



Diagnostic Imaging

CT Colonography

What is CT Colonography and how is it performed?

Computerised tomography (CT) is a scan that uses x-rays to look at organs within the body. CT Colonography (CTC) is designed to look at the large bowel (colon) and abdomen. It is performed as an alternative test to a barium enema or colonoscopy. The examination is performed by a senior radiographer or a radiologist and usually lasts for no longer than 30 minutes, although you may be in the department for up to an hour.

A trained Senior Radiographer will carry out the examination. There will be another trained member of staff or Radiographic Department Assistant in the room during the procedure. You will be asked to change into a hospital gown when you arrive in the department which will be provided for you. You may bring your own dressing gown to wear on top if you wish.

Before the test, a small tube (cannula) will be inserted into a vein in your arm. This will be used to give you an injection of a medicine to relax the bowel (Buscopan) and may also be used for x-ray contrast dye (iodine based) during the scan.

A member of staff will take you into the scan room, ask you some questions and explain the procedure so that you understand what is happening. You can ask us any questions you may have at any time.

During the test, gas (carbon dioxide) will be used to inflate the colon via a thin flexible tube placed in your rectum (back passage). This will make you feel bloated and may give you some mild abdominal discomfort which should quickly ease when the test is complete. A CT scan will then be done with you lying on your back and then either on your front or on your side. Occasionally a third position will be required to get all the information required.

Are there any side effects or risks?

CT Colonography is a very safe examination and complications rarely occur.

CT scans involve x-rays; the amount of radiation used is more than an ordinary x-ray of the chest or body, but is about the same as an average person receives from the atmosphere over approximately 3 years. The scanner we have in Dorchester has the latest software to keep the radiation dose to a minimum.

There is a tiny risk of making a very small hole in the bowel, known as a perforation. This happens very rarely in 0.005% of cases. If this does happen, most cases resolve without treatment, but may require hospital admission for observation.

If we need to give you x-ray dye, it can, very rarely, cause an allergic reaction which may need medication or even hospital treatment. This occurs in less than 0.04% of patients. More commonly it causes a metallic taste in the mouth, nausea or a feeling of warmth passing down your body. This usually passes very quickly.

The medicine used to relax your bowel can give you a dry mouth and also make your vision a little blurred. This should resolve within half an hour, but you should not drive home until your vision has returned to normal. Very rarely, patients may develop pain and redness of the eyes within 24 hours following Buscopan. If this occurs you should go immediately to the Accident and Emergency department.

Are there any special preparations for this test?

It is very important that the large bowel is empty when this test is performed. You will need to follow a special low residue diet for a couple of days before the test and also take a mild laxative and a liquid called Gastrograffin which you have already collected. Full instructions for the preparation are on the following pages.

Female patients

If you are, or think you may be, pregnant please contact the department. If you are taking the oral contraceptive pill, the bowel preparation may reduce its effectiveness, so continue taking the tablets but use other precautions for the remainder of that cycle.

After the examination

You will be taken to visit the toilet immediately after the scan has finished. The gas (carbon dioxide) is absorbed by the body and any discomfort should quickly wear off. If your vision has been affected by the Buscopan injection, you should wait until your vision returns to normal before driving.

The x-ray dye is removed from your body by your kidneys; therefore it is important to keep well hydrated over the subsequent 48 hours after your appointment.

The doctor who sent you for the examination should get the results within 10 days. If you feel unwell after the test or have any questions or concerns, please contact us on **01305 255397**.

About this leaflet:

Author: Simon Jones, Lead Radiographer CT and Dr Kathy Lawrence, Consultant Radiologist
Written: August 2018
Approved: April 2019
Review date: April 2022
Edition: v2

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

© 2017 Dorset County Hospital NHS Foundation Trust
Williams Avenue, Dorchester, Dorset DT1 2JY
www.dchft.nhs.uk

Bowel preparation and diet sheet

Please follow these instructions carefully to make sure that your bowel is as empty as possible and to improve the accuracy of this test.

You should have received some laxative (Bisacodyl) tablets and a 100ml bottle of Gastrograffin from the pharmacy. If not, please ring **01305 255397**.

The Gastrograffin contains iodine; it is very important that if you are allergic to iodine or have previously had a severe allergic reaction to x-ray contrast dye, if you have difficulty in swallowing or if you suffer from regular choking/coughing episodes when drinking fluids, that you do **not** take it and phone the department on **01305 255397**.

If you have diabetes, please seek advice from your diabetic team about how to manage the diet.

4 Days before

Continue to take any prescribed medicine, but if you are taking iron tablets you should stop taking them.

2 days before

If you are taking any constipating medicines such as Codeine, Kaolin and Morphine, Loperamide (Imodium), Regulan or Fybogel, stop this 2 days before you are due to come for the examination. Continue other medications and any laxatives you usually take.

Start low residue diet - you may only eat what is listed below throughout the day.

Foods allowed on low residue diet:

- White bread and bread products, such as crumpets, wraps and white naan.
- Breakfast cereals, such as Cornflakes, Rice Crispies, Special K or Frosties with a small amount of semi skimmed or skimmed milk, rice milk or soya milk.
- White pasta, white rice, couscous, tapioca, ground rice, semolina, peeled potatoes.
- Quorn, tofu.
- Chicken or turkey.
- White fish.
- Boiled, poached or scrambled eggs (without cream or butter).
- Boiled sweets, fruit gums, pastilles, Madeira cake, plain biscuits e.g. rich tea, water biscuits, cream crackers, rice pudding and plain sponge.
- Strained stock, stock cubes, Marmite, Bovril, soy sauce, instant gravy.
- Clear fluids including water, fruit squash, fruit juice with no bits, rehydration drinks, clear soup or broth, tea/coffee with small amount of milk.
- Small amount of oil for cooking, honey, lemon curd, golden or maple syrup, marmite, smooth peanut butter and jams or marmalades with no bits.
- Salt, sugar, fine ground pepper, vinegar, mustard, gelatine, dried herbs, salad cream, mayonnaise, ketchup.

Foods not allowed:

- All fruit including dried fruit and vegetables.
- Wholemeal, granary, brown and high fibre white breads and bread products (including best of both).
- Potato skins and chips.
- Crisps and nuts, fresh herbs, pickles, chutney, hummus, freshly ground peppercorns.

- Biscuits or cakes made with wholemeal flour/nuts/fruit/grains (fruit cake, Ryvita, digestives, hobnobs).
- Whole wheat pasta, bran and brown rice or noodles.
- High fibre breakfast cereals such as Weetabix, Shredded wheat, bran flakes, porridge.
- Red meat including burgers, sausages and ham.
- Pulses such as beans and lentils.
- Fried or fatty fish.
- Full fat milk, cream, full fat yoghurt, ice cream and full fat hard cheese.
- Butter and butter-like spreads, vegetable oils.
- Drinks to avoid are full fat chocolate drinks, drinks with full fat milk, cocoa and vegetable juices.

After your evening meal take 10mg Bisacodyl (2 tablets). This is a mild laxative which usually takes between 6 and 8 hours to work.

1 day before

At 8am, take a further 10mg (2 tablets) Bisacodyl.

Just before breakfast, drink 30mls of Gastrograffin liquid. This is best diluted with an equal amount of squash or water. Use either a measuring cup or two tablespoons.

For breakfast you may have:

- Tea/coffee but no milk.

And **one** of the following:

- 2 slices of white bread with no spread.
- 1boiled/poached egg and 1 slice white bread with no spread.
- 50g cottage cheese and 1 slice of white bread with no spread.

Before lunch take a further 30mls Gastrograffin diluted as before.

For lunch you may have one of the following:

- 75g white meat/white fish.
- 2 boiled/poached eggs.
- 100g cheese.

And **one** of the following:

- 2 slices of white bread with no spread.
- 2 egg sized potatoes with no skin.
- 3 tablespoons plain white pasta or rice.

At 4pm drink another 30mls Gastrograffin.

After 4pm, no further solid food, milk or dairy products until after the procedure, but drink clear fluids such as fruit cordials, herbal tea, Bovril or fizzy soft drinks. You can also have tea or coffee with no milk.

The Gastrograffin also works as a mild laxative and it is very important that you do not become dehydrated. It is recommended that you try and drink a cup of water/squash or fluid from the allowed foods every hour during the day.

On the day of the scan, you can have clear fluids up to the time of the scan, but no solid food. After the scan you can eat and drink as normal and you may want to bring a snack with you to have in the department before going home.