

Paediatric Auditory Implant Programme

Having a magnetic resonance imaging (MRI) scan

This leaflet explains more about your child's MRI scan, including the benefits and risks, and what you can expect when you come to hospital. If you have any further questions, please speak to a doctor or nurse caring for your child.

What is an MRI scan?

MRI stands for magnetic resonance imaging. An MRI scan uses a combination of a strong magnet and radio waves to produce detailed pictures of the inside of the body.

The MRI scan is carried out in a large scanner (pictured below) and can be done while your child is awake, under sedation or under a general anaesthetic. Your consultant will decide with you what will be appropriate. An MRI scan is done as a day case.



What are the benefits?

An MRI scan can help to find out what is causing your child's hearing problem and help your doctor to find the best treatment.

An MRI scan will show the structures of the hearing pathway, including the structure of the cochleae, the hearing nerves and vestibular system so the surgeon can recommend the appropriate treatment.

Unlike x-rays and CT (computerised tomography) scans, MRI scans do not use radiation.

What are the risks?

A general anaesthetic is usually required, as an Auditory Brainstem Response (ABR) hearing test is usually carried out at the same time. The hearing test and scan require the child to be completely still. The ABR test is non-invasive and involves small pads (stickers) being attached to your child's forehead, linked to wires that attach to a computer. Sounds are then presented and any response by the hearing nerve is picked up on a computer. This test is used by the audiologists as further evidence of the degree of your child's hearing loss.

You will be given a booklet when you sign the consent form for the MRI which explains about having a general anaesthetic.

The risks will also be discussed with you by the doctors. You will be asked to complete and sign a safety questionnaire for your child before their scan to make sure it is safe for them to be scanned.

Giving my consent (permission)

We want to involve you in decisions about your child's care and treatment. If you decide to go ahead, you will be asked to sign a consent form. This confirms that you agree to your child having the procedure and understand what it involves.

You should receive the leaflet, **Helping you decide: our consent policy**, which gives you more information. If you do not, please ask a member of staff caring for you for a copy.

What happens before the procedure?

If your child is to have a general anaesthetic, you will have an appointment at Artic Day Unit in the Evelina Children's Hospital for a preadmissions check – this will usually be a couple of weeks before the MRI scan. This appointment is to check if your child is fit to undergo the general anaesthetic.

If your child does not require any anaesthetic, you will be asked to go straight to the radiology department, 1st Floor, Artic Day Unit, Evelina Children's Hospital on the day of the scan (see picture below).



If you live a long way from the hospital, please call the administrator who writes to you about the scan to arrange accommodation on the St Thomas' site the night before. A maximum of two adults can stay with a child in the accommodation. The Trust will cover the cost of one adult but the second adult may need to pay for the accommodation.



What does my child need to wear?

We may ask your child to change into a hospital gown if any metal fastenings on their clothes, such as zips or hooks and eyes, are close to the area we are going to scan. This is because the fastenings may spoil the pictures.

You will need to empty your child's pockets of any coins, as these may be pulled out by the magnet and fly into the scanner.

You can only go into the MRI room if your child is awake for the procedure. If you are going into the MRI room, you will need to take off your watch and take any credit cards or travel cards with magnetic strips out of your pockets. The scanner can affect these and stop them from working. You will also be asked to sign a safety questionnaire for yourself.

What happens during the scan?

Before the scan, you will be given the opportunity to ask the radiographer (member of the radiology team trained to carry out scans) any questions you have.

If your child is having a general anaesthetic, the anaesthetist will make sure your child is comfortable before administering the anaesthetic. You will be able to stay with your child until they fall asleep.

If your child is awake, he/she will be asked to lie on the scanner bed where they will be made as comfortable as possible, as your child will need to keep very still during the scan. If your child is awake, it is important that they do not move, or the pictures could be blurred and the scan will have to be repeated. Once your child is positioned correctly, we will move them into the scanner – the part of your child's body that we are scanning must be in the centre of the machine. The scanner is a short tunnel.

If your child is awake they can watch a DVD – so **please bring in a DVD of your choice!** You can also bring a favourite teddy bear (which has no metal on it) to go into the scanner with your child.

How long will the scan take?

This can vary and depends on the information that the doctor needs. The radiographer will tell you how long he/she expects your child's scan to take. Most scans take between 20 and 30 minutes. If an ABR hearing test is also being carried out, the appointment may last up to one hour.

Will my child feel anything?

The scan should be completely painless. The most difficult part, if your child is awake, is keeping still. If this is the case, please make sure your child is as comfortable and as relaxed as possible before we start.

Can I stay with my child during the scan?

Only if your child is awake. Although this is a children's hospital, you are still responsible for the behaviour of your child. If you are responsible for other children, please arrange supervision for them so you can be with your child during the scan.

What happens after the scan?

You will be kept on the ward until your child has had something to eat and drink and then you will be free to go home. The scans will then be reported on by a radiologist and discussed with the surgeon at the weekly radiology meeting.

Will I have a follow-up appointment?

A follow-up appointment with the team will be arranged to discuss the scan results.

Contact us

If you have any questions or concerns please contact the Auditory Implant Programme on 020 7188 6245 between 9am and 5pm.

Pharmacy medicines helpline

For information about any medicines that you have been prescribed at Guy's and St Thomas' hospitals, you can speak to the staff caring for you or call our helpline.

t: 020 7188 8748 9am to 5pm, Monday to Friday

Patient Advice and Liaison Service (PALS)

To make comments or raise concerns about the Trust's services, please contact PALS. Ask a member of staff to direct you to the PALS office or:

e: 020 7188 8801 at St Thomas' t: 020 7188 8803 at Guy's e: pals@gstt.nhs.uk

Knowledge & Information Centre (KIC)

For more information about health conditions, support groups and local services, or to search the internet and send emails, please visit the KIC on the Ground Floor, North Wing, St Thomas' Hospital.

t: 020 7188 3416

Language support services

If you need an interpreter or information about your care in a different language or format, please get in touch using the following contact details.

t: 020 7188 8815 fax: 020 7188 5953

NHS Choices

Provides online information and guidance on all aspects of health and healthcare, to help you make choices about your health.

w: www.nhs.uk

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