

MRI: Your Child's Awake MRI Scan

Information for parents and carers



Oxford University Hospitals
MRI Department

Information for parents and carers

Oxford University Hospitals provides awake MRI scans for your child with the support of a Health Play Specialist.

This will avoid an admission to one of the wards, eliminating the need for General Anaesthetic/Sedation.

This document will give you more information about MRI and your child's preparation for the scan.

MRI: Magnetic Resonance Imaging

MRI scans use a strong magnetic field and radio waves and a sophisticated computer to obtain detailed pictures of your body which get reviewed by a Radiologist, who will report your child's MRI scan back to your child's Consultant/GP.

The MRI scanner is a powerful, strong magnet that looks like a 'mint with a hole' or a 'tunnel'.

The scan causes no discomfort but does make different types of loud noises during the scan. It is very important that your child stays statue still throughout the scan to ensure we obtain clear pictures.

We provide earplugs and headphones to muffle the noises. For most types of scan we can play your child music of their choice through headphones.

Scans vary in length taking anything from 10 minutes to 90 minutes. As a guide: Brain scan: 15 to 30 minutes; Spine scan: 20 to 45 minutes; Abdomen scan: 30 minutes, Knee: 30 minutes; Hip: 30 minutes; Foot: 30 minutes.

What are the benefits of my child having an awake MRI scan?

- Your child can have the scan in their own clothes, but make sure no glitter, zips, metal hooks or poppers are in the clothes, and no metal hairpins or clips.
- Reduces time spent in hospital.
- Eliminates need for add General Anaesthetic / Sedation medicines to be given.

There is a wealth of evidence which suggests a well prepared child will be able to cope with the having the MRI scan awake. The following pages will give you some ways to prepare your child for their scan.

Contrast and breath holding

Some scans require your child to hold their breath for periods of 5 to 10 seconds. This helps to reduce the amount of time required to spend in the scanner. This is most commonly required for MRI of the chest and abdomen areas.

In order to help with diagnosis, contrast may need to be given as part of your child's MRI scan. This will be administered through a line called a cannula which will be inserted before the scan. A cannula is a thin plastic tube that is placed under the skin usually on the back of the hand. Local Anaesthetic cream (EMLA or Ametop, sometimes known as 'magic cream') can be put on their hand or arm before injections so they do not hurt as much. It works well for 9 out of 10 children. It may be possible to put the cannula in with your child sitting on your lap.

What are the risks and side effects?

MRI scans do not use X-rays and there are no known risks or side effects associated with MRI scans.

Risks and side effects of contrast

Intravenous Contrast – Gadolinium

This is a rare earth metal which is a special dye or contrast agent used in MRI to provide a better visualization of the whole body including the head, neck, liver, skeleton, muscles and surrounding tissues.

Possible Side Effects:

- Allergic reaction
- Wheezing
- Headache
- Strange taste in the mouth or dry mouth
- Dizziness
- Vomiting
- Fatigue
- Rash, itching.

Please inform the radiographer if your child experiences any side effects after the contrast is injected.

Preparing your child for their scan

- Your child must stay still during the scan to get clear pictures. Games such as 'statues' and 'sleeping lions' are fun ways to practice staying still.
- You can explain to your child that the scanner is a confined space that looks like a tunnel.
- To prepare your child you can set up a tunnel, using a pop up one if you have or if not by using chairs. Ask your child to lie in the tunnel whilst playing the MRI sounds and encourage them to be as still as possible. Play the sounds for 30 seconds, then pause the sounds; then play for 1 minute, then pause; then play for 2 minutes, then stop. Children who cope with this exercise at home are likely to cope in the scanner.
- Reassure your child that nothing will touch them, it's just noisy.
- Be honest with your child – explain to them what will happen and try to answer any questions they might have. The Health Play Specialist, Nurse or Radiographer will be able to answer any questions you are unsure about.
- Please see QR code below to watch a video to help familiarise your child with the process of having an MRI scan.
- If your child has any difficulties with being in one position for long periods of time, please let us know at least two weeks before their MRI scan appointment.

Please scan the following QR codes for helpful videos:

Having an MRI scan
– Being an astronaut



MRI sounds



Play to prepare younger
children for MRI video



During the scan

When you arrive at the MRI Department, the Radiographer will check the MRI safety checklist for your child and the accompanying adult. This person is only allowed in if they have no contraindications ie pregnancy.

If unsure please contact the MRI Department on telephone number **01865 221 144**

The Radiographer will check your child's height and weight.

All metal objects in clothes and hair will need to be removed. If some of your child's clothes contain metal (such as poppers or zips) they may be asked to change into a hospital gown.

You will be asked to encourage your child to use the toilet before going for their scan; this will make it easier for them to keep still. Very few scans need a full bladder for the Imaging. You can check with the Health Play Specialist or Radiographer when you arrive.

Inside the scan room, your child will lie on the scan table. We will provide soft ear plugs and headphones to muffle the noises. The radiographer will move your child slowly into the scanner, which is open at both ends. Your child will need to remain still so we don't get blurry pictures. One Parent/Carer is allowed to stay with your child in the scan room throughout the scan.

The Radiographer will give an emergency buzzer to enable you / your child to call them if needed during the scan.

For a head scan, a helmet-shaped coil will be placed over the head with a mirror so that your child can see the Parent/Carer staying in the room.

For abdomen, pelvis and other scans, the coil is placed over the area of interest.

The Radiographers will keep talking to your child in between each sequence and update them with each scan sequence time.

The noise starts as the sequences of pictures are being taken. Sequences can last between 1 to 8 minutes. The noise will stop between sequences.

The Parent/Carer is encouraged to remain still and quiet during the sequences.

In order to help with diagnosis, some scans require contrast injections as a part of the scan. A Radiologist will inject the contrast through the cannula, which will be inserted before the scan.

Additional support from a Health Play Specialist

Health Play Specialists provide therapeutic play and support during procedures for children of all ages. One role of the Health Play Specialist is to prepare children and young people before a procedure, such as an MRI scan. Research shows that those children who are well prepared before their hospital experience tend to cope better and are less anxious.

The Health Play Specialist can help to:

- assess if your child will cope having an awake MRI scan
- prepare your child for what is going to happen
- provide coping techniques
- provide information about length of time of scan and if contrast is required
- provide ways for your child to deal with any worries and fears.
- facilitate visits to the scanner prior to the MRI
- support on the day of the scan.

For more information, assessment or to arrange support on the day of the scan, please contact the Play Team on:

Telephone: **01865 231 955**

Email: **oxfordplayservices@ouh.nhs.uk**

The Play Team are available Monday to Friday, 7.30am to 3.30pm.

What happens after the scan?

After your child's scan you will be free to leave. Results are not normally given on this day, as they need to be seen by your child's referring doctor and the radiologists (specialist doctors who interpret scans and other images of the body).

If you have not had the results of your child's scan or been sent a follow-up appointment 2 to 3 weeks after the scan, please telephone your child's consultant's secretary.

Notes

Further information

If you would like an interpreter, please speak to the department where you are being seen.

Please also tell them if you would like this information in another format, such as:

- Easy Read
- large print
- braille
- audio
- electronic
- another language.

We have tried to make the information in this leaflet meet your needs. If it does not meet your individual needs or situation, please speak to your healthcare team. They are happy to help.

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Oxford University Hospitals NHS Foundation Trust

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