



# The Rowan Suite

World Class Private Heart & Chest Care

## MRI Scan Magnetic Resonance Imaging

Specialised type of scan to diagnose health conditions



Information for Patients & Families

**This leaflet has been written to provide information about MRI Scanning (magnetic resonance imaging). We hope it answers some of the questions or concerns you may have. It is not intended to replace talking with medical or x-ray staff.**

### ***What is an MRI scan?***

MRI is a way of creating detailed pictures from inside your body without using X-rays or radiation. MRI pictures show the soft tissues of the body including muscles, nerves, brain, discs and ligaments etc. In many situations MRI provides unique information which can help your doctor to diagnose certain conditions or illnesses and plan your treatment and care.



### ***How does an MRI scan work?***

The MRI machine creates pictures by organising and collecting the magnetic fields that naturally occur within the body. Passing through the magnetic field causes the body's cells to vibrate. The cells then give off electrical signals which are interpreted by a computer and turned into very detailed images on a television monitor.

### ***How is it done?***

Depending on what part of your body is being scanned, you may have to wear a cotton gown. During the scan you will be asked to lie on a table which moves inside a large tubular machine. The inside of the scanner is well lit and has a fan which gently blows fresh air over you. The radiographer who performs the scan will be able to see you at all times and will talk to you through an intercom. You will be given a buzzer to use if you need to alert staff during the scan.

It is very important that you are comfortable and remain very still as even slight movement can spoil the images and reduce their usefulness. Staff will do their best to make you feel settled, secure and relaxed while you are in the scanner. Please let them know if there is anything they can do to help you relax and therefore ensure the best possible pictures are obtained. You will hear loud knocking noises while the scanner is taking pictures.

Music can be played to you (although not all examinations allow this) and you may bring in a CD of your choice. For some MRI scans we need to measure your heartbeat by placing small dots and wires on your back or chest.

Depending on the type of scan you may be asked to hold your breath whilst the pictures are being taken.

When the scan is over the table is moved back out from the scanner.

Depending upon the part of the body that requires examining, it may be necessary to inject a special dye (contrast agent), to make some of the tissues show up more clearly and provide more accurate pictures.

### ***Will I feel any pain or discomfort during the scan?***

You will not feel anything during the scan.

Some people feel uncomfortable in enclosed spaces. If so, you may benefit from taking a mild sedative before the scan, to help you relax. Your GP will be able to prescribe this for you and it is important to follow their instructions.

### ***How long does it take?***

Depending on the type of scan and the preparation needed you could be in the scanning department for up to 90 minutes.

### ***How do I prepare for the scan?***

MRI scans are routinely performed as an outpatient procedure. You can eat and drink normally prior to the scan unless you have been informed otherwise.

It is very important not to bring any metal into the scan room without letting the radiographer know. Before the scan you will be asked to remove your watch, keys, coins and credit cards. These can all be damaged by the strong magnet of the MRI scanner, or might cause distortions in the MRI pictures. When you arrive at MRI, you will be asked a series of questions to find out if you have any metal or implants in your body.

### ***What are the benefits of having an MRI Scan?***

MRI scans are performed without the use of radiation. They often provide a more detailed image than other scans and are more effective at showing up the differences between various types of tissue. The high quality images can help your doctor to diagnose certain conditions and determine the best treatment options.

### ***Who can have an MRI scan?***

Not everyone can have an MRI scan. As the magnetic field attracts metal objects it may not be possible, or safe, to have an MRI scan if you have any of the following;

- Cardiac pacemaker or ICD (implantable cardiac defibrillator)
- Surgical clips in your head (particularly aneurysm clips)
- Some artificial heart valves
- Electronic inner ear implants (bionic ears)
- Metal fragments in your eyes
- Electronic stimulators
- Implanted pumps or recorders
- ANY internal metal
- Had heart surgery in the last 3 months
- You are or might be pregnant or breastfeeding

If you think that any of the above applies to you then please contact us using the number on your appointment card or letter.

### ***Are there any risks involved?***

Any risks involved in the procedure will be discussed in more detail before you sign a consent form. Occasionally some people have an allergic reaction to the dye which is sometimes used. This may cause temporary flushing of the skin.

The strong magnetic field can cause movement of any metal objects such as an implanted pacemaker. It is very important to inform staff about previous surgery or metal implants as you may not be suitable for a MRI scan.

### ***Are there any alternatives?***

Other tests that do not involve magnetic fields include x-rays, CT scans (a special type of x-ray that takes three dimensional pictures) and ultrasound scans (involves the use of sound waves to create images). Your doctor will be happy to discuss any alternative tests or procedures if they are applicable to you.

### ***When do I get the results?***

The images produced by the MRI scan will be studied by a radiologist (a doctor who specialises in interpreting images) and sent to your consultant. You will be asked to attend as an outpatient and informed of the results when they become available.

### ***When can I resume normal activities?***

You may resume normal activities as soon as the scan is over. If however you have had sedation provided by your GP you should follow these instructions.

Although you may not be aware of it, sedation can remain in your system for up to 24 hours and can cause you to be less alert than normal. It is important that you do not drive, drink alcohol, operate machinery or sign legally binding documents within 24 hours of taking the sedation. It would be advisable to be escorted home and have someone stay with you overnight.

**For further information visit:**

- [www.lhch.nhs.uk](http://www.lhch.nhs.uk)

If you require a copy of this leaflet in any other format or language please contact us quoting the leaflet code and the language or format you require.

<p>إذا لديك الرغبة في الحصول على نسخة من هذه المعلومات بأي لغة أخرى أو بشكل آخر ( على سبيل المثال بخطوط كبيرة ) ، الرجاء الاتصال علينا على الرقم 0151 600 1257 موضحاً الشكل أو اللغة التي ترغب فيها.</p>
<p>如果您想索取一份以其他語文或形式（如大字體）編印成的資料傳單，請致電 0151 600 1257 向我們查詢，並說明您所需要的形式和語文。</p>
<p>ئەگەر ئەم زانیاریانەت بەھەر زامانیکی تریاخود شیولزیکی تر دەوینت (بۆ نموونە بە چاپی گەورە) ئەوا تکیایە بە ژمارە تەلەفونی 0151 600 1257 پەیوەندیمان پێوە بکە و ناماژە بدە بەر زمانەیی یاخود شیوہیەیی کە دەتەوینت</p>
<p>W celu uzyskania niniejszej informacji w innym języku lub formacie (np. dużym drukiem), prosimy o kontakt z nami pod numerem 0151 600 1257 podając wymagany format lub język.</p>
<p>Haddii aad u baahan tahay koobiga wargelintan oo luqad ama qaab kale (sida far waaweyn) fadlan nagala soo xiriir 0151 600 1257 adiga oo noo sheegaya luqadda ama qaabka aad wax ku rabsid.</p>