

General Patient Information – Preparing for your MRI

Small Bowel Series

Introduction

Your child has been referred by their doctor to have an MRI Small Bowel Series. This leaflet explains what the examination involves and what to expect when you come to the hospital. It may not answer all your questions, so if you have any queries or concerns, please call the telephone number on your appointment letter. An app has been developed by the department to help explain the scan to your child; “Virtual Reality MRI” is free to download from the App Store or Play Store.

It is **important** that you **read this leaflet carefully**, even if you have had this procedure before.

Preparation

Your child will need to fast from all food and drink for 4 hours before the scan.

Please attend the department 1 hour and 30 minutes before your scan time. Your child will be required to drink 1 litre of fluid over this time, which enables the small bowel to be seen clearly on MRI. This fluid can have a mild laxative effect, so your child may experience some loose motions after the scan. In addition, your child will need to have a cannula inserted prior to the scan. More information on this is below.

What is an MRI scan?

MRI means Magnetic Resonance Imaging and this system uses a powerful magnet, radiofrequency waves and a computer to produce detailed images of any part of the body. These images will help doctors diagnose and treat medical conditions. The MRI scanner does not use x-rays and the examination is painless. Your child’s MRI scan will be performed by a radiographer.

How long will it take?

You may be in the department for 2-2½ hours. The scan usually takes between 20 and 30 minutes.

Please note, we endeavour to keep to appointment times, however you may be delayed if an emergency arises. If so, we will keep you informed of the estimated delay time.

Are there any risks or side-effects associated with MRI?

MRI is a very safe procedure. There are no known side-effects associated with being exposed to the magnetic field and radio waves of an MRI scan. There are no risks from the magnetic field itself, but there are risks in taking metallic objects into the field. All patients are asked a series of questions before the scan to eliminate these risks. Some patients may experience a heating sensation during the scan. Please advise the radiographer immediately if you are uncomfortable.

Safety Notice

Please note there can be a risk in entering a strong magnetic field.

You **must** contact the department if your child has any of the following:

- a pacemaker or implanted cardiac device
- aneurysm clips
- a cochlear implant
- a neurostimulator
- **ever** had metal in their eyes or metal injuries to any part of your body

Failure to contact the department about any of the above can result in a substantial delay and/or a wasted journey.

Before you come to the department

You **must** confirm your appointment.

The MRI Appointment

A staff member will go through a safety questionnaire with you, explain the procedure, and answer any questions you may have. It is important that you do not enter the scan room with anything metallic. You and your child will be asked to remove any jewellery, piercings or other metal items. Please do this before attending for your scan if possible, as we may not be able to perform the scan if they are not removed. Do not take credit cards, mobile phones or hearing aids into the scan room as the magnetic field can damage them and stop them working. Your child will be asked to change into a hospital gown if their clothing has metal fastenings or highly decorated logos/patterns. In addition, sportswear cannot be worn for the scan. Parents are reminded that if they do bring personal belongings with them to the scan, they are responsible for these items. You will be provided with a locker to secure any valuables during the scan.

If you or your child have a FreeStyle Libre glucose monitoring system you must remove it immediately prior to the MRI procedure. The effect of MRI on the performance of the system has not been evaluated. The exposure may damage the sensor and may impact proper function of the device which could cause incorrect readings. A new FreeStyle Libre monitor can be reapplied immediately after the MRI procedure.

The MRI Scan

The scanner is shaped like a large, hollow cylinder which is open at both ends and will remain open throughout the scan. Your child will go into the scanner either feet or head first. A piece of equipment called a coil will be placed over their stomach. During the scan they will hear rhythmic tapping sounds which may become quite loud. This is normal and they will be given headphones to protect their ears from the noise.

The computer, which operates the MRI scanner, is in a separate room to keep it away from the magnetic field. There is a large window where the radiographer can see them. There is a 2-way microphone so that the radiographer can talk to them during the scan. It is important that they remain very still to ensure good quality

images. The scan itself takes approximately 20-30 minutes but may be longer for certain examinations.

Will my child need an injection?

The majority of patients attending for an MRI small bowel series will require an injection of buscopan. This is an anti-spasmodic drug, which relaxes the bowel to ensure better pictures.

Some patient also require an injection of contrast agent. Both injections will be through the same cannula.

The contrast agent contains gadolinium, which may occasionally cause an allergic reaction. The most common symptoms of allergic reactions are headaches, nausea and vomiting, sneezing, wheezing, a runny nose, eye irritation, itching, hives, a skin rash, swelling of the face, mouth, hands, feet or throat, difficulty in breathing, and low blood pressure. Before your child’s scan, we will check whether they have had any previous allergic reactions. Their kidney function may also be checked, as the contrast is not recommended in some cases where there is renal impairment.

Contrast agents have been in clinical use worldwide for 30 years. Hundreds of millions of doses of contrast agents have been given to patients throughout the world since these were first developed and approved for human diagnostic use in 1988 in the USA. It is possible that a tiny amount of the gadolinium within the contrast agent that we administer can stay in several parts of the body for months or years. The long-term possible effects of this have not yet been determined, but to date all studies of the issue have found no harmful effects from this retention. We will always administer the lowest dose required to give us the most effective result for you.

After your scan

Once the examination is complete, your child can get dressed and go home. If they have had an injection of contrast, they will need to stay in the department for 20 minutes following the injection. The radiographer will not be able to tell you the results of the scan. A radiologist will report the scan and the report will be sent to your referring doctor. This is usually completed within 10 days of your scan.

Is there an alternative to an MRI scan?

Your doctor has decided that an MRI scan would be the most useful in your case. The examination will help your doctor assess you more fully and plan any further treatment that might be necessary. If you would like more information about alternative imaging modalities including not having the examination, please speak to your doctor managing your care.

Further information

A free virtual reality App is now available on the Apple and Android App stores and is very useful for those who wish to experience what MRI is like before coming to the hospital. Search for virtual reality MRI or use following link:

https://play.google.com/store/apps/details?id=net.belfasttrust.vrmri&hl=en_GB

Image sharing

Your images will be electronically stored on the hospital picture archiving system. This data can be accessed throughout the Belfast Health and Social Care Trust and other doctors and health care professionals who are directly involved in your care. The ability to share images and radiological reports will improve the safety and quality of your care by ensuring that the right information is available in the right place at the right time.

In order to improve the medical services we provide we may also use your data as anonymously as possible for internal audit and medical education. If you would prefer that your data is not used for these purposes, please inform a member of staff when you attend for your examination.

If your data is to be used for research, then a separate consent process will be used. You will be asked for your consent, should this be the case.

Contact us

If you have any queries, we will be happy to answer any questions on the day of your MRI scan or you can contact us on the number given on your appointment letter.

Feedback

We hope you found the information in this leaflet helpful. If it did not tell you what you needed to know or you would like to provide any feedback on your experience please let us know so that we can make any necessary improvements.

You can provide feedback on your experience:

Telephone: **028 9504 8000** (Monday-Friday: 9am-4pm)

Textphone: **18001 028 950 48000**

By email: compliments@belfasttrust.hscni.net

By email: complaints@belfasttrust.hscni.net

By completing an online form:

<http://www.belfasttrust.hscni.net/contact/FeedbackForm.htm>

Care Opinion



We invite you to share your experience by clicking the following link:

<https://www.careopinion.org.uk/>

or by scanning the following QR code on your smartphone or tablet:



Language and accessible support services

Deaf/Hard of Hearing

If a Sign Language interpreter is required, please either telephone **028 9615 8900** via the Sign Video remote interpreting service (<https://signvideo.co.uk/deaf-community/>) or email us at MPHAdminFOH@belfasttrust.hscni.net and we will arrange one for your appointment. Please have your H&C number ready when calling or include it in your email. This can be found at the top right corner of any Health and Social Care letters you may have received.

If you are unable to hear on the phone and need to contact us with regards to your appointment you can email us at MPHAdminFOH@belfasttrust.hscni.net.

Do you need this information in another format or language?

The Trust has access to interpreting and translation services. If you need this information in another language or format, including Braille, large print, CD, audio tape please contact the telephone number **028 9615 8900** or e-mail address MPHAdminFOH@belfasttrust.hscni.net, and we will do our best to meet your needs.

Polish - Czy potrzebujesz tych informacji w innym formacie lub języku?

Fundusz ma dostęp do usług w zakresie tłumaczeń ustnych i pisemnych. Jeśli potrzebujesz tych informacji w innym języku lub formacie, w tym w piśmie Braille'a, dużym druku, na płycie CD, kasecie magnetofonowej, skontaktuj się z nami pod numerem telefonu lub adresem e-mail **028 9615 8900 / MPHAdminFOH@belfasttrust.hscni.net**, a my dołożymy wszelkich starań, aby spełnić Twoje potrzeby.

Arabic - هل تحتاج هذه المعلومات بصيغة أو بلغة أخرى؟

تستطيع الجمعية توفير خدمات الترجمة الفورية والتحريرية. إذا احتجت هذه المعلومات بلغة أو بصيغة أخرى، بما فيها صيغة برايل Braille أو صيغة بالأحرف الكبيرة، أو في سي دي CD أو في شريط مسموع، يُرجى الاتصال برقم التليفون أو عبر البريد الإلكتروني MPHAdminFOH@belfasttrust.hscni.net / 028 9615 8900، وسوف نبذل قصارى جهدنا في تلبية احتياجاتك.

Lithuanian - Ar jums reikia šios informacijos kitu formatu ar kalba?

Tarnyba gali suteikti vertimo žodžiu ir raštu paslaugas. Jei reikia šios informacijos kita kalba ar formatu, įskaitant Brailio raštą, didelį šriftą, kompaktinį diską, garso įrašą, skambinkite telefonu arba susisiekite el. paštu MPHAdminFOH@belfasttrust.hscni.net / 028 9615 8900 ir mes padarysime viską, kad patenkintume jūsų poreikius.

Romanian - Aveți nevoie de aceste informații într-un alt format sau altă limbă?

Trustul are acces la servicii de interpretariat și traducere. Dacă aveți nevoie de aceste informații într-o altă limbă sau într-un alt format, inclusiv Braille, tipărire cu caractere de mari dimensiuni, CD, înregistrare audio, atunci vă rugăm să ne contactați la numărul de telefon sau la adresa de e-mail MPHAdminFOH@belfasttrust.hscni.net / 028 9615 8900, iar noi vom face tot posibilul pentru satisfacerea necesităților dumneavoastră.

Tetum - Ita presiza atu informasaun ida ne'e iha formatu ka lian seluk ka lae?

Fidusiáriu ida ne'e iha asesu ba servisu durubasa no tradusaun. Se Ita presiza informasaun ida ne'e iha lian ka formatu seluk, inklui letra Braile, letra boot, CD, kasete audio, entaun favór telefone númeru ka enderesu e-mail MPHAdminFOH@belfasttrust.hscni.net / 028 9615 8900, no ami sei halo esforsu tomak atu kumpre Ita-nia nesesidade sira.