

FACTSHEET

This fact sheet is for education purposes only. Please consult with your doctor or other health professionals to make sure this information is right for your child. If you would like to provide feedback on this fact sheet, please visit: www.schn.health.nsw.gov.au/parents-and-carers/fact-sheets/feedback-form.

MRE Scan for Crohn's Disease

What is an MRE Scan?

Magnetic Resonance Enterography (MRE) is a special type of resonance imaging (MRI). The scan is done using contrast material to produce detailed images of the small intestine and bowel. It is used to work out if Crohn's disease is in the small bowel and if there are any complications from the Crohn's, such as bowel narrowing.

It is an MRI scan, which uses a powerful magnetic field and radio waves to produce detailed images of any part of the body. The scan usually takes between 30 and 60 minutes, depending on the request from the doctor.

What is contrast?

Contrast is a clear liquid, which makes the images easier to see. Contrast for this scan will need to be taken orally, at Sydney Children's Hospital Randwick, this contrast is called Osmolax and it is clear and is tasteless. At The Children's Hospital at Westmead, diluted Metamucil is given.

Sometimes Intravenous (IV) contrast is needed to be given through a tiny straw (cannula), which is inserted into the hand/arm before the start of the scan.

How to prepare

To make sure that the bowel is empty, no food is to be eaten 6 hours before to scan. No fluid is to be drunk 2 hours before to scan.

Bring your child's favourite cordial, not fruit juice, on the day to mix with the oral contrast.

You will be asked to complete and sign a questionnaire on your child's behalf. It is important that you fill out the form correctly and ask any questions you have before going in to the scan room. It is important that you give information on whether your child has any medical devices (such as a pacemaker) or metal bone appliances (such as pins or plates), as they may interfere with the magnet, or the magnet may interfere with the pacemaker. *(For CHW this must be filled out before the procedure is booked).*

What to expect on the day of MRE scan?

The MRE scan is done in the Medical Imaging Department at The Children's Hospital at Westmead and at Prince of Wales Medical Imaging at Sydney Children's Hospital Randwick

- When you arrive please check in at the MRI desk.
- A member of staff will greet you and your child. If your child needs IV contrast, numbing cream will be applied to the relevant area on your child's hand/arms for cannulation.
- As MRI's are giant magnets, staff will go through a metallic surveillance form for both your child and whichever carer is going in the MRI with them.
- One parent/carer is allowed to accompany your child in the scan room.
- Your child will be given the oral contrast (mixed with cordial) to start drinking, from a polystyrene cup. Straws can be given if needed.
- Your child will be asked to drink at least one litre of contrast over a **60-90 minute** period. You will then need

to wait for 30 minutes, before your child must drink two glasses of water, before the scan begins.

- Your child may be asked to change into a hospital gown.
- If your child has numbing cream on, the cannula will be inserted prior to the scan for IV contrast.
- Your child will need to lay still for the length of the scan, which will be about 60 minutes, on some machines they are able to watch a movie during the scan.
- The magnet makes loud unusual sounds. It is helpful to play these sounds to children before their scan to stop them feeling frightened
- The MRI machine is a large tunnel which can feel claustrophobic for some people. It is important to talk to your child about this and if possible practice laying still in a confined space – like a play tunnel or under their bed.
- **Although the machine makes lots of strange noises, after the cannula has been inserted the scan itself is not painful as is simply involved laying on the scanning bed inside the tunnel.**
- Your child will be instructed to hold their breath, for various amounts of time throughout the scan.
- During the scan IV contrast may be administered by a nurse, who will enter the room.
- Once the scan is complete, your child's cannula will be taken out. They can then change back into their clothes before heading home.

Advice for parents

- It is very important that your child drinks the oral contrast, as it will allow for a successful scan. It is important to talk to them about this before the scan i.e. "You will need to have a big drink before they can take your pictures ... and so we can get the best pictures we need you to drink the whole drink."
 - It can be helpful to practice breath holding techniques with your child, at home, before the scan. Explain to your child, that breath holds, 'will allow the people at the hospital to take the best pictures'.
 - There are two ways to practice breath holds; on the inhalation (breath in) and on the exhalation (breath out).
- To hold your breath in:**
- Ask your child to take a deep breath in until they can't breathe in any more, stop. It helps to keep the mouth, cheeks and tummy still, this way they won't keep breathing through their nose. Your child will need to hold their breath for 10-20 seconds at a time, then they will get to take another breath before the next breath hold. This can seem like a long time at first, but if you practice at home it gets a lot easier.

To hold your breath out:

- Ask your child to take a deep breath in, then blow all the air out through their mouth. When they can't blow anymore, stop, asking them to keep their mouth, cheeks and tummy still. This can be tricky at first, but gets easier if you practice.
- Before your child has their pictures taken, on the day, a radiographer or nurse may ask your child to show them how they hold their breath. They will also tell you which kind of breath holds your child will need to do.
- During the scan, the radiographer will give instructions to your child, over a speaker. They will be told when they need to hold their breath and when they can breathe normally.
- The MRI scanner makes loud sounds, when the images are being taken. For more information please refer to the MRI factsheet available at: www.schn.health.nsw.gov.au/parents-and-carers/factsheets
- You and your child may be waiting for long periods of time on the day; it is good to bring items with you to support your child; i.e. favourite book, IPAD, card game, drawing materials etc.¹

Remember:

- Women who are pregnant are not allowed to enter the scan room, therefore an alternative family support person is recommended.
- If you have other children, under 18 years, it is suggested where possible, that these children do not accompany you to the appointment, as there is limited waiting space in the Medical Imaging area and they are not allowed into the scanning room with you.

For more information on helping children cope with procedures, please refer to SCHN factsheets from the following web-site:

www.schn.health.nsw.gov.au/parents-and-carers/factsheets

If your child needs frequent procedures, and experiences anxiety, you can contact the Child Life Therapy Departments at:

- Sydney Children's Hospital - 93826984
- The Children's Hospital at Westmead - 98453717
- John Hunter Children's Hospital – (02)49855410

¹ REFERENCES:

The Royal Children's Hospital Melbourne. 2015. *Holding your breath* [ONLINE] Available at: http://www.rch.org.au/rch/apps/okee/Holding_your_breath [Accessed 24 June 15]