxygen levels, your heart rate and heart rhythm before, during and after the anaesthetic.
- While you are under general anaesthesia, you will be transferred into the MRI scanner for the scan and then moved to a recovery area where a nurse will care for you until you are awake enough to return to the ward.

After your examination

- You will return to the ward, and you will be discharged home once it is safe to do so.
- You will stay with us a couple of hours after you initially wake from your anaesthetic.
- There is a small possibility that you may need to stay in hospital overnight if you feel nauseated or remain drowsy. Please make sure you have prepared for this should it happen.
- If you have any problems after the examination, please contact your GP.

Patient Information

Your results

The results will not be given to you immediately. They will be sent to the doctor who referred you to us for this examination once a formal report has been generated.

More information

If you have any questions or would like further information, please contact the MRI department using the contact details on your appointment letter.

The Trust has access to interpreting and translation services. If you need this information in another language or format, please contact the telephone number on your appointment letter and we will do our best to meet your needs.

The Trust operates a smoke free policy.

Did we get it right?

We would like you to tell us what you think about our services. This helps us to make further improvements and to recognise members of staff who provide a good service.

Have your say. Scan the QR code or visit:

www.uhcw.nhs.uk/feedback



Document History	
Department:	Radiology
Contact:	27122
Updated:	May 2024
Review:	May 2026
Version:	2
Reference:	HIC/LFT/2615/21