



CT colonography / virtual colonoscopy

This leaflet tells you about having a CT colonography (CTC), also known as a virtual colonoscopy (VC). It explains what is involved and the possible risks. It is not meant to replace informed discussion between you and your doctor, but can act as a starting point for such discussions. If you have any questions about the procedure please ask the doctor who has referred you.

What is a CT colonography?

A CTC involves using a CT scanner to produce two- and three-dimensional images of the whole of the colon (large bowel) and rectum (back passage) to look for polyps (fleshy growths) or signs of cancer.

You may have been referred for this test to help your doctor find out what is causing symptoms such as abdominal (tummy) pain, weight loss, a change in your usual bowel habit and blood in your faeces (stools).

Are there any alternative tests?

Colonoscopy involves a flexible tube with a camera on the end to directly visualize the large bowel and continues to be the main test for looking at the bowel. It is more invasive than CTC and usually requires sedation. However a biopsy or sample of tissue can be taken at the same time if required. CTC is as accurate as colonoscopy.

Both of these tests require that the bowel be cleaned with medication (laxatives) prior to the test in the same way as CTC.

Are there any risks?

CTC is regarded as a very safe test.

There is a small risk that inflating the colon (carbon dioxide gas is introduced into the tummy cavity to expand it so that colon is well seen) may cause a tear (perforation). The risk of perforation is about 1 in 3000 and is lower than that of a colonoscopy.

There is a link between developing cancer and excessive exposure to radiation. We keep the radiation dose to an absolute minimum and the dose you are exposed to during a CTC is approximately the equivalent to three years natural background radiation (i.e. the amount of natural radiation you would receive from living in the UK for 3 years).

However, your doctor feels that benefit of an accurate diagnosis far outweigh any potential health risks.

Do I have to do anything before my CT colonography?

The bowel lining needs to be clear for us to get good pictures and you will need to follow a low fibre / low residue diet two days before the test and take bowel cleansing agents the day before – strong laxatives and/or a liquid. You will want to stay close to a toilet once you have taken the laxatives. This is explained in more detail in your appointment letter.

Can I take my normal medications?

If you are taking iron tablets please stop taking them 7 days before your scan. You should continue taking all other medications as normal. If you have diabetes you may need to amend your normal doses. Please let us know on the day of your test if you are diabetic and are taking a tablet called Metformin as we may ask you to stop taking it for two days after the test.

Can I bring a friend or relative?

Yes, but for safety reasons they will not be able to accompany you into the x-ray room.

What happens during the test?

- The radiographer will explain the test to you and answer any questions you may have.
- You can expect to be in the x-ray department for approximately 30-40 minutes.
- You will be asked to change into a hospital gown.
- You may have a small plastic cannula (fine tube) put into a vein in your arm as part of the CT scan.
- You might be given intravenous contrast (dye) through the cannula into the vein as part of the CT scan.
- You will be given a small injection to help relax the bowel.
- Once in the CT scan room, the radiographer will insert a small flexible plastic tube into your back passage.
- Carbon dioxide gas is then gently introduced into the bowel via the tube in your back passage. This is to distend (swell up) up the bowel so we can get good pictures of the entire colon. This may feel a little uncomfortable and you may feel bloated; like 'bad wind'.
- Once the radiographer is happy with the amount of gas in the bowel you will lie on your back for the first CT scan.
- You will be asked to hold your breath and the scan itself takes about 10-20 seconds.
- The radiographer will then help you to turn over onto your front (or on your side if lying on your front is not possible) and we will perform a second CT scan. You will be asked to hold your breath and the scan itself takes about 10-20 seconds.
- The radiographer will then quickly check that the images taken are satisfactory.
- The tube will be removed and you will be able to go and sit on the toilet to expel some of the gas, get dressed and go home.

What happens after the test?

You will be able to go home immediately.

How do I get the results of the test?

The radiologist will look at all the scans and issue a report. This is sent back to the hospital doctor who requested the test who will contact you with the result. You may have a follow-up clinic appointment where the result will be available. The X-ray Department (Radiology) is unable to give results on the day of the test or over the telephone.

Information for female patients

As this test involves x-ray radiation which can be potentially harmful to an unborn fetus, we would normally only perform this test in the first 10 days of your menstrual cycle (if you are of child-bearing age). Please let us know if this is not the case when you receive your appointment.

The strong laxatives used for clearing the bowel can interfere with the effectiveness of the oral contraceptive pill and if you do not want to become pregnant you should use other protective methods e.g. condoms, until you have finished your current packet of pills.

Any other questions?

- If you have any queries please telephone the Radiology Department on 0118 322 7991.
- If you have internet access, you can find out more about virtual colonoscopy on the National Institute of Clinical Excellence website: www.nice.org.uk/guidance/IPG129
- For more information on bowel cancer: www.bowelcancer.org

Contacting us

Radiology Department, Tel 0118 322 7991.

Radiology Day Case Unit, Tel 0118 322 8368 (Monday-Friday 8.30am-5pm).

To find out more about our Trust visit www.royalberkshire.nhs.uk

Please ask if you need this information in another language or format.

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Charlotte Robinson, RBFT Radiology Department, July 2025.

Next review due: July 2027.