

# Your child is having an MRI scan using 'feed and wrap' technique

A female nurse in a light blue NHS uniform is smiling and holding a white plastic MRI 'feed and wrap' device. The device is a curved, arch-like structure designed to hold a baby's head and neck during an MRI scan. In the background, the circular opening of an MRI scanner is visible, with a yellow radiation warning sign on the wall. The nurse's uniform has a small NHS logo and the text 'Great Ormond Street Hospital for Children' on the chest.

Information for families

Great Ormond Street Hospital  
for Children NHS Foundation Trust

**This information sheet from Great Ormond Street Hospital (GOSH) explains about having a magnetic resonance imaging (MRI) scan, how to prepare for it and what care your child will need afterwards.**

## **What is an MRI scan?**

An MRI (magnetic resonance imaging) scan uses a magnetic field rather than x-rays to take pictures of your child's body. The MRI scanner is a hollow machine with a tube running horizontally through its middle. Your child will lie on a bed that slides into the tube. An MRI scan usually lasts between 20 minutes and an hour.

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/](http://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.

If you would like further advice about preparing your child for the scan, please ring the department's play specialist on the number on the back of the leaflet.

## **What is 'feed and wrap' technique?**

'Feed and wrap' is a technique used with young babies instead of sedation or general anaesthesia. Generally, babies tend to fall asleep after a feed, so we take advantage of this and scan them while asleep.



## Are there any alternatives?

Your child may need this scan so that their doctors can get detailed pictures of the size and shape of part of your child's body. Various types of scan such as CT, ultrasound and x-rays can show the size and shape of parts of your child's body but not in as much detail as an MRI scan. The information from the scan is then used to help with diagnosis and plan their treatment.

## When you receive your appointment letter

If you are unable to keep this appointment, please inform the department as soon as possible beforehand. Sometimes, we can offer the appointment to another child on the waiting list. As so many children and young people need to use our services, we have had to introduce a policy where if a child cancels or does not attend two appointments in a row, we will close their referral and inform their GOSH consultant.

## The day of the scan

Try to keep your baby awake on the journey to hospital so that it is easier for them to fall asleep at the time of their scan appointment. We also advise keeping them a bit hungry and due for a feed just before the appointment.

When you arrive at the hospital, you should report to the MRI department. Some scans need additional preparation – information about whether your child needs any additional preparation is in your appointment letter.

Your child should wear clothes without zips or metal poppers for the scan – otherwise they will need to be changed into a gown. Before the scan starts, the nurse or radiographer will check you or your child do not have a pacemaker, metal implants or clips, dental braces, a history of metal fragments in the eyes or any allergies. We will ask you to sign a form to confirm this. If, for any reason, we cannot confirm whether or not your child has any metal implants or equivalents, we will have to cancel the scan as it would be unsafe to continue. If you are wearing a medication patch, for instance, for pain relief or to quit smoking, please remove this before you go into the scanner room.

You will also need to leave metallic objects like jewellery, watches, keys, pens or cards with metallic strips like bank cards and train tickets in the lockers outside the scanner room.

If your child requires an injection of contrast as part of the MRI scan, we will insert a cannula (thin, plastic tube) into a vein either on a ward or in the MRI unit before the appointment. This will prevent them being disturbed once they have fallen asleep.

Please bring a feed for your baby if you are using formula milk. We will ask you to feed your baby and let them fall into a natural sleep in a quiet room. When your baby is in a deep sleep we will transfer them onto the MRI scanner.

Sometimes babies do not fall asleep at the time of their appointment. If you are able to stay in the MRI unit, we may be able to fit in your child at a later time in the day. If this is possible the radiographer will talk to you about







this. Please try to be patient - this technique is often successful if the preparation has been followed, but sometimes you may need to stay in the MRI unit for an extended length of time. If you are not able to stay in the MRI unit for at least four hours please telephone us in advance. It may not be possible to use a feed and wrap technique and an appointment for sedation or general anaesthetic may need to be rescheduled.

You are welcome to stay with your child during the scan, but if you are in the first three months of pregnancy, you should let us know beforehand.

## **What does the scan involve?**

We will lie your child on the bed for the scan. Depending on the part of their body being scanned, they may need to have a coil over part of their body or wear a head coil (this will not touch their head).

When your child is in the correct position, the radiographer will move the bed inside the scanner and then go into the control room. The scanner will make a continuous knocking sound throughout the scan, which can be quite loud, but we will give you and your child ear protectors to minimise any discomfort. It is important that your child is in a deep sleep before we start the examination so that the loud noises do not wake your child.

They will need to be completely still inside the MRI scanner for the images to be good enough to make a diagnosis.

When the scan has finished, the radiographer will move the bed out of the scanner. If your child has had a cannula you will be able to leave the department as soon as this has been removed. If they have not had a cannula inserted, they will be able to leave immediately once you have retrieved any metal items that you may have put in the lockers.

## Medicines given during an MRI scan

We may give your child some medicine during the MRI scan to make the image clearer. The radiographer will tell you which medicines your child has had in case of later side effects. The medicine we use most often at GOSH is:

**Gadoteric acid (Dotarem®)** – This is a 'dye' that makes blood vessels and any inflammation show up more clearly on the pictures. It is given as an injection. A possible side effect is



hypersensitivity, but this will normally be an immediate effect. There are no reported long term side effects of gadoteric acid.

## **Are there any risks?**

There are no risks associated with MRI scans. They are painless with no lasting effects. The scanner does not touch your child during the scan. MRI scans are not suitable for people with certain metal implants inside them (such as pacemakers) because the scanner emits a strong magnetic field. This is why we carry out a thorough metal check before your child has the scan.

## **What happens afterwards?**

In most cases, your child will be able to go home straight after the scan has finished. The radiologist (doctor specialising in scans) will send a report of the scan to your child's doctor in time for their next appointment. If you have not been given a follow up appointment to see your consultant, please contact their secretary after two weeks.



**If you have any questions or concerns, please contact:**  
**Radiology Play Specialist: 020 7405 9200 ext. 0301**  
**MRI Bookings: 020 7813 8510**

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