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# CT Colonography (CTC) with Citramag and Senna

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**CT Scanning Department**

**Patient Information**



**NHS**



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## What is a CT Colonography?

Your doctor has asked us to carry out an examination of your large bowel (colon) using a CT scanner. This is called a CT Colonography (CTC) which is a specialised type of test.

CT stands for computed tomography and is a specialised type of scan that uses x-rays to produce an image. To obtain the images, you will lie on a bed, which moves you through the centre of the scanner. Most of the time you can see out of one side of the scanner, therefore it is much less of a problem for people who feel claustrophobic. To prevent blurred images, you will be asked to hold your breath and keep still for a short time during the scan.

As CT scans involve a small radiation dose, women who are pregnant, or think they may be pregnant, should contact the department before starting the preparation.

## What does the examination involve?

In the privacy of the CT scanning room, the radiographer will insert a small tube (catheter) into your back passage. This tube allows the radiographer to inflate the bowel with carbon dioxide so that the bowel and lining can be seen more clearly. We will ask you to hold this gas in which may cause a bloating sensation. This may be a little uncomfortable, but should not be painful.

During the scan you will be given two injections. The first is a muscle relaxant (an anti-spasmodic drug) that reduces the natural movement of your bowel for the short duration of the scan to make you more comfortable. We will inject this into the muscle in the top of your arm. This injection may cause slight blurred vision – this is temporary but we advise that you do not drive yourself home after the examination.

The second injection is an x-ray dye (contrast medium) given during the scan to outline your blood vessels. We will give this through a cannula inserted into a vein in your arm or hand. Some possible side effects from this injection include a warm sensation through the body and a metallic taste in the back of the throat.

A scan will then be carried out with you lying first on your front and then on your back. The test should take about half an hour but you should plan to be in the department for up to two hours.

## After the examination

At the end of the examination the tube will be removed. You may want to visit the toilet to expel some air, although the gas will be expelled from your bowel naturally over the course of the next few hours. The gas may cause some bloating and discomfort, but this should pass as it is released.

We will check that you are comfortable before you leave and you will be able to eat and drink as normal.

The results will be sent to the consultant caring for you at The Royal Marsden and will be discussed with you when you have your next clinic appointment.

## Are there any risks?

CT Colonography is generally regarded as a very safe test and everything will be done to ensure your safety and comfort, but there are risks associated with any procedure. Problems can occur, but they are rare. These include:

- Abdominal discomfort – this should resolve as soon as the test is finished
- A small tear to the bowel wall – the risk of this is one in 3000; we will advise you of the possible signs and symptoms and what to do if this occurs
- Reaction to the contrast media injected
- Eye pain and blurred vision within the first 24 hours – this can occur due to the injection given to relax the bowel, however this is very rare. If this happens, you should contact your GP or your local A&E department.
- Exposure to radiation – there is a small risk as with any x-ray examination. We will keep the dose as low as possible.

If you have any queries, please do not hesitate to call either the CT scanning department, or your own medical team.

## Alternatives to CT Colonography

CTC is an alternative to having an optical colonoscopy, the standard way to examining the large bowel. In this, a thin tube with a camera on the end (colonoscope) is passed into the back passage and moved up and around the bowel. The procedure is more invasive than CT Colonography and usually requires sedation. However, it does allow tissue to be removed for testing (biopsy) or polyp removal, if needed.

Often, CT colonography is used where the optical colonoscopy has not been able to be successfully completed, which can happen for a variety of reasons. A colonoscopy can only tell the doctors information about the inside of the bowel, whereas CT colonography can also give information about the other structures inside your abdomen.

## What preparation will I need?

Your bowel must be completely empty of waste material (faeces) to have a clear view. If it is not, the procedure may have to be repeated. This leaflet explains how you should prepare for your CTC examination.

You will need to take two different types of laxatives. One laxative is a powder called Citramag which comes in a sachet. You will need to take two sachets. The other laxative is a tablet called Senna. You will need to take 10 of these tablets. This is taken with a barium drink called Microcat which helps to outline the bowel.

You must also follow the special low fibre diet set out in this leaflet for two days before the procedure. If you feel unable to follow any of the dietary or medication instructions, or you have any questions, please contact the CT Scanning Department (contact details on page 10).

## What will the bowel preparation do?

The medication may have a powerful laxative effect so you will need to stay close to a toilet the day before your examination. This is intended and will 'clear out' your bowel.

You will need to complete the preparation as directed, otherwise your bowels may not be clear enough to perform the procedure and it would have to be repeated. There is a small possibility that the medication could affect you by causing:

- Dehydration
- Light headedness
- Low blood pressure
- Kidney problems.

You should continue to drink clear fluids to prevent becoming dehydrated and if you feel light headed, you could have a glucose drink such as Lucozade or other sugary drinks.

You may experience stomach cramps with the diarrhoea and this is normal. If you have severe stomach pains or vomiting, take the preparation more slowly until these feelings stop. If they continue, seek medical advice from your GP or contact the CT Scanning Department.

Alcohol-free and fragrance-free wet wipes and soft toilet tissue may help minimise the expected irritation from wiping. You can use a barrier cream such as zinc and castor oil or petroleum jelly (Vaseline) on your bottom to prevent soreness.

## When do I start to prepare for my CT Colonography?

The following section describes how to take the preparation as well as the special diet which needs to be followed. There is also a section on how to take your regular medication including the contraceptive pill, where appropriate.

### **Seven days before your procedure**

- Stop taking iron tablets or any vitamin tablets containing iron – iron makes everything inside your bowel black, making it difficult for the doctor or nurse examining your bowel to see everything.
- Stop taking any laxatives that will cause bulk in your bowels (such as Fybogel or Normacol).

### **Four days before your procedure**

- Stop taking any medications that may cause you to become constipated, for example lomotil, loperamide (Imodium), or codeine phosphate.
- Unless you have been told otherwise, you should continue to take your other regular medicines as usual including on the day of the procedure, but with only a little sip of water on the day of the test.

### **Two days before your procedure, follow the diet on page 6**

You must follow the low residue diet shown on page 6, only eating and drinking from the allowed list.



| <b>Food Group</b>    | <b>Allowed</b>  | <b>Avoid</b>   |
|----------------------|---|--|
| Meat, fish, eggs     | All meat, poultry, fish and eggs  | None   |
| Starchy foods        | White bread, rice, pasta, cous cous, noodles, potatoes (no skins)<br>Cornflakes, Rice Krispies, Coco Pops, Frosties<br>Plain biscuits such as Rich Tea, shortbread, Malted Milk, Gingernuts, Cream Crackers, rice cakes<br>Cake – only if made with white flour | Wholemeal, wholegrain and seeded or granary breads or breads containing fruit and nuts including some rotis, chapattis, naan, parathas<br>Brown rice, wholegrain pasta<br>Porridge, Branflakes, All Bran, Weetabix, Shredded Wheat, Shreddies, any cereal containing fruit, nuts or oats, wholegrain cereals such as Cheerios<br>Whole wheat biscuits such as Digestives, Ryvita, oatcakes<br>Any biscuits containing fruit, nuts or oats such as Garibaldi, Fruit Shortcake, Hobnobs<br>Cakes containing fresh or dried fruit, vegetables, oats or nuts |
| Fruit and vegetables | None  | All fresh, cooked, tinned and dried fruit and vegetables including beans, lentils and pulses   |
| Dairy foods          | Milk, plain yoghurt, cheese, ice cream, cream, butter and milky puddings  | Any dairy foods containing fruit, nuts or herbs  |

| <b>Food Group</b> | <b>Allowed</b>  | <b>Avoid</b>  |
|-------------------|---|---|
| Drinks            | <p>Fruit juice, squash, sparkling drinks</p> <p>Tea, coffee and coffee-based drinks, hot chocolate, Ovaltine, Horlicks</p> <p>Have plenty of fluid to drink (aim for 2–3 litres).</p> | <p>Any drinks with red or purple colouring, such as Ribena, Vimto, Red Bull</p> <p>Smoothies and fruit juices containing pulp or bits</p>   |
| Others            | <p>Chocolate, sweets, spices, salt, pepper, consommé (clear soup)</p>   | <p>Any chocolate or sweets containing fruit, nuts or seeds such as sesame snaps, nougat, Florentines</p> <p>Bombay mix or any snack made with chickpea flour</p> <p>Fresh and dried herbs</p> <p>All soups except consommé (clear soup)</p> <p>Any sweets containing red or purple food colouring</p> |

If you are taking any nutritional supplements or are on tube feeding, please discuss this with the CT Scanning Department.

## **One day before your procedure**

10 Senna tablets, two sachets of Citramag and a bottle of Microcat are enclosed. Senna and Citramag are medicines which will encourage your bowel to empty. Microcat outlines your bowel on the scan. Please follow the instructions carefully to make sure your bowel is empty - this is essential for a proper examination.

**7am:** Have a good breakfast of food from the list on page 6 and 7.

After this, do not eat any solid food until after your examination. You should, however, drink plenty of clear fluids and drinks from the list on page 7. This can include water, black tea and coffee, squash/cordial (not red or purple), fizzy drinks, clear jellies, clear soups and consommés, and meat extract drinks such as Bovril.

**2pm:** Start the bowel preparation as follows:

- Take all 10 Senna tablets with plenty of water.
- Make up the Microcat by filling the bottle with water to the line on the outside near the top (around 500mls). Shake the bottle and drink one cup of the Microcat.

**4pm:**

- Dissolve the first sachet of Citramag powder in a cup of cold water (approximately 150ml). Stir for two to three minutes and then drink the solution. Sometimes as the Citramag dissolves, the solution becomes warm and it may froth up a little. If this happens, wait until it cools sufficiently before drinking it.
- Shake the bottle of Microcat and drink one cup.

**6pm:**

- Dissolve the second sachet of Citramag as above and drink the solution.
- Shake the bottle of Microcat and drink the remaining contents.

During the day, make sure you drink at least one glass of water (approx. 250mls) every hour whilst the effects of the medication continue.

You should expect frequent bowel movements (diarrhoea), shortly after you take the medication. Some intestinal cramping is normal. You can use a barrier cream such as zinc and castor oil on your bottom to prevent soreness. It is advised that you should stay within easy reach of a toilet once you start taking the medication.

If you develop the symptoms of dehydration and cannot increase your fluid intake, then you should seek medical attention. These symptoms include:

- Dizziness or light headedness on standing up
- Thirst
- Reduced amount of urine passed.

### **What about my regular medication?**

You should continue to take your other regular medicines with a sip of water as usual and on the day of your procedure. You will be informed if you need to stop any of your medication. Avoid taking your medications within one hour of taking the Citramag as they may not be properly absorbed.

Women taking the oral contraceptive should be aware that taking bowel preparation might prevent the absorption of the contraceptive pill. Additional contraceptive precautions should be taken until the next period begins.

## What happens afterwards?

You may experience some discomfort in your abdomen. This is common after the procedure due to the gas (carbon dioxide) that we have put into your bowel for the examination. This will be absorbed naturally by your bowel over time.

It may take some time for your bowel movements to return to normal due to the bowel preparation (laxative) taken in preparation for this examination. Please use the toilet facilities before you leave the imaging department, if needed.

You may now eat and drink as normal. Please make sure you have plenty of fluids in the next 24 hours to ensure that you stay well hydrated.

The results of this examination will be available from your Royal Marsden consultant in 7–14 days.

## Contact details

For any queries or medical advice, telephone your GP surgery or out of hours service (your GP 24 hours number), or else go to your nearest A&E (Accident and Emergency). Then inform the CT Scanning Department at The Royal Marsden.

**Chelsea**      020 7808 2562

**Sutton**      020 8661 3222

The CT Scanning Department can be contacted routinely between 8am and 5pm, Monday to Friday.

Outside of working hours you can call the main switchboard number: **020 7352 8171** and ask to speak to the Clinical Site Practitioner at Chelsea.

Alternatively, please contact:

**The Royal Marsden Macmillan Hotline: 020 8915 6899**

(available 24 hours a day, 7 days a week)

Please attend the Accident and Emergency Department immediately at your nearest hospital if following the procedure you experience:

Discomfort in your abdomen that persists for more than a few hours, or becomes more severe.

**and / or**

After the muscle relaxant (Buscopan), you develop pain and redness in both eyes and blurred vision, which can occur in the 24 hours after the test.

Please take this information with you to the hospital.

Should you require information in an alternative format, please contact The Royal Marsden Help Centre.

## **Sources of information and support**

Please talk to the clinical staff responsible for your care, or alternatively contact the Patient Advice and Liaison Service (PALS) on 0800 783 7176.

## References

This booklet is evidence based wherever the appropriate evidence is available, and represents an accumulation of expert opinion and professional interpretation.

Details of the references used in writing this booklet are available on request from:

The Royal Marsden Help Centre

Telephone: Chelsea 020 7811 8438 / 020 7808 2083

Sutton 020 8661 3759 / 3951

Email: [patientcentre@rmh.nhs.uk](mailto:patientcentre@rmh.nhs.uk)

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Should you require information in an alternative format, please contact The Royal Marsden Help Centre.

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