Great Ormond Street Hospital for Children NHS Foundation Trust: Information for Families

Cardiac MRI scan 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 your child comes 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 radioactive 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.

Please watch our podcast (short video film) about having an MRI, available at www.gosh.nhs.uk/medical-conditions/procedures-and-treatments/your-child-is-having-an-mri-scan/video-your-child-is-having-an-mri-scan or on the GOSH channel on YouTube.

Why is a general anaesthetic needed?

We need your child's heart and blood vessels to remain in the same place within the chest while the pictures are taken. For this, your child has to be lying very still for at least 40 minutes. Your child will need to control their breathing, and hold their breath reliably for short periods. This sort of cooperation is usually only possible for older children. For a cardiac MRI, younger children tend to need a short general anaesthetic to help them sleep and lie still, allowing 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 booking office on the numbers below if you have any questions about safety.

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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 Booking Office as soon as possible. Sometimes, we can offer the appointment to another child on the waiting list and it will enable us to book another appointment for you.

Where is the Cardiac MRI Unit at GOSH?

The location of GOSH is marked on the local area map. When you arrive at the hospital, please go first to Walrus ward - the cardiac day care ward - so we can prepare your child for the anaesthetic. Walrus ward is located on Level 1 of the Morgan Stanley Clinical Building (MSCB) at GOSH.

What time should I arrive?

Please arrive at the time given to you by the Booking Office, early on the morning of your child's scan. 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 will check that your child is safe to go into the magnetic environment of the MRI scanner. We will also ask you to give permission for the MRI scan under general anaesthetic by signing a consent form.

What should my child wear?

Once at 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 several hours before the general anaesthetic. Your child will need to `fast' or stop eating and drinking before the MRI scan so that the general anaesthetic is safe and effective.

If your child is on the morning list:

- No breast milk after 4.30am
- No food or milk after 2.30am
- Clear fluid or very dilute (weak) juice up to 6.30am

If your child is taking any medicines, please give these as you normally do. We strongly encourage you to give your child food and drink right up to the times above, waking them during the night if necessary, to minimise the time for which they have to fast. However after the times indicated above, they should have nothing at all to eat or drink. You should follow these instructions exactly. Otherwise, your child's procedure may be delayed or even cancelled.

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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 Walrus ward or anywhere nearby in the hospital. The staff from Walrus ward will contact you when your child is waking up after the scan.

Once asleep, we will help your child into the scanning room and onto the bed, making them as comfortable as possible. We will put ECG leads on the skin of your child's chest and a light, rectangular plastic device containing receiver coils over these leads. We will give your child earphones to wear, as the scanner makes a loud knocking noise during the scan.

How long will the scan take?

The scanning time is usually between 45 minutes and one hour.

What happens afterwards?

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

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

If you have any questions, please contact the Cardiac Booking Office on 020 7405 9200 extension 0375

Notes

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GOSH Floor Plan

Notes

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GOSH Area

P Car park **PA** Children's play area

GOSH Great Ormond Street Hospital

WH Weston House **IW** Italian Wing

RLHIM Royal London Hospital for Integrated Medicine

ICH UCL Institute of Child Health

UCL University College London **UCLH** University College London Hospital

Southampton Row
Restaurants
Chemists
Sandwich shops
Coffee shops
Supermarkets
Newsagents
Banks

Lamb's Conduit Street
Sandwich shops
Doctor's surgery
Chemists
Supermarket

Brunswick Centre
Supermarket
Bank
Children's clothes
Coffee shops
Sandwich shops
Restaurants
Cinema
Chemist
Post office

Compiled by the Cardiac MRI team in collaboration with the Child and Family Information Group

Great Ormond Street Hospital for Children NHS Foundation Trust, Great Ormond Street, London WC1N 3JH

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