



Diagnostic Imaging

MRI Small Bowel

Introduction

To help you prepare for your MRI Small Bowel examination, please read carefully the information in this leaflet.

Before your MRI scan appointment

We need you to fast (not eat) for six hours prior to your appointment. You may have clear fluids and take any medication. This is to ensure that your bowel is empty so that we can obtain clear images.

Please allow at least one hour for the appointment.

On Arrival

Book in at Diagnostic Imaging reception (they will guide you to the MRI department).

- On arrival, you will be greeted by an MRI radiographer or assistant who will ask you to complete an MRI safety questionnaire
- You will also be given a drink called Mannitol and asked to drink it steadily over the following 30 minutes. Mannitol is a type of contrast agent (dye) that highlights the bowel allowing better visualisation on the MRI images
- Closer to your appointment time, the MRI radiographer will escort you to the changing cubicle where they will check the MRI safety questionnaire, discuss the examination with you, ask you to change into a hospital gown and place all clothes and valuables in the lockers provided
- Once you are changed, please remain in the cubicle. The MRI radiographer will return to place a cannula (a small plastic tube with a needle) to enable us to administer (during the scan) a muscle relaxant (Buscopan®) and a contrast agent (Dotarem®)
- At this point, you are ready for the MRI scan and the MRI radiographer will call you into the scan room when they are ready.

During the Scan

- You will be asked to lie on your front, on the MRI scan table. Your feet will go into the scanner first and you will be able to look out of the scanner. The radiographer is able to see you at all times during the scan
- A piece of equipment called a coil (resembling a large foam pad) will be placed on your back in order to acquire the images
- The MRI radiographer will administer the Buscopan®
- As the scanner makes a lot of noise, you will also be provided with earplugs and headphones to protect your ears during the scan. You will also be given a call button so that you can contact the radiographer if you need to during the scan
- You will then be positioned in the scanner and the scan will begin. During the scan, you will be asked to follow some breathing instructions which requires you to hold your breath for up to 20 seconds
- In total, the scan will take approximately 20 minutes to complete
- During the scan, it is possible to experience tingling in the hands and feet and you may experience an increase in body temperature. These are normal sensations. Please use the call button if you feel uncomfortable.

After the Scan

The MRI radiographer will enter the scan room and remove all the equipment, including the cannula from your arm. The radiographer will check how you are feeling and will escort you back to the changing room to change. Once you have changed, and provided that you are feeling alright, you may leave. If you are feeling unwell, you must inform a member of staff immediately.

You will not receive results from the scan at this time. The images are reviewed by a Consultant radiologist and a report will be issued to the referring clinician.

Please Note:

- **Diabetics** - It is important that you maintain your normal carbohydrate intake so that you can continue with your insulin injection or tablet dosage. We recommend energy drinks or squash. Please replace sweet foods or drinks with diabetic equivalents. Test your blood glucose level regularly. On the day of your MRI scan examination, take your normal dose of insulin and a sufficient amount of fluid
- **Pregnancy** - If you have reason to believe that you are pregnant, please inform the imaging department before attending your appointment. The telephone number is on the top of the appointment letter
- **Breastfeeding** - If you are breastfeeding, we advise that you do not breastfeed for 24 hours after receiving the contrast agent as a safety precaution.

Further Information

Further information about Mannitol and the muscle relaxant Buscopan® is provided on the following pages.

If you have any further queries about the examination, please do not hesitate to contact the MRI Department on 01305 255397.

Buscopan® (Muscle relaxant)

What is it?

Buscopan® contains a medicine called Hyoscine-N-Butylbromide which belongs to a group of medicines called antispasmodics.

Why is it used?

It is used to relieve cramps in the muscles of your stomach, intestines, bowels and bladder. For procedures such as CT Colonograms, MRI pelvis scans (including prostate, bladder, gynaecological examinations) and barium enemas, it can help relieve spasm and discomfort as well as improve image quality (to aid diagnosis).

How is it given?

1 ampoule (20mg) will be injected into a vein by a radiographer or radiologist (doctor).

Possible Side effects

The following side effects may happen with this injection, although not everyone experiences them:

- **Blurred Vision** - you may experience blurred vision for a short period after the injection. This should wear off after about 30 minutes
- **Dry Mouth** - you may experience dryness in the mouth for a short period after the injection
- **Dizziness and increased heart rate** - can occur following injection for a short period.

Warnings

Do not drive or operate machinery after an injection of Buscopan® until any blurred vision or dizziness has gone.

Advice

- In the rare event that following the examination you develop painful, blurred vision in one or both eyes, you **must** attend hospital immediately for assessment
- If any of the side effects persist, please seek medical advice
- If you have any unexplained abdominal pain, nausea, change in bowel movement, low blood pressure or dizziness, contact your doctor.

Mannitol (Drink)

What is it?

Mannitol (Mannitol EP 200.00gm) is a sugar-based solution that is used as a contrast agent for examinations of the small bowel. It can also be used as an intravenous infusion for treatment purposes.

Why is it used?

It is used to highlight the small bowel which means that it will be easier to visualise on the MRI scan images.

How is it given?

180mls of Mannitol solution is diluted in 1.5 litres of water. You will be asked to drink as much of this mixture as possible (over 30-40 minutes) to ensure good visualisation of the bowel. Squash can be added to alter the flavour if required.

Possible Side Effects

Mannitol does have a mild laxative effect which may cause you to have mild diarrhoea for a few hours after the scan. There is a toilet in the waiting area for your convenience.

On rare occasions, it can also cause nausea, vomiting, headaches and dizziness.

Advice

It is advisable to take into account the above side effects when planning what you will do in the couple of hours immediately after the scan.

If the side effect persists, please contact your doctor or the Emergency Department.

Contact Numbers:

We hope that you have found this leaflet useful. If you have any questions or you are worried about anything, please contact the MRI department on 01305 255397.

You can also contact NHS direct 24 hours a day on 0845 46 47 or www.nhsdirect.nhs.uk

About this leaflet:

Author:	Hannah Peel, MRI Superintendent
Written:	March 2019
Updated & Approved:	July 2022
Next Review Date:	July 2025
Edition:	v4

If you have feedback regarding the accuracy of the information contained in this leaflet, or if you would like a list of references used to develop this leaflet, please email pals@dchft.nhs.uk



INTEGRITY | RESPECT | TEAMWORK | EXCELLENCE

© 2022 Dorset County Hospital NHS Foundation Trust
Williams Avenue, Dorchester, Dorset DT1 2JY
www.dchft.nhs.uk