

The ROYAL MARSDEN
NHS Foundation Trust

Having an MRI scan under sedation



NHS

**Information for young people,
carers and their families**

Oak Centre for Children and Young People

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This booklet is evidence based wherever the appropriate evidence is available, and represents an accumulation of expert opinion and professional interpretation.

Details of the references used in writing this booklet are available on request from

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Should you require information in an alternative format, please contact The Royal Marsden Help Centre.

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Thanks to supporters of The Royal Marsden Cancer Charity, we raised £16 million to build the Oak Centre for Children and Young People. Opened in September 2011 by TRH The Duke and Duchess of Cambridge, it is one of the largest comprehensive children and young people's cancer centres in Europe.

The Royal Marsden Cancer Charity raises money solely to support The Royal Marsden, a world-leading cancer centre. We ensure our nurses, doctors and research teams can provide the very best care and develop life-saving treatments, which are used across the UK and around the world.

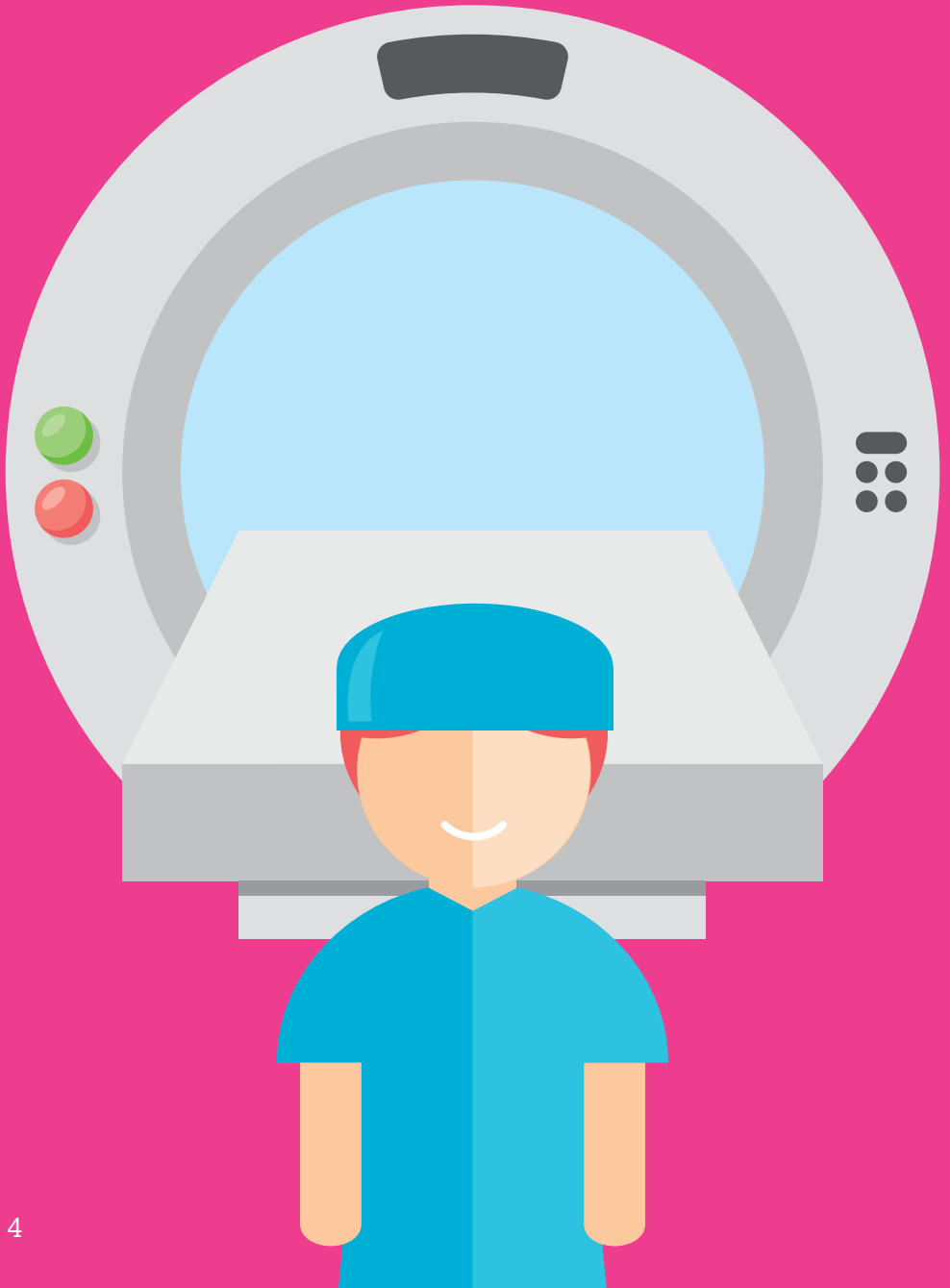
From funding state-of-the-art equipment and groundbreaking research, to creating the very best patient environments, we will never stop looking for ways to improve the lives of people affected by cancer.

The Royal Marsden Cancer Charity
For a future beyond cancer.



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Introduction

This information booklet from The Royal Marsden Hospital explains about having a Magnetic Resonance Imaging (MRI) scan under sedation, how to prepare for it and what care your child will need afterwards.

Please use this information booklet in conjunction with The Royal Marsden MRI Scan – Patient Information leaflet available on the online patient information library and in the MRI department.

www.patientinfolibrary.royalmarsden.nhs.uk/mri-scan



What is an MRI scan?

MRI is short for Magnetic Resonance Imaging. This means that rather than using x-rays, the scan uses a strong magnetic field, radio waves and a computer to take very detailed pictures of inside the body. MRI scans do not hurt, and nothing will touch you/your child during the scan, although they are very noisy.

The MRI scanner is shaped like a short open-ended tunnel with a bed that moves through the middle of it. The play team will be able to show you a model of the machine that also makes realistic sound effects. Your child will lie down on the bed and the radiographer (specialist in taking images) will move

the bed inside the tunnel. Depending on what your child is having scanned, an MRI usually lasts between 20 minutes to an hour.

If you would like further advice about preparing your child for the scan, please contact our play team.



Why does my child need sedation for the MRI scan?

Some children may find it difficult to lie still for the duration of the scan, so we might suggest they have sedation. We assess all children to see if they might benefit from sedation.

When you receive your appointment

If you are unable to keep this appointment, please inform your CNS team as soon as possible. Sometimes we can offer the appointment to another child. Occasionally we may need to move your child's scan at short notice if we receive a clinically urgent referral, we will only do this if your clinical team is happy.

Preparing for the sedation

The evening before your scan, reduce the amount of sleep your child has by allowing them to go to bed an hour later than usual.

On the day of the scan, wake your child at least one hour earlier than usual and try to keep them awake on your way to The Royal Marsden.

It is important that your child does not eat or drink anything for a few hours before the sedation. This is called 'fasting' or 'nil by mouth'. Fasting reduces the risk of stomach contents entering the lungs during and after the procedure. It is equally important that your child does not fast for too much longer than needed to, to avoid dehydration. You will be informed the day before the procedure of the time your child should be 'nil by mouth' – in other words, have nothing to eat or drink before the sedation.



Day of the scan



When you arrive at the hospital, you should report to the MRI department on the ground floor of the main building.

We will ask you to arrive earlier than your scan as we need this time to prepare your child for the sedation; for instance, completing the metal check described below and apply some local anaesthetic cream for a cannula to be inserted if your child does not have a central line. Your child will be reviewed by a member of the Nurse Led Sedation team and be consented for the MRI scan under sedation.

Your child should wear clothes without zips or metal poppers for the scan, otherwise we may ask them to change.

Before the scan starts, the nurse or radiographer will check your child does not have a pacemaker, metal implants or clips, a history of metal fragments in the eyes or any allergies. We will also need to know if they have a central line or shunt and where this was inserted.

We will ask you to sign a form to confirm this. If, for any reason, we cannot confirm whether your child has any metal implants or equivalents, we will have to cancel the scan as it would be unsafe to continue.

If your child does not have a central line, they will have a cannula (thin plastic tube) inserted into a vein into their arm or hand – they can use local anaesthetic cream or cold spray to numb the skin first. The play team can be present for distraction if required.





What does the scan involve?

Your child will have the sedation infusion, Dexmedetomidine, into the cannula started 10 minutes before the scan is due to start. This will help relax them and put them into a sleep cycle.

Your child will need to lie 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.

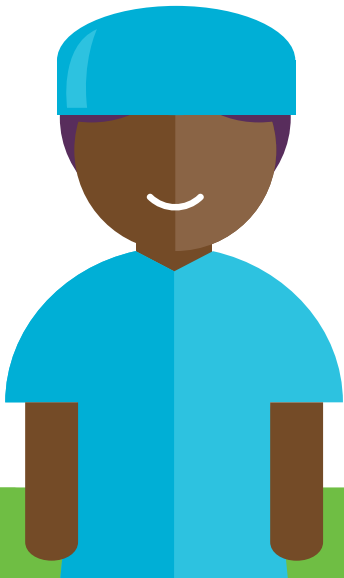
A nurse will stay with your child throughout the scan, and they will be monitored. The scanner will make a continuous knocking sound throughout the scan, which can be quite loud, your child will have ear protectors to minimise any discomfort. When the scan has finished, the radiographer will move the bed out of the scanner.

They will then move your child into the recovery area to wake up from the sedation. You should be prepared to stay in the department until your child is fully awake and has had something to eat and drink. Most families are able to go home a couple of hours after the scan if your child is clinically well to do so.

Medicines given in an MRI scan

We may give your child some medicine, commonly known as contrast, 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 sedation used at The Royal Marsden is Dexmedetomidine, you will be informed about how this sedation is given, the side effects and any other important information whilst in the MRI department. A member of the Nurse Led Sedation team will contact you before the scan, you are welcome to ask any questions at this time.



Are there any risks?

There are no risks associated with MRI scans. They are painless and generally quick with no lasting effects. MRI scans are not suitable for people with certain metal implants inside them as the scanner emits a strong magnetic field. This is why we carry out a thorough metal check before your child has the scan.

Risks of sedation are rare, and these will be discussed fully on the day, before you sign the consent form. The side effects of the sedation medication include:

- lowered blood pressure
- increased sleepiness through the day
- irritability.

There may also be a short period when your child's heart rate slows a little, but this is monitored carefully. The sedation nurse is very experienced and is trained to deal with any complications.

What happens afterwards?

When your child has recovered fully from the sedation and has had something to eat and drink, you will be able to go home. The radiologist will send the report of the scan to your clinical team, and you will receive the results once they have been discussed.

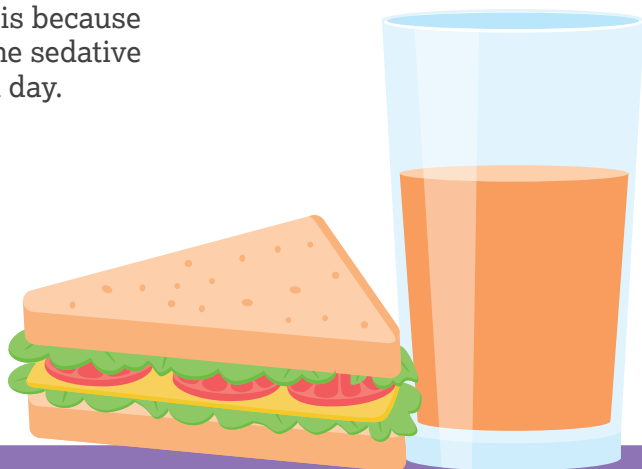
When you get home

Children are generally sleepier than usual for 24 hours after a scan with sedation. This is because the effects of the sedative last for about a day.

If your child is unduly sleepy or difficult to rouse, make sure they are in a safe position on their side and telephone the 24 hour advice line.

Make sure that your child can tolerate a juice drink before offering anything to eat.

Give milk only if your child does not feel sick and has not vomited.



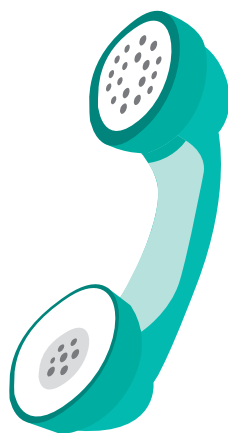
Your child may have mood changes which can make them irritable. This is temporary.

Keep a close watch on your child until they are back to normal. Do not leave them with an inexperienced carer.


If your child is taking any medications, please give this as normal.

Paediatric 24hr advice line

Tel 0208 915 6248

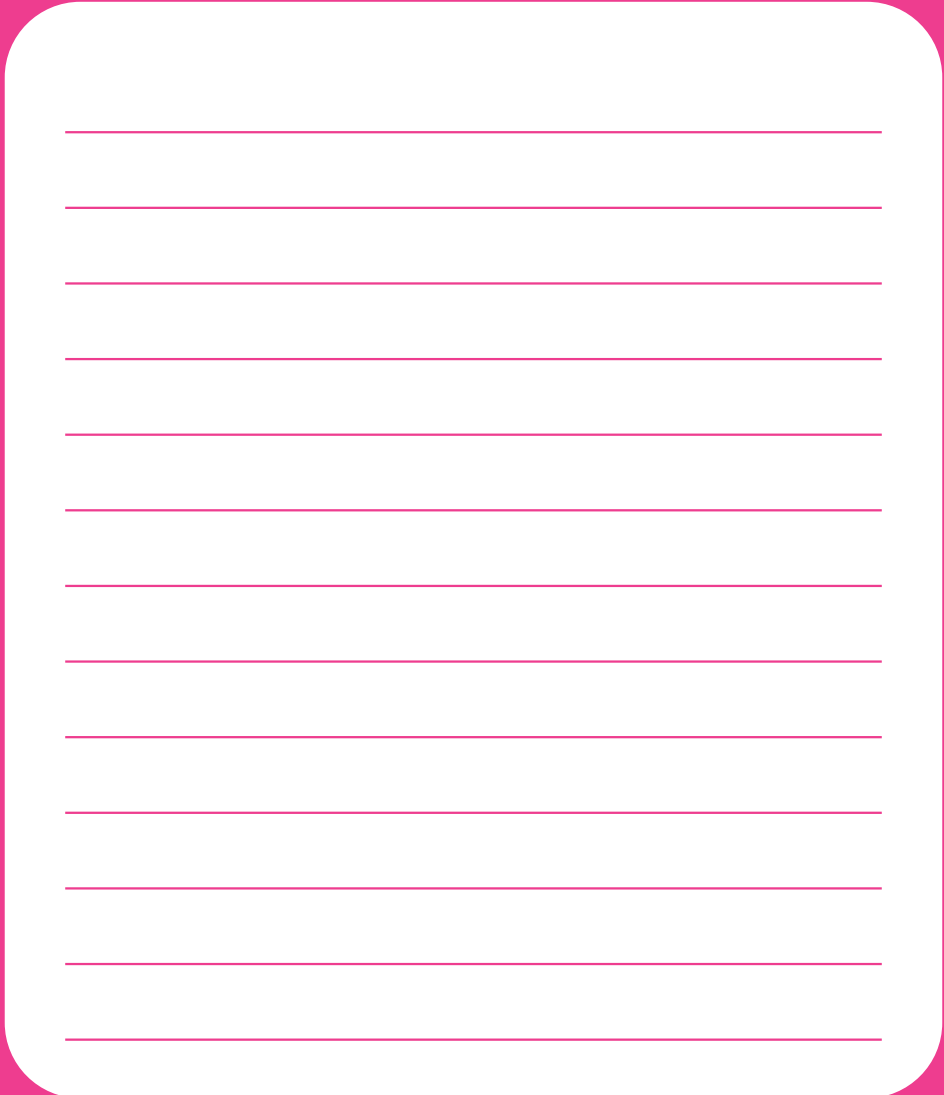


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Notes



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