

Computed tomography colonography with Gastrografin

Information for patients



What is computed tomography colonography (CTC)?

Computed tomography colonography is a CT scan that looks at the large bowel (colon) and abdomen. It is used as an alternative to a Colonoscopy.

A trained member of staff will place a thin tube into your rectum. Gas is then put into your colon through the tube to distend (expand) your colon. A CT scan is then performed to take pictures of your bowel.

You will normally be in the scan room for no longer than 30 minutes, and the scan itself usually takes around 10 minutes.

Who will perform the test?

A senior radiographer or a radiologist will carry out the examination.

How do I prepare for the test?

You will need to drink the Gastrografin liquid to prepare for the test. This is to help us see your colon and its contents clearly.

A special diet is very important before the test (low residue) along with the bowel preparation (Gastrografin liquid).

You will need to start the preparation the day before your appointment.

Once you have taken the preparation, it is important to be close to a toilet as it often causes frequent loose bowel motions.

If you take iron tablets please stop taking these four days before your appointment.

Bowel preparation for CT colonography

A special diet, which is shown on pages 4-5 of this leaflet has been designed to prepare and cleanse your colon before your examination.

It is important to follow this diet properly because too much faeces in your bowel can make it difficult for the doctor looking at the scan to interpret it.

Gastrografin liquid (bowel preparation)

Although this liquid does have a slight laxative effect, it is designed to allow us to clearly see faeces in your colon.

Do not be alarmed if you haven't been to the toilet many times after drinking the liquid, your test can still be performed.

Gastrografin is safe to drink and has an aniseed taste.

If you have had a severe allergic reaction to x-ray contrast in the past we may need to give you an alternative preparation. Please telephone us for further advice if you think you may have an allergy (see attached letter).

Preparation for CT colonography

This preparation is designed to prepare the bowel prior to the examination. It may result in extra bowel movements after the first dose so it is advisable that you have access to a toilet.

The day before the CT examination

Step 1	
Before breakfast	Drink 30ml of Gastrografin liquid
Breakfast	Tea/coffee, no milk Choose one of following: <ul style="list-style-type: none">- 2 slices white bread- 1 boiled/poached egg <i>and</i> 1 slice dry toast- 50g cottage cheese <i>and</i> 1 slice dry bread
Mid Morning	Drink clear liquid such as water, fruit cordials, herbal tea, bovril or fizzy soft drinks (you can drink tea or coffee without cream or milk).

Step 2	
Before lunch	Drink 30ml of Gastrografin liquid
Lunch	Choose one of following: <ul style="list-style-type: none">- 75g meat/fish- 2 boiled/poached eggs- 100g cheese and one of following: <ul style="list-style-type: none">- 2 slices white bread- 2 egg sized potatoes, no skin- 2 tablespoons plain white pasta/rice
No further solid food, milk or dairy products until after the procedure	

Step 3

4pm	Drink 40ml of Gastrografin liquid
After 4pm	Please drink plenty of clear fluids as indicated in the Mid Morning section of Step 1.

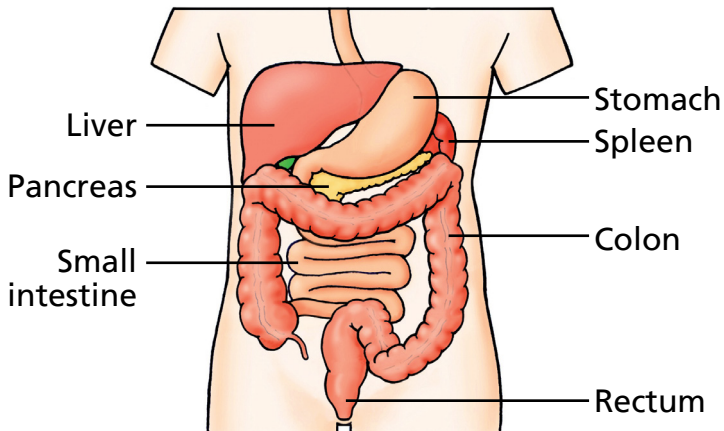
What happens during the test?

You will be asked to change into a hospital gown on your arrival at the department.

A member of staff will put a needle (cannula) into a vein in your arm before you enter the scan room. This is so that a muscle relaxant (Buscopan) and x-ray contrast medium can be injected during the scan.

We will ask you some questions and explain the procedure to you so that you understand what is happening. You can also ask us questions at any time if you are unsure about what is happening.

A small tube is inserted into your rectum and your colon is filled with carbon dioxide gas using a special machine.



Two scans are then performed, one with you lying on your back and a second with you lying on either your side or your tummy. Occasionally a third scan may be needed so that we can see the whole of the large bowel clearly.

Are there side-effects or risks from the procedure?

CT scanning involves x-rays.

Female patients: If you suspect you might be pregnant, OR if the appointment is more than 10 days after the start of your last period, you must contact the radiology department in advance to rearrange your appointment. If you are taking the oral contraceptive pill, diarrhoea can make it less effective. Continue taking the pill but use other precautions for the rest of that cycle.

The amount of **radiation** used is more than an ordinary x-ray of the chest or body and is equal to the natural radiation we receive from the atmosphere over a period of approximately three years. The risk from this radiation dose is very low.

You may have a **contrast medium injected** into a vein in order to increase the amount of information obtained from the scan. The injection usually causes nothing more than a warm feeling passing around your body. Extravasation (leakage) of contrast outside the vein very occasionally occurs.

This can cause pain and swelling at the injection site. Usually symptoms resolve completely within 24 hours. Very rarely extravasation may lead to tissue damage which may need an operation. If the extravasation is severe, a doctor will examine you before you leave the department and advise you if any further treatment is necessary.

Mild **abdominal discomfort** and bloating can occur when gas goes into the colon. We use carbon dioxide gas because the body quickly absorbs it. Any symptoms quickly pass off when the tubing is removed from the rectum and you have gone to the toilet.

Buscopan (muscle relaxant) can make your mouth dry and your vision slightly blurred, which normally lasts for 15-20 minutes.

Very rarely patients may develop pain or redness of the eyes which occurs in the 24 hours after the test. If this happens, you should go to an Accident & Emergency department immediately for a check up.

Please remember that this eye problem is very rare (it has not happened in any of our patients having CT colonography so far).

If you are having this examination as part of the **bowel cancer screening programme** or if you suffer from either a condition called **Myasthenia Gravis** or a condition called **Porphyria** please inform the radiographers when you enter the scan room for your examination.

If you have any **heart problems** such as angina, Cardiac arrhythmia or if you have had a recent heart attack then inform the radiographers when you attend for the test as you may not be suitable for the injection of Buscopan. **If you use a GTN spray for angina please bring this with you when you attend for your test.**

Perforation of the bowel can occur with this test but this is also very rare (approx 1 in 3000 tests). When it happens nearly all cases resolve without treatment, but it may require hospital admission and observation under the care of a surgeon in case an operation is needed.

Despite these small risks, your doctor believes it is advisable that you should have this examination. Do bear in mind that there are greater risks from missing a serious condition like bowel cancer by not having it.

Please remember this test is safe - serious complications are rare.

Special information for diabetic patients

General Points

- Ideally all diabetic patients should be given either an early morning or early afternoon appointment.
- If you are diabetic, feel free to telephone the radiology department for advice after you have read this leaflet on **0113 206 4713**.
- If you take insulin, telephone your diabetes liaison nurse (hospital or GP) for advice.
- If you are on a combination of long acting and short acting insulin injections, please contact the CT department, as we will need to ensure you have the first appointment of the morning.
- You will be offered a hot drink after the examination. You are welcome to bring a snack with you to eat after the test.

Instructions on how to take Gastrografin liquid to prepare your bowel for the test are given on page three of this leaflet.

As a diabetic, you are at risk of having a 'hypo' (hypoglycaemic episode/low blood sugar) if you go without food for any length of time. 'Hypo' symptoms include sweating, shakiness, blurred vision, dizziness and confusion. To avoid this, please check your blood sugar regularly if you are able.

While you are drinking the Gastrografin liquid, you are allowed clear fluids at any time. Clear fluids include sugary drinks such as lucozade, fizzy drinks and fruit juices.

Day before CT colonography

- Take insulin/diabetes tablets with your breakfast.
- Follow the dietary instructions on pages 4-5 all day.
- Once you are only taking fluids - **reduce your insulin doses by half and continue your diabetic tablets as normal.**
- Drink clear fluids right up to the procedure.
- Check your blood sugar four times during the day.
- If your blood sugar is below five, drink clear sugary drinks to avoid a 'hypo'.

Day of CT colonography

If you have a morning appointment:

- Continue to drink clear sugary fluids.
- **Do not** take any more insulin/diabetes tablets until after your examination.
- Check your blood sugar if you can before arriving at hospital.
- Bring insulin/diabetes tablets and a light meal or sandwich with you to have after the test.

If you have an afternoon appointment:

- Continue to drink clear sugary fluids.
- Take **half your normal dose of insulin in the morning only - do not take diabetes tablets.**
- Check your blood sugar if you can in the morning and before arriving at hospital.
- Bring insulin/diabetes tablets and a light meal or sandwich with you to have after the test.

After your test

How will I get my results?

You will not be given any results on the day of your test.

If your GP sent you for the test then results can be obtained from your GP around 7-10 days after your scan. If you have been sent by a hospital consultant/specialist then you will be sent an appointment to attend the relevant clinic or contacted by letter with the results.

Anything else?

Some patients may need to return for a colonoscopy appointment to look at the large bowel and take biopsies to check areas we have highlighted on the CT scan. Your doctor will tell you if this is required and explain the test to you.

Can I eat normally after the test?

Yes, eat normally but still drink plenty of fluid for the next day or so as you may still be dehydrated.

Tea or coffee and a biscuit will be offered after your scan, but consider bringing a snack with you to eat afterwards as you may be hungry after fasting.

What should I do if I develop new symptoms after my scan?

Most patients bowels return to normal within 24 hours of the scan. Complications from CT colonography are very unusual after you have left the radiology department. Abdominal pain, bloating and distension, vomiting or constipation in the initial days following your CT Colonography examination could be a sign that a perforation of the bowel has occurred.

If you do start to feel unwell in the days after the scan please call for advice on:

0113 206 8340 Monday to Friday 8:00am to 6pm

Outside these hours please call the NHS Help Line (**dial 111**)

If you have severe abdominal pain and vomiting following your CT colonography you should dial 999 for emergency assistance.

We have added a list of frequently asked questions on the back page of this leaflet.

Frequently asked questions

What if I have forgotten to take the Gastrografin liquid?

Contact the Radiology Department on **0113 206 4713**.

What do I do if I don't open my bowels after drinking the Gastrografin liquid? Don't worry, as long as you drink the liquid your test will still be able to be carried out.

What if I have a known allergy to x-ray contrast media?

Do not drink the liquid. Contact the CT department as soon as possible to ask for advice - we can give you an alternative medication to drink if necessary.

Can I take my normal medications? Yes, everything except for iron tablets, which you need to stop taking for four days before your appointment.

If you are diabetic please read the earlier section. Do not stop taking vital drugs – please refer back to the diabetes information if this affects you.

Will the test be painful? No, but you may experience some mild abdominal discomfort during the test from the gas we put in your bowel.

Will I need to bring a dressing gown? This is not essential, but if you feel more comfortable wearing a dressing gown then please bring one with you on the day of your test.

If you have any other questions that we have not answered, please telephone **0113 206 4713**