



Information for parents of paediatric patients undergoing Cardiac MRI under GENERAL ANAESTHETIC

Your child's cardiologist has requested a magnetic resonance imaging (MRI) scan to find out more about the structure and function of your child's 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.

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. Your child will need to lie down on a flat scanning bed that slides into the tunnel.

Why is a general anaesthetic needed?

We need your child's heart and blood vessels to remain in the same place within their chest while the pictures are being taken. For this, your child has to be lying very still for at least 40 minutes. Your child will need to control his or her breathing, and hold his or her breath reliably, for short periods. This sort of cooperation is usually only possible for older children. For a cardiac MRI, younger children usually need a short general anaesthetic to help them sleep, lie still, and allow clear pictures to be taken.

Is cardiac MRI safe for everyone?

If your child has a cardiac pacemaker or other metal devices in their chest or body, or aneurysm clips in their head, then the magnetic field of the MRI scanner may not be safe for them. 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.

When you arrive at the hospital, please go first to Walrus Ward (Cardiac Day Care), so that we can prepare your child for the anaesthetic. Walrus Ward is located on Level 1 (basement) of the Variety Club Building.

What time should we arrive?

Please arrive at the time given to you by the booking office, early on the morning of your child's scan or the evening before. If you arrive late, we may have to cancel the investigation.

When you get to Walrus Ward, the staff will greet you and admit your child to the ward for the day. They will prepare your child for the MRI scan and the anaesthetic, by weighing and measuring your child. The anaesthetist will visit you to see your child and talk to you before the scan.

We also need to check that your child is safe to go into the magnetic environment of the MRI scanner, and we will need you to formally sign consent for your child's general anaesthetic.



What should my child wear?

Once at the Walrus Ward, we will give your child a gown to wear for the procedure.

May my child eat and drink before the scan?

No. It is important that your child does not eat or drink anything for a few hours before the anaesthetic. This is called 'fasting' or 'nil by mouth'. Fasting reduces the risk of stomach contents entering the lungs during and after the procedure.

You will be informed the night before the procedure of the time that your child should be 'nil by mouth' – in other words, have nothing to eat or drink before the anaesthetic. Fasting times are provided in your admissions letter. In broad terms, this is six hours for food (including milk), four hours for breast feeding and two hours for clear fluids or water before the procedure.

It is equally important to keep giving your child food and drink until those times to ensure they remain well-hydrated and get adequate nutrition. This may involve waking your child in the night to give them a drink, which we recommend.

What happens during the scan?

You may accompany your child to the MRI department, and into the preparation room, before the scan. You will be able to stay with your child until they are almost asleep, under the anaesthetic.

Once your child is asleep, we will ask you to leave the preparation room. You will be able to wait in the Walrus Ward, or anywhere nearby the hospital. The staff from Walrus Ward will contact you when your child is waking up after the scan.

We will help your child into the scanning room and onto the bed, making him or her as comfortable as possible. ECG leads will be placed on the skin of your child's chest and we will lay a light, rectangular plastic device containing coils on their chest on top of these leads.

How long will the scan take?

The scanning time is usually about one hour.

What happens afterwards?

When the MRI scan is finished, your child will be allowed to recover from the anaesthetic in our recovery room. You will then be able to join your child, and go with them back to Walrus Ward. Please be prepared to wait in the day ward for two to four hours after the scan, until your child is fully recovered and is able to eat and drink.

The cardiac MRI specialist will review the images and will send the report with the results to your child's cardiologist. Your cardiologist will contact you about the results and any further appointments needed.

What happens if my child is unwell before or at the time of the appointment?

If your child is 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