



Great Ormond Street Hospital for Children NHS Foundation Trust: Information for Adult Patients

Cardiac Magnetic Resonance Imaging (MRI) Unit

Your cardiologist has requested a magnetic resonance imaging (MRI) scan to find out more about the structure and function of your heart and blood vessels. This information sheet explains about the scan and what you can expect when you come to Great Ormond Street Hospital (GOSH) to have one.

Although GOSH is a children's hospital, the Cardiac MRI department specialises in cardiac imaging for both children and adults.

What is a cardiac MRI?

Magnetic resonance imaging (MRI) is a way to take pictures of the body using a large magnet, radio waves and a computer. The machine takes pictures without touching the body. It does not hurt and does not use X-rays or any radiation.

The MRI machine is shaped like a short, open-ended tunnel and sits in a large room. The patient lies down on a flat scanning bed that slides into the tunnel.

Is cardiac MRI safe for everyone?

If you have a cardiac pacemaker or other metal devices in your chest, aneurysm clips in your head, or if you are pregnant, then the magnetic field of the MRI scanner may not be safe for you. Please contact our Cardiac Booking Office on the numbers below if you have any questions about safety.

Where is the Cardiac MRI Unit at GOSH?

Details of travelling to GOSH are available on our website at www.gosh.nhs.uk/parents-and-visitors/coming-to-hospital/directions-map-and-parking.

The Cardiac MRI Unit is on Level 1 (basement) of the Variety Club Building. When you arrive at the hospital, please first come to the GOSH main reception desk. From there, you will be directed towards the lift or stairs down to Level 1, then follow the signs to the MRI Unit reception desk.

What time should I arrive?

Please arrive on time for your appointment as stated in the appointment letter.

We ask you to arrive on time, so that we can register you, answer any questions you have and check that you are fit and well for the scan. If you arrive late, we may have to cancel the investigation.

What should I wear?

Please wear comfortable clothing without metal zips or fasteners, such as a tracksuit and t-shirt. You can wear your own clothes for the scan if they do not have any metal zips, clips or fasteners. We also have a changing room and gowns that you can change into, if preferable.

May I eat and drink before the scan?

You may eat and drink before the scan, as long as this will not make you feel uncomfortable when lying flat.



What will happen first?

We will greet you at our reception desk, check our metal object safety checklist with you and guide you to change into a gown if necessary. We have a safe place in which you can leave your clothing (if necessary). You will also have to remove any keys, coins, watches, rail tickets, wallets, credit cards, hair clips and any other metal objects from your clothing.

Before the scan, we will need to check your weight and height. Most patients will need to have an intravenous (IV) contrast dye called gadolinium for some of the pictures during the scan. This dye flows through your blood vessels, making them show up on the scan more clearly. We will insert a cannula (thin plastic tube) into a vein (usually in your arm) before the scan takes place. The cannula will be removed again after the scan, before you go home.

What happens during the scan?

We will help you into the scanning room and onto the bed, making you as comfortable as possible. We will put ECG leads on the skin of your chest and we will lay a light, rectangular plastic device containing coils on your chest over these leads. We will give you earphones to wear, as the scanner makes a loud knocking noise during the scan. You can watch a DVD during the scan. You can bring your own DVD, or we have a selection of DVDs from which you can choose. Please note we do not have a system to plug in music devices.

A radiographer will operate the MRI machine from the room beside the scanning room, but he or she will talk and listen to you through an intercom, and will see you through a large glass window. While the scan is happening, you will need to relax and lie as still as possible. We will give you instructions about holding your breath for some of the pictures.

How long will the scan take?

The scanning time is usually between 45 minutes and one hour. Please expect to be in the Cardiac MRI department for up to two hours.

Can anyone come into the scanning room with me?

If your companion is able to go into a strong magnetic field and has been through our metal object safety checklist, he or she can then stay inside the scanning room with you. Your companion will also need to wear earphones for protection during the scan, but can sit near your head or feet to keep you company while the scanning takes place.

What happens afterwards?

When the MRI scan is finished, you will be able to get dressed and leave. The cardiac MRI specialist will review the images and send a report with the results to your cardiologist. Your cardiologist will contact you about the results and any further appointments needed.

What happens if I am unwell before or at the time of the appointment?

If you are unwell, or there is another reason that you cannot keep the appointment, please inform the Cardiac Booking Office as soon as possible. We may be able to offer the appointment to someone else and will re-book a more suitable appointment for you.

If you have any questions, please contact the Cardiac Booking Office on 020 7405 9200, extension 5178