

# Having an MRI Scan

**This leaflet explains more about having an MRI Scan, including the benefits, risks and any alternatives. It also provides information on what you can expect when you come to hospital. If you have any further questions, please speak to the health care professional/s caring for you.**

## **What is an MRI Scan?**

MRI stands for magnetic resonance imaging. An MRI scan uses a combination of a strong magnet and radio frequency waves to produce detailed pictures of the inside of your body.

## **Why should I have an MRI Scan?**

An MRI scan can help to find out what is causing your problem and help your doctor to find the best treatment for you. An MRI scan provides much more detailed pictures of your body than an ordinary X-ray. It is particularly good at identifying problems in the spine, the brain and in the joints. It is also helpful for looking at other parts of the body, often when other types of scan have not given a full picture. Unlike X-rays and CT (computerised tomography) scans, MRI scans do not use ionising radiation.

## **What are the risks?**

MRI is a very safe procedure for most patients. However due to the very powerful magnetic field, patients with heart pacemakers and certain other surgical implants, for example a cochlear implant, cannot be scanned.

You will therefore be asked to complete and sign a safety questionnaire before your scan to make sure it is safe for you to be scanned.

## **Can I have an MRI scan if I am pregnant?**

National safety guidelines recommend that we do not perform this type of scan on those who are pregnant unless the scan is clinically urgent. During your pregnancy the doctor who refers you for the scan, along with the radiologist (doctor who uses X-rays and scans to diagnose and treat illnesses) will decide whether they believe your scan is necessary. Many pregnant patients have had MRI scans worldwide, with no reported problems. If you have been referred for an MRI scan when you are pregnant and would like further information, please do not hesitate to contact us.

## Are there any alternatives?

If you cannot have a scan, for example if you have a pacemaker, the radiologist may suggest an alternative type of imaging. This could be a CT scan or an ultrasound scan.

## How can I prepare for an MRI scan?

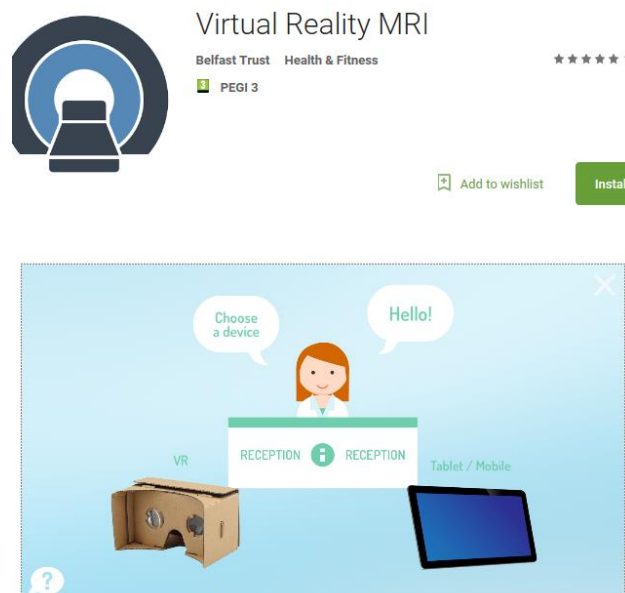
- If any preparation is required, this information will be provided at the time of booking your appointment or in your appointment letter. This may include a brief period of fasting. Any medication you are taking can still be taken with water prior to your scan.
- Please read carefully the Patient Safety Questionnaire and notify the MRI Department if you have answered 'YES' to any of the questions. Failure to do this may mean we are unable to carry out your scan on the appointed date.
- Wear metal free clothes where possible.
- Please do not wear make-up, hair gel or lacquer, as these may produce artefacts on your images.
- You may wish to bring a CD, mobile phone or similar type of device so that you can listen to something during the scan.
- Children may bring a DVD to watch during their scan.

## Additional resources to prepare for my MRI scan:

A Virtual reality App is now available for free on the Apple and Android App stores. This App is very useful for children attending for an MRI and also for anxious or claustrophobic patients. Search for virtual reality MRI or use the following links:

Apple - <https://appsto.re/gb/LvwsIb.i>

Android - [https://play.google.com/store/apps/details?id=net.belfasttrust.vrmri&hl=en\\_GB](https://play.google.com/store/apps/details?id=net.belfasttrust.vrmri&hl=en_GB)



## **Giving my consent (permission)**

We want to involve you in decisions about your care and treatment.

The radiographer (member of the radiology team trained to carry out scans) will ask you if you are happy for the scan to go ahead. This is called verbal consent and may only involve the radiographer checking you are booked for the correct scan. If you do not wish to have the scan or are undecided, please tell the radiographer. It is your decision and you can change your mind at any time. Please bear in mind that not having the scan may delay your diagnosis as the doctors may not have all of the information that they need. Please remember that you can ask the radiographer any questions you have at any time before, during or after your scan. Students/trainees may be present during the examination but only with your verbal consent. If you would like more information about our consent process, please speak to a member of staff caring for you.

## **What happens during an MRI scan?**

Before the scan, you will be given the opportunity to ask the radiographer any questions you have. We will ask you to lie on the scan table in the position required for your scan where you will be made as comfortable as possible. If this is not comfortable, please tell us, as you will need to keep very still during the scan. It is important that you do not move, or the pictures could be blurred and the scan will have to be repeated.

Once you are positioned correctly, we will move you into the scanner – the part of your body that we are scanning must be in the centre of the machine. For scans of the chest or abdomen, you may be asked to hold your breath for a short while.

When the scanner is working, it makes “clunking” or “buzzing” noises. Although they can be very loud please do not worry because these are normal. We will give you headphones and earplugs to wear to reduce the noise. You can listen to music while you are being scanned – so please bring in a CD of your choice! You will be given a buzzer to squeeze if at any time you need to stop the scan for any reason or to attract our attention during the scan.

The radiographers can see you at all times through a window in their “control” room and via CCTV. The inside of the scanner has good lighting and is well ventilated.

## **Will I need an injection?**

If we are scanning certain areas of your body, we may need to give you an injection of contrast dye. The dye shows up on the scan and gives us more detailed pictures, particularly of your blood vessels. The injection will be given by inserting a small needle into a vein in your arm or your hand.

The contrast dye contains gadolinium, which may, occasionally, cause allergic reactions. The most common allergic reactions can present as headaches, nausea and vomiting, sneezing, wheezing, runny nose, eye irritation, itching, hives, skin rash, swelling of the face, mouth, hands, feet or throat, difficulty in breathing, and low blood pressure.

Before your scan we will check whether you have had any previous allergies. If you would like more information about the injection, please ask the radiographer before your scan.

### **What do I need to wear?**

We may ask you to change into a hospital gown if any metal fastenings, such as zips or hooks and eyes, on your clothes are close to the area we are going to scan. This is because the fastenings may spoil the pictures.

You will need to empty your pockets of any coins, as these may be pulled out by the magnet and fly off into the scanner. You will need to take off your watch and take any credit cards or travel cards with magnetic strips out of your pockets. The scanner can affect these and stop them from working.

If we are scanning your head, you will need to remove any dentures that contain metal. Dental fillings will not affect the scan. Hairclips and wigs must also be removed if they contain metal. A locker will be provided for you to keep your belongings in during your scan.

### **Will I feel anything?**

No, the scan should be completely painless. The most difficult part is keeping still. Make sure you are as comfortable as possible before we start and try to relax. The scanner is a short tunnel, so if you get claustrophobia (fear of enclosed spaces) please let us know before you come for your scan.

### **Will there be anyone with me during the scan?**

The radiographer will talk to you during the scan to let you know what is happening. If you are particularly anxious, a friend or relative can stay in the room during the scan provided they are not pregnant or do not have any medical implants which would prevent them from entering the scan room.

### **Can I bring my children?**

Unfortunately, we are not able to offer childcare facilities and your children cannot go into the scan room with you. If you need to bring your children with you, please bring along an adult who can look after them while you are having the examination.

### **How long will the MRI scan take?**

This depends on which part of your body is being scanned and the information that your doctor needs. The radiographer will tell you how long he/she expects your scan to take. Most scans take between 30 - 40 minutes.

## What happens afterwards?

As soon as the scan is finished, you can go home, or back to your ward if you are staying in the hospital. You can eat and drink as normal and resume your usual activities. The pictures taken during the scan are carefully studied by the radiologist who will produce a detailed report.

If you had the injection of contrast dye, an allergic reaction can very rarely occur up to two days after the scan (please read “Will I need an injection?” section on page 3 for allergic reactions that you should look out for). If this happens, please contact the MRI department where you had your scan for advice. Alternatively, if it is out of hours, contact your local emergency department.

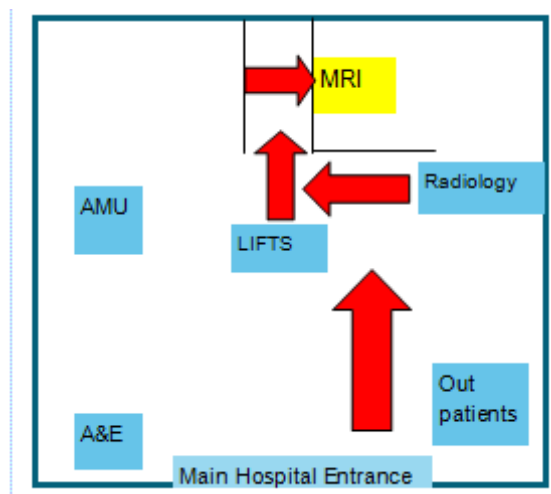
## When will I get the results?

The results will be sent to the doctor or other professional who referred you for the scan. Your MRI pictures will be studied by a radiologist and the results will be sent to the doctor who referred you for the scan. They will discuss the results with you and any treatment you may need.

If you are an out-patient please allow 4 weeks for the results to be sent to your referring doctor. If you are staying in hospital the results will be given to the doctors looking after you on the ward. Unfortunately it will not be possible for you to receive the results at the time of your scan.

## CONTACT US

If you have any questions or concerns about coming for your MRI scan please contact MRI appointments on 02837563795 (Monday to Friday, 9am to 5pm). Alternatively you may contact us by email on [mri.cah@southerntrust.hscni.net](mailto:mri.cah@southerntrust.hscni.net).



## **Your comments and concerns**

You can make your comment, suggestion or compliment in the way that best suits you. This can be face to face, on the telephone, in a letter or by email.

Corporate Complaints Office  
Beechfield House  
Craigavon Area Hospital  
68 Lurgan Road  
Portadown  
BT63 5QQ

Tel: 028 3756 4600

Email: [complaints@southerntrust.hscni.net](mailto:complaints@southerntrust.hscni.net)

## **Involving you**

The Southern Trust radiology wishes to involve the public in the planning, development and evaluation of its services, irrespective of their learning, skills, knowledge and experience. If you would like to register your contact details specifically for radiology, please contact our department 028 37564420 / 028 37564324 / 02837563807. In doing so we may contact you for telephone surveys and any future face to face activities.