

Cardiac MRI Patient Information Sheet

What is Cardiac Magnetic Resonance Imaging (MRI)?

Cardiac MRI is a technique that produces very detailed images of the heart, allowing us to detect abnormalities that may not be seen with other imaging modalities.

How is it done?

MRI uses a magnet, radiowaves and a computer to produce two-dimensional and three-dimensional images and does not involve harmful radiation.

What to expect prior to the test.

Unless your scan has been arranged urgently, you will receive in the mail a participant information sheet and also a consent form inviting you to participate in research. This research form is sent to every patient, and enables us to utilise new MRI sequences that may improve the quality of your MRI scan. You will have an opportunity to ask questions and discuss this further on the day of your test. You will also receive an MRI Safety Screening Form which you should read through carefully. Please contact the MRI department as early as possible if indicated to do so on the safety form.

Can I eat and drink before my test?

In most cases there is no need to fast before the test. Rarely, if a patient suffers from claustrophobia, sedation may be required to enable us to perform the test without undue patient distress. If sedation has been arranged for your test or if you are claustrophobic and think you may require sedation, you should fast for 4 hours before the test. You are allowed to have water for your normal medications.

Do I take my medications on the day of the test?

Take all your normal medications before the test.

What do I do on the day?

Please present yourself to the Reception desk in the Tynan-Eyre Diagnostic Unit, located on the 1st floor. Please bring your Medicare Card and your MRI Safety Screening Form (this should be filled out prior to your appointment). A radiographer will check the form and ask more detailed questions as necessary to ensure you are safe to proceed with the test.

What happens during the test?

A small needle will be inserted in your hand or arm before you enter the MRI machine. You will be positioned lying down on your back on the scan table. Once comfortable, the table is advanced into the MRI scanner, which is shaped like a tunnel. It is very important that you lie still during the scan and follow breath-holding instructions when asked to avoid “blurring” of your heart images. The MRI makes a loud tapping or knocking sound whilst scanning. We provide earplugs for hearing protection. MRI is not painful. Sometimes people feel some warmth associated with the energy being generated by the machine, however cooling fans inside reduce this and often a blanket is required.

During the scan, the radiographer will communicate with you through an intercom system and you will be able to talk to them. An emergency buzzer is also available if you feel you need to contact them urgently. The exam will require the injection of a “contrast agent” called Gadolinium to provide extra detail and information on the images. Gadolinium is considered to be safe for you with a very low incidence of allergic reaction and is unrelated to other iodine-based contrast injections you may have had for CT scans or other x-ray procedures.

How long does the test take?

The scan takes approximately 45 minutes to 1½ hours, depending on what information your doctor requires. Most scans take about 1 hour.

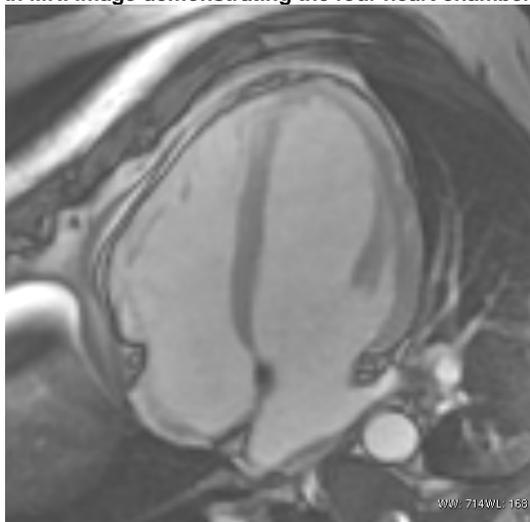
What are the risks?

MRI is not dangerous and there are no known harmful effects as long as standard safety precautions are followed. The magnetic field used in MRI is very powerful and can attract ferromagnetic objects (e.g. one containing iron or steel) if they are in close proximity with the magnet. It is critical that you fill in the MRI Safety Screening Form accurately and let us know if you have any implants or foreign bodies within you. You will also be instructed to remove all metallic objects and to leave your belongings in a secure area away from the magnet to avoid this risk.

How will I get my results?

The MRI is recorded onto a computer and reported by a Cardiologist and a Radiologist. The report is then sent to your referring doctor and a copy is placed in your medical history. Your referring doctor will discuss the results at your next appointment.

An MRI image demonstrating the four heart chambers



A person entering the cardiac MRI machine

