

**Patient  
Information**

# CT colonoscopy

**If you do not believe you should have been referred for this procedure, please contact the CT department immediately.**

## Introduction

This leaflet gives you information about having a CT colonoscopy, how the test is done, the risks involved and what to expect. A CT colonoscopy is also known as a virtual colonoscopy.

## What is a CT colonoscopy?

CT colonoscopy uses a CT scanner to produce 2 and 3 dimensional images of the whole of the large bowel (colon and rectum).



Figure 1: CT scanner

During the CT colonoscopy, gas will be used to inflate the bowel via a thin flexible tube placed in your back passage. CT scans are then performed with you lying on your front or side and then on your back. Doctors can look at the images to check for polyps and signs of cancer. If anything, abnormal is seen on the scan, you may be offered an outpatient appointment for an endoscopy.

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Department

**Radiology**

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## **Alternative procedures**

### **Colonoscopy**

Colonoscopy is an alternative procedure, where a thin tube attached to a camera (colonoscope) is passed into the back passage and moved up and around the bowel. This is a standard test for the large bowel.

### **Endoscopy**

An endoscopy is more invasive than a CT colonoscopy but allows tissue biopsies and polyp removal if needed. An endoscopy usually requires the patient to be sedated.

## **Giving your consent (permission)**

We want to involve you in the decision about your care and treatment. We are happy to answer any questions you may have or address any concerns. If you decide you do not want this procedure you can change your mind at any time, even after signing the consent form.

The Radiology Department plays an important role in the training of future healthcare professionals. The part patients play in this is vital in ensuring we produce the right quality of healthcare professionals for the future. If at any time you would prefer not to have students present, please inform the team looking after you. This will not impact on your care in any way.

## **Before the CT colonoscopy**

### **Bowel preparation**

To give the doctor a clear view of the bowel lining, your bowel has to be prepared before the test. This will involve clearing the bowel of stool (faeces) by using strong laxatives and drinking an iodine or barium-based liquid with meals on the day before you have the virtual colonoscopy.

### **Medication**

You should continue to take your usual medication including blood thinners.

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## On arrival

Please report to the Radiology (X-ray) Department. You will be greeted by one of the radiology assistants and shown to the preparation area where you will be asked to change into a hospital gown. You can bring a friend or relative with you if you need help dressing.

## During the CT colonoscopy

- The radiographer will explain the test and answer any questions you may have. Please let the radiographer know if you have had any problems with your bowel preparation.
- You will be asked to complete and sign a safety questionnaire.
- The procedure usually takes about 20 to 30 minutes.
- You may have a cannula (a thin tube) inserted into one of the veins in your arm. This will be used if you need to be given Buscopan<sup>®</sup> to relax your muscles, or contrast is required.
- You will be asked to lie down on the scanner table on your left side.
- The radiographer will pass a short, thin flexible tube into your back passage.
- A muscle relaxant injection may be given to avoid bowel spasm.
- In order to visualise the inside of your bowel, gas (carbon dioxide) will be gently introduced through a tube placed in your back passage. This is done at a controlled rate by a machine specifically designed for this purpose.
- Despite the muscle relaxant, you may still feel some bloating and mild discomfort such as 'wind' in your abdomen.
- Once the radiographer is satisfied with the amount of gas in your large bowel, a CT scan will be performed with you lying on your front or your side. This will take about 10 to 20 seconds.
- You will then be asked to turn on to your back or side for a second scan, which will also take about 10 to 20 seconds.
- You may be given an iodine-based intravenous contrast injection, via the cannula, to highlight the colon and other structures around it. This can make you feel warm all over and give you a slight metallic taste in your mouth.

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CT colonoscopy is generally regarded as a safe test. Problems rarely occur but if they do, they are similar to those which could happen with other methods of examining the large bowel.

These include:

- Abdominal discomfort.
- Faint-like reactions.
- Reaction to the injected contrast such as a warm flush or nausea. These should pass quickly. In rare instances an allergic reaction may occur, the radiology team are trained to deal with any complications and will make sure that you are well enough before sending you home.
- Damage to the bowel wall; a small tear in the lining of the colon or rectum. This happens fewer than 1 in every 3000 tests.

Female patients who are or might be pregnant must inform a member of staff before the scan.

CT scanning does involve X-rays and so has the usual risks associated with ionising radiation. The amount of radiation is equal to the natural radiation we all receive from the atmosphere over a period of about 3 years. This adds very slightly to the risk of, for example, developing a cancer however, Macmillan Cancer Support predict that 1 in 3 of us will develop a cancer at some stage during our lives, so this added risk is very small.

Some CT colonoscopy scans also involve having a contrast medium injected into a vein, via the cannula, in order to increase the amount of information obtained from the scan. This injection causes a warm feeling passing around your body.

There are slight risks with this injection which are an allergic reaction or leaking of the contrast into the tissue around the vein which can be painful. The doctors in the Imaging/Radiology Department are trained to deal with any complications and again the risk is very small.

If you had a reaction to a previous injection of contrast material given for a kidney X-ray (IVU) or a previous CT scan, it is important that you tell the radiographer at the time of your examination.

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## After the CT colonoscopy

You will be given a cup of tea/coffee and some biscuits after the scan.

## Can I eat and drink afterwards?

Yes, you can eat and drink as normal.

## When will I get the results?

After your visit, the radiologist will look at your CT scan and prepare a report on the findings. These will be sent to your referring doctor.

## Interpreters

If you need an interpreter for your procedure, please contact the department so we can try to arrange this.

## Cancelling your appointment

If you are unable to attend your appointment, we would be grateful if you could contact us as soon as possible. We can then offer your appointment to another patient and arrange another date and time for you.

If you have had diarrhoea and/or vomiting please cancel your appointment unless you have been free of symptoms for 48 hours. Please ring the CT Appointments Officer on the number shown on your appointment letter, between 9:00am and 4:30pm, Monday to Friday.

**If you do not believe you should have been referred for this procedure, please contact the Radiology department immediately.**



**Patient  
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We will do our best to make your visit as comfortable and stress-free as possible. If you have any further questions, please contact the Radiology Department.

**Radiology Department****Cheltenham General Hospital**

Tel: 0300 422 5691

Monday to Friday, 9:00am to 5:00pm

**Gloucestershire Royal Hospital**

Tel: 0300 422 5560

Monday to Friday, 9:00am to 5:00pm

We are pleased that we can offer state of the art technology for diagnosis. However, radiology equipment needs constant updating and there is a charitable fund for this. If you would like to make a donation, please send a cheque to the appropriate address below. Cheques are payable to GHNHSFT.

Please send your donation to:  
Business Manager  
Dept of Radiology (Imaging 1)  
Gloucester Royal Hospital,  
London Road  
Gloucester  
GL1 1NN

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## Making a choice

### Shared Decision Making

If you are asked to make a choice, you may have lots of questions that you want to ask. You may also want to talk over your options with your family or friends. It can help to write a list of the questions you want answered and take it to your appointment.



### Ask 3 Questions

**To begin with, try to make sure you get the answers to three key questions if you are asked to make a choice about your healthcare.**

1. What are my options?
2. What are the pros and cons of each option for me?
3. How do I get support to help me make a decision that is right for me?

These resources have been adapted with kind permission from the MAGIC Programme, supported by the Health Foundation

\* Ask 3 Questions is based on Shepherd HL, et al. Three questions that patients can ask to improve the quality of information physicians give about treatment options: A cross-over trial. Patient Education and Counselling, 2011;84: 379-85



<https://aqua.nhs.uk/resources/shared-decision-making-case-studies/>