Computed Tomography (CT) Colonography

Introduction

This leaflet will give you information about CT colonography, what it is, how it is carried out, what to expect and the risks involved.

What is CT colonography?

CT colonography is a way of looking inside your bowel and abdomen. The test involves using a scanner to produce two and three dimensional images of the whole of the large bowel (colon and rectum).

The scanner uses x-rays to produce images of a ‘slice’ through a part of the body, which is called Computed Tomography or CT.

During CT colonography, gas will be used to inflate your bowel and will be introduced using a thin flexible tube placed in your back passage. Then CT scans will be performed with you lying on your back and either your front or side. After the scans, doctors will look at your images for polyps (small growths inside your bowel) and signs of cancer. If anything unusual is seen on the images or if further information is needed, you may be offered further tests.

CT colonography also provides information about the other structures inside your abdomen such as your liver.

Are there alternatives to CT colonography?

Yes and endoscopy is the standard way of examining the large bowel. In this examination 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.

What can I do to prepare for the CT colonography?

You will need to prepare your bowels before the investigation by taking bowel preparation. This is medicine to empty your bowels and you will have a separate information sheet to explain this process.

If you feel very unwell after taking your bowel preparation, please do not take any more and contact us or your doctor (or out of hours GP service during weekends/ evenings).
If you need an interpreter please tell the person who sent you for this test so that it can be arranged.

You should continue to take your tablets except iron tablets which should be stopped three days before your CT colonography.

Please let us know when you arrive for your test if you have any of the following:

- Diabetes
- Kidney problems
- Prostatism (enlarged prostate)
- Angina or other heart problems
- A previous reaction to iodine based intravenous contrast medium (x-ray dye). If you are not sure about this, please ask us.

Frequently asked questions and answers

Q. I have already had a colonoscopy that was difficult, so how is this test different?

A. This test will be easier and more comfortable than trying to pass the colonoscope around your bowel.

Q. I have diabetes so can I still take the bowel preparation?

A. Yes. You have also been provided with an information sheet with additional guidance for patients with diabetes.

Q. Is this test just for my bowel or will it show anything else?

A. With this test it is possible to get information about other structures within your abdomen. The amount of information will vary for each patient, depending on the technique used.

Q. This test involves radiation so how much radiation will I receive and is it dangerous?

A. We use as little radiation as we are able to, whilst making sure that the scan is of adequate quality. The amount of radiation needed will depend upon various factors including the reason why the scan is being performed and if additional scans are required.
Q. Will I have sedation for this test and will I be able to drive home afterwards?

A. Sedation or pain relief is not needed for this test. Most people find that it can be a little uncomfortable, but as soon as the test is finished the discomfort will ease. Because there is no sedation, this test will not affect your ability to drive.

Q. What happens if an abnormality is found in my bowel?

A. Usually you will get the result of your scan from the doctor who asked us to perform it. You and your doctor will then decide what to do next, if any treatment is needed. However, sometimes if further tests are required we may try to organise them for the same day, especially if this means you do not have to have another bowel preparation.

Q. If polyps are found in my bowel, will I have to have them removed?

A. It is not possible to remove polyps during a CT colonography, this might occur during a colonoscopy.

Q. Is this test as accurate as a colonoscopy?

A. A large study has been carried out, comparing this test to other bowel tests. This test has been shown to be as accurate as a colonoscopy.

Q. Can anybody have this test?

A. As this test uses radiation, we try to avoid performing this test on anyone under the age of 40, however we treat every case individually and there will always be exceptions.

Q. What if I don’t want this test or cannot attend?

A. Please let us know as soon as possible so we can book another patient who is on our waiting list. Call 020 8235 4181 and leave a message if nobody answers.

**What will happen on the day of my test?**

You should go to the Radiology (x-ray) department at the hospital where you have your appointment and report to the **CT reception desk**.

You will be greeted by a radiology assistant or radiographer and guided to the preparation area to get changed into a gown.
If you need help with changing into a gown you may bring someone with you to help you.

**What happens during CT Colonography?**

- The radiographer will explain the test and answer any questions, before asking for your consent. Please let them know if you had any problems with your bowel preparation.
- The procedure usually takes around 15-20 minutes.
- You may have a small tube, called a cannula, inserted into one of the veins in your arm.
- You may be given an iodine-based intravenous contrast medium via the cannula, as this can highlight particular problems that your doctor might be concerned about.
- You will be asked to lie down on the scanner table on your left side.
- The radiographer will pass a small flexible tube into your back passage.
- A muscle relaxant will normally be injected via the cannula in your arm to avoid bowel spasm.
- Gas (carbon dioxide or air) will be gently introduced into your bowel through the tube in your back passage. This is done at a controlled rate by a machine specifically designed for the purpose.
- Despite the muscle relaxant, you may still feel some bloating and mild discomfort in your abdomen like “bad wind”.
- Once the radiographer is satisfied with the amount of gas in your bowel, CT scans will be taken with you lying in two positions.
- Sometimes the radiographer may need to take extra scans to ensure we can fully see your entire bowel. Occasionally we will perform a scan of your chest at the same time for additional information such as if there are any problems with your chest.

**Are there any risks?**

CT colonography is generally regarded as a very safe test, and although problems can occur, they are rare. Problems which might occur are similar to those which can happen with other methods of examining the large bowel. These include:

- Abdominal discomfort.
- Feeling faint.
- Allergic reaction to the iodine-based intravenous contrast medium.
• Damage to the bowel wall (there may be a small tear in the lining of the colon or rectum but this happens in less than one in 3000 tests).

• Dehydration or an electrolyte imbalance (an imbalance of the salts in the blood) caused by the bowel preparation. It is important that you drink plenty of fluids and your leaflet explaining the preparation for CT Colonography will give you this information.

What happens after the test?
A specialist radiologist will review the images from your CT colonography and send a report to the doctor who requested your scan.

Can I go home immediately after my test?
Most patients will go home immediately after the test but we may occasionally be able to offer some patients a ‘same-day’ endoscopy when further information about the bowel is needed. When this happens, we will need you to stay in the hospital (or be available on a phone), fasting, for up to two hours after your CT colonography test while we fully review your scan and arrange the endoscopy appointment. If same-day endoscopy is offered, you will be informed about what this examination will involve and escorted to the Endoscopy Unit.

Who should I contact if I want further information?
If you have internet access, you can find out more about CT Colonography on the National Institute of Clinical Excellence website.

For more information on bowel cancer you can also look at the beating bowel cancer website.

Contact details
If you have questions about the time or date of your appointment, please phone our appointment desk:

Monday to Friday: 10.30am and 4pm on 020 8235 4181.

If you have questions about the procedure, please contact us at the following number:

Monday to Friday: 10.30 am to 3.30pm on 07770 784911.

If your call cannot be answered, please leave a message including your name, hospital number, your contact phone number and a brief message, and we will return your call as soon as possible.

If you have any questions about your medicines which have been prescribed from the Trust, Call us on: 020 8869 2762 (Monday to Friday 9am to 5pm)

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General Trust Information

Patient Advice and Liaison Service (PALS)

PALS is a confidential service for people who would like information, help or advice about the services provided by any of our hospitals. Please note that this service does not provide clinical advice so please contact the relevant department directly to discuss any concerns or queries about your upcoming test, examination or operation.

If you would like this information in an easy to read format, large print, braille, different format or language, please contact the PALS team on 020 8869 5118 or email lnwh-tr.PALS@nhs.net. We will do our best to meet your needs.