

## **Your Cardiac MRI Scan**

Welcome to Blackrock Clinic Radiology department

We hope you will find the information contained in this pamphlet useful as it is our ultimate goal to make your experience with us as pleasant as possible.

### ***What is an MRI scanner?***

An MRI scanner is an advanced, state-of-the-art imaging modality which can produce very detailed images of the inside of your body.

### ***What does "MRI" stand for?***

"MRI" stands for "Magnetic Resonance Imaging".

### ***What does the MRI scanner look like?***

It looks like a very wide barrel which is open at both ends. It is very bright and airy inside the machine. It is located in the centre of a very large room. It uses a large magnet to make the pictures. A cushioned table will move in and out of the scanner.

### ***How does it work?***

MRI scanners do not use x-rays. It produces pictures of your body using a magnet, radio waves and a very high tech computer.

### ***What is Cardiac MRI?***

A cardiac MRI is a MRI of your heart. It is used to help evaluate the structure and function of your heart, your heart valves, the heart muscle and major blood vessels. It can be used to help:

- Examine the thickness and size of the heart
- Diagnose and manage a variety of cardiovascular problems
- Assess the extent of damage caused by a heart attack or progressive heart disease
- Help to plan your treatment and monitor your progress and recovery

### ***What happens prior to the MRI study?***

Before you can enter the scan room, you will be asked to fill out a questionnaire. This is to ensure that any implants/ metal that may be present in your body will not affect your scan or be affected by the scan.

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

There is no need to fast. Please do not use any moisturiser or perfumes on your chest on the day of your scan.

Depending on the type of cardiac MRI you are having we may ask you to not eat or drink anything containing caffeine from midnight the night before your scan. We may also ask you to not take one type of medication on the morning of your scan. If we need you to do this we will inform you individually.

You will be asked to remove all metal items from your person including coins, keys, cards, watches, and other jewellery. You will also be asked to change into a hospital gown and dressing gown.

### ***What to expect during the scan?***

Knowing what to expect can help make you more comfortable and in control.

The radiographer will bring you into the scan room and you will be asked to lie down on a cushioned table and some ECG electrodes will be placed on your chest in order to see your heart beating during the test. (If you are male we may have to shave some of your chest hair to make sure the electrodes stick well). A coil will be placed over your chest – this helps us to acquire the images of the heart.

You will be given a bell to hold in your hand. If you squeeze this, the radiographer will come straight into the room and stop the scan if you feel that you cannot continue.

You can also ask for a blindfold to place over your eyes. Some people find the scan easier if their eyes are closed. The table will move slowly up and into the brightly lit scanner so that your heart lies at the centre. A fan will be on the entire time you remain in the scanner to aid your comfort, as sometimes the temperature of the scanner can become slightly hot.

Once you are positioned comfortably in the scanner the radiographer will leave the scan room. However the radiographer can see you at all times and will be in constant contact throughout the scan via a two-way intercom.

During the MRI scan you will be asked to hold your breath for approximately 10 sec, as we take images.

When scanning begins you will hear a very loud thumping or banging noise. You will be given ear plugs or headphones to help with this noise. Other than sound you should experience no other sensation except maybe slight vibrations during your scan. Very rarely some people notice a warm feeling in the area being examined. This is normal, but if it becomes bothersome let the radiographer know.

Try to relax as much as possible during the scan. It is really important that you try and stay as still as possible. Movement causes the images to blur. Sometimes the whole scan may have to be repeated. The radiographer will explain to you during the scan when it is time to stay still.

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

It is common to need an injection of contrast (dye) during the scan. The contrast gives further information regarding your heart muscle.

Depending on the type of cardiac scan that you are attending for we may need to give you an injection of a medication which helps to show the blood supply to the heart. It may make you feel like you are exercising – this is normal. During this part of the scan you will be monitored by our doctors in the department.

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

The total scan time is approximately 40 – 45 mins. This time can vary from person to person.

***Can I go home afterwards?***

We will recommend that you have something to eat and drink afterwards. If you have had this scan as an outpatient, you may then go home. Should you not feel ready to leave immediately, our staff will be happy to assist you until you are comfortable.

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

You will not receive the results on the day of your scan. The results will be available from your doctor who referred you for the scan approximately two working days after your appointment date.

If you are unable to keep your appointment please contact us at 1800300200 so we can arrange another appointment for you.

Timely attendance is important so please arrive at least 30mins prior to your appointment to allow for registering, form filling and to allow time for you to change into a gown. It is also important to bring information such as previous x-rays or scans, relevant forms, doctors' referral letter and insurance details.