

Your child's MRI scan

This leaflet aims to answer your questions about your child's MRI scan. It explains the benefits, risks and alternatives, as well as what you can expect when you come to hospital. If you have any questions or concerns, please do not hesitate to 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 radiowaves to produce detailed pictures of the inside of the body.

What are the benefits of an MRI scan?

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

An MRI scan provides much more detailed pictures of your child's body than an ordinary x-ray. It is particularly good at identifying problems in the spine, the brain and in the joints. It is also helpful for looking at other parts of the body, often when other types of scan have not given a full picture.

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

Are there any risks?

MRI is a very safe procedure for most patients; however patients with heart pacemakers and certain other surgical implants, for example a cochlear implant, cannot be scanned. 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. You will also be asked to complete and sign a safety questionnaire for yourself in order to make sure it is safe for you to go into the MRI room with your child.

Your child may need to have an injection of contrast agent (dye) for their scan which can very rarely cause an allergic reaction, please see the dedicated section later in this leaflet for more information.

Are there any alternatives?

If your child cannot have a scan, for example if they have a cochlear implant, the radiologist (a specialist doctor trained in studying scans and x-rays) may suggest an alternative type of imaging. This could be a CT scan or an ultrasound scan.

How can I prepare my child for the scan?

Your child can eat and drink as normal. If your child is taking any medication, please continue with this. If we do need your child to do anything in preparation we will send you information about this with your appointment letter.

Talk to your child

Preparing your child for the visit to hospital and the MRI scan will help him/her to understand what is happening. From a young age, children are keen to talk about what they know about hospitals. Talking to your child in advance will give him/her time to ask any questions or raise any concerns.

Will my child need an injection?

If we are scanning certain areas of your child's body, we may need to give them an injection of contrast dye. This shows up on the scan and gives us more detailed pictures, particularly of your child's blood vessels. The injection will be given by inserting a small needle into a vein in your child's arm.

The contrast dye contains gadolinium, which may, occasionally, cause allergic reactions. The most common allergic reactions can present as headaches, nausea and vomiting, sneezing, wheezing, runny nose, eye irritation, itching, hives, skin rash, swelling of the face, mouth, hands, feet or throat, difficulty in breathing, and low blood pressure. Before the scan we will check whether your child has had any previous allergies. If you would like more information about the injection, please ask the radiographer (a specially trained member of the radiology team who performs the MRI scan) before your child's scan.

If your child has any problems with their liver and/or kidneys please raise this with the radiographer as extra tests may be required before administering any contrast.

If we know your child will **definitely** need an injection, an additional information sheet will be included with the appointment letter.

What does your child need to wear?

We may ask your child to change into a hospital gown if any metal fastenings, such as zips or hooks and eyes, on their clothes 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 as anything containing metal for example coins, metal toys, or hair slides may be pulled out by the magnet and fly into the scanner.

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.

What happens before the scan?

You will be given the opportunity to ask the radiographer any questions you have.

Your child will also have the opportunity to spend a short time with a radiographer or a hospital play specialist (a member of staff trained to use play to prepare children for procedures) to discuss the scan. This will give your child a better understanding of what to expect during the MRI scan.

What happens during the scan?

In the scanner your child 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. 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. The radiographer will talk to your child during the scan to let them know what is happening and your child will be given a buzzer to press if they need to attract our attention during the scan.

When the scanner is working, it makes a loud banging noise. We will give you and your child headphones to wear, to reduce the noise. Your child can listen to music while they are being scanned and for some scans they can watch a DVD – so **please bring in a CD or 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 depends on which part of your child's body is being scanned and 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.

Will your child feel anything?

The scan should be completely painless. The most difficult part is keeping still. Please make sure your child is as comfortable and as relaxed as possible before we start.

Can you stay with your child during the scan?

Yes. 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 afterwards?

As soon as the scan is finished you can go home, or back to the ward if your child is staying in the hospital. Your child can eat and drink as normal and resume their usual activities.

The pictures taken during the scan are carefully studied by the radiologist who will produce a detailed report.

When will you get the results?

The results will be sent to the doctor who referred your child for the scan – usually a hospital specialist. If you make a clinic appointment for two weeks after the scan, the results should be available. For more urgent problems, they may be available sooner.

Further information

Evelina Children's Hospital MRI webpage – Provides information about having an awake MRI scan at the Evelina Children's Hospital MRI unit.

w: www.evelinalondon.nhs.uk/our-services/hospital/mri/overview.aspx

Contact us

If you have any questions or concerns about your child's MRI scan, please contact the MRI department on 020 7188 9218 (Monday to Friday, 9am to 5pm). Outside of these hours, please call 020 7188 3932 and leave a message on our answer phone.

Evelina London Medicines Helpline

If you have any questions or concerns about your child's medicines, please speak to the staff caring for them or contact our helpline.

t: 020 7188 3003 10am to 5pm, Monday to Friday **e:** letstalkmedicines@gstt.nhs.uk

Your comments and concerns

For advice, support or to raise a concern, contact our Patient Advice and Liaison Service (PALS). To make a complaint, contact the complaints department.

t: 020 7188 8801 (PALS) **e:** pals@gstt.nhs.uk
t: 020 7188 3514 (complaints) **e:** complaints2@gstt.nhs.uk

Language Support Services

If you need an interpreter or information about your care in a different language or format, please get in touch:

t: 020 7188 8815 **e:** languagesupport@gstt.nhs.uk

NHS 111

Offers medical help and advice from fully trained advisers supported by experienced nurses and paramedics. Available over the phone 24 hours a day.

t: 111

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

Get involved and have your say: become a member of the Trust

Members of Guy's and St Thomas' NHS Foundation Trust contribute to the organisation on a voluntary basis. We count on them for feedback, local knowledge and support. Membership is free and it is up to you how much you get involved. To find out more, and to become a member:

t: 0800 731 0319 **e:** members@gstt.nhs.uk **w:** www.guysandstthomas.nhs.uk/membership

Leaflet number: 2314/VER4

Date published: July 2016

Review date: July 2019

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