

MRE (Magnetic Resonance Enterography)

Parent / Guardian / Patient Information Leaflet



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Cardiff and Vale
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This leaflet provides information about your magnetic resonance imaging (MRI) scan, how to prepare for it and what is involved.

The paediatric MRI scanner is located in Octopus Radiology Department, Noah's Ark Children's Hospital for Wales.

What is an MRI scan?

An MRI scanner uses a very strong magnetic field and radio waves to produce images of the body. These images can be used for diagnosing a large number of pathologies and used to plan treatments. MRI does not use ionising radiation like x-rays, and there are no known long-term health risks.

What is MR Enterography?

MR Enterography is a test to look at your small bowel and abdomen. The small bowel is the portion of your intestine joining the stomach and duodenum to the large bowel. Fluid is drunk prior to the scan to fill the small bowel so that it can be seen more easily on the MRI images.

Is there any preparation before the MRI scan?

The MRI safety questionnaire included with your appointment letter, must be completed prior to your scan to ensure that you're safe to enter the MRI scan room.

If you answer YES to any of the questions, it is very important that you contact us.

Octopus Radiology Reception on 02921 843953, Mon-Fri 9am-5pm

If you do not contact us, this may result in delays on the day or cancellation of your appointment.

Implants and devices must be reviewed prior to your MRI scan. Such queries can take some time to clarify so please be patient as this is for your own safety. Due to the MRI scanner using a very strong magnetic field, there could be situations where you may not be able to undergo your MRI scan.

Patients who have had penetrating injuries involving metal to their body, especially the eyes, may need to have an x-ray before their MRI scan. This is to ensure there are no pieces of metal remaining.

It is very important you arrive **FASTED**. You **MUST NOT HAVE EATEN FOR 4 HOURS PRIOR** to your appointment time. You can drink clear fluids.

You should continue to take all your normal medication unless you are a diabetic taking insulin. If you are a diabetic using insulin please contact **Octopus Radiology Reception on 02920 743953** before your appointment date. If you have diabetes we will try to give you an appointment earlier in the morning. Because you are arriving fasted you should not take the dose of insulin before your appointment time. Please contact your Specialist Diabetes Nurse if you require any further advice.

Can other children attend?

We are unable to provide child care and other children cannot come into the scan room. Please bring along an adult who can take care of other children while the MRI scan is taking place.

What happens when I arrive at the hospital for my MR Enterography appointment?

Your appointment letter will specify what ward to attend on the day of the scan. The staff will prepare you for your MRI scan which will take approx. 1 ½ hours.

You will be asked to drink about 1.5 litres of liquid steadily over approximately 40 minutes. A cannula will be inserted into one of the veins in your arm.

Once you are ready for your MRI scan, the staff on the ward will direct you to Octopus Radiology.

What does MR Enterography involve?

Once you have been greeted at reception by a member of staff, a radiographer will run through the MRI safety questionnaire you have completed. You will be given the opportunity to ask any questions you may have. The radiographer will ask you if you are happy for the scan to proceed.

Before entering the scan room all metal items need to be removed from your body and placed in a locker or left with a companion. This will include watches, piercings, jewellery, hair clips, metal plate dentures, coins, credit cards, keys and mobile phones. You may be asked to change into metal free clothing especially if you are wearing sportswear with metal threads.

When safe and ready the radiographers will ask you to lay down on the scan table and a piece of equipment will be laid across your abdomen. You will be given either ear plugs or headphones to protect your ears from the noise of the scanner, which makes a loud, knocking noise when the scan is taking place. There is a TV/DVD player in the MRI scan room, so you can choose something to watch during the scan. Alternatively, you can bring a DVD of your choice or listen to your iPod. You will have a buzzer in your hand so that you can alert the radiographer at any point.

Your abdomen will be positioned within the middle of the scanner. The Radiographers can see you at all times and can communicate through an intercom system. Your parent can be with you in the MRI room during the scan if you choose. The MRI scan will last approximately 45 minutes. It is important that you lie perfectly still throughout the scan and follow the breathing instructions.

A muscle relaxant will be administered through the cannula into the vein. This will stop the bowel from moving during the scan and give better images of your bowel. The muscle relaxant may make your eyesight blurred and give you a dry mouth, but it soon wears off, usually around 30 minutes after the injection.

You will also receive an injection of **MRI contrast** through the cannula during the scan.

What is MRI contrast?

MRI contrast is a liquid dye that is used to enhance the appearance of anatomy during an MRI scan. It contains gadolinium and is sometimes administered to patients during MRI examinations at the request of the radiologist (a specialist doctor trained to interpret the images). It is known that a small amount of gadolinium may remain in the body after a scan where contrast is administered. However, there is no evidence that gadolinium deposition has caused any harm to patients. If you need a scan with an MRI contrast agent to help with your diagnosis or treatment, you will be prescribed the lowest dose required for a clear image to be obtained. Further information from the manufacturer is available on request.

What happens after my scan?

The liquid you drink may cause some short lived diarrhoea, so you may wish to spend a short time in the department near to a toilet before you go home. You may eat and drink as normal as soon as the examination is finished. Normal activities can usually be resumed immediately after the scan.

Radiographers cannot give you the results of your scan, but will inform you how long it will take for the results to be written and how to obtain them.

Are there any risks associated with MR Enterography?

MR Enterography is generally regarded as a very safe test. Problems can occur, but they are rare. Problems which might occur are similar to those which can happen with other methods of examining the bowel.

These include:

- Nausea or abdominal discomfort.
- The liquid you drink may cause some short-lived diarrhoea.
- Reaction to the injection of contrast.
- In the rare event of developing **painful, blurred vision** following your appointment, please go to casualty urgently as there is a small risk of precipitating acute glaucoma.