

Children's Services

Having a magnetic resonance imaging (MRI) scan under general anaesthetic

Parent information

This leaflet has been created to enhance your understanding of your child's forthcoming MRI scan.

The Ward will telephone you at home the day before the scan to give you the opportunity to ask any questions you might have. It would be helpful if you had these ready before the call is made.

If you have any other questions that the leaflet does not answer or would like further explanation, please add them and we will be happy to answer them.

On arrival at the Ward you will be given the opportunity to ask any further questions not provided in this leaflet and be asked to give your verbal consent for the scan to take place.

What is an MRI scan?

MRI is a method of building up a detailed picture of the body and its organs. Unlike computerised tomography (CT) it does not use X-ray radiation but instead magnetic fields are used to build up the pictures.

Is it safe?

There are no known risks or side effects associated with MRI. Because of the magnets involved, MRI must not be performed on people with certain metal implants in their bodies such as pacemakers, inner ear implants, surgical clips within the head and some artificial metallic heart valves. If your child has ever had metal fragments in their eyes due to an injury, it will be necessary for them to have an X-ray of their eyes to ensure that no fragments still remain.

During the scan the magnets make a wide range of loud noises such as banging, buzzing and rumbling.

How long will the MRI scan take?

It usually takes around 30 minutes to an hour to scan one part of their body. It will obviously take a little longer to scan more than one part. The length of the scan also varies depending upon the problem that your child's doctor is trying to investigate. It is important to remember that if the scan takes a little longer it does not necessarily mean that there is something wrong.

Why a general anaesthetic?

Your child needs a general anaesthetic to allow them to remain still throughout the duration of the MRI scan. This is important to enable clear and precise images to be obtained by the MRI scanner.

What is a general anaesthetic?

A general anaesthetic is when the whole of the body is put into a state of 'controlled unconsciousness' for a controlled amount of time. There is no sensation of touch, pressure or pain.

General anaesthetics are only given by an anaesthetist. These are doctors who have specialist training in anaesthesia. The anaesthetist will ensure your child is asleep and secure during the procedure (an anaesthetist will stay with your child at all times) until they wakeup afterwards.

The anaesthetist will meet with you in the scanning department before the scan, and will talk to you about any risks associated with having a general anaesthesia.

What will happen in the anaesthetic room?

One parent or an adult can go into the anaesthetic room with your child, along with your ward nurse, until your child is fast asleep. The anaesthetist will place a mask over your child's mouth and nose to send them off to sleep. Following the procedure your child may have a cannula, which is a small plastic tube inserted into a vein. This will enable your nurse to administer medication if required.

Can your child eat and drink?

For the safety of your child, it is essential that they are starved in preparation for the general anaesthetic. They will be able to have their last food and milk (cows and formula) six hours before the scan time.

Your child can continue to drink water or diluted squash until three hours before the scan time. For breast fed babies, the last feed will need to be four hours before the scan time.

When will my child be able to go home?

After your child's scan, they will need to eat, drink and pass urine before going home. They may still be wobbly on their feet, but this will resolve by itself over the course of the day. Children usually go home one to two hours after completion of the scan.

The nurses will be responsible for allowing your child to be discharged home. You will not routinely see the doctor prior to discharge.

Following a general anaesthetic, children should rest at home for the next 24 hours with a responsible adult caring for them. Children may tire easily and their co-ordination and judgement may be affected. Allow them to gradually increase their activity until they feel back to normal. Their sleep pattern may be altered for the first 24 to 48 hours.

When will I know the results of the scan?

It takes a long time to look at all the pictures that your child's scan produces and so the report will not be available straight away. You should have an appointment to be reviewed in the outpatient department to discuss the findings of your child's scan and any further treatment that might be necessary. If you do not have one, please let the nurses know and they will be able to tell you which number to telephone to book one.



We are currently working towards a smoke-free site. Smoking is only permitted in the designated smoking areas.

For advice and support in quitting, contact your GP or the free NHS Stop Smoking helpline on 0800 169 0 169

Help with this leaflet:



If you would like this information in another language, large print or audio format, please ask the department to contact



Patient Information: 01223 216032 or
patient.information@addenbrookes.nhs.uk

Document history

Authors	Senior Sister Ward F3, Children's Services
Department	Cambridge University Hospitals NHS Foundation Trust, Hills Road, Cambridge, CB2 0QQ www.cuh.org.uk
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