The radiologist will analyze the pictures via special software and send the report directly to your referring physician.

Risks of CT colonography

There is a very small risk that inflating the colon with air or carbon dioxide may cause a small tear (perforation). The risk is estimated at less than 0.04 per cent. CT colonography is therefore safer than endoscopy.

If iodinated contrast is administered during your examination there is a potential risk of allergic reaction. Again the risk is minimal however it is common to feel a flushing feeling during the injection or to experience a metallic taste in the mouth.

Benefits of virtual colonography

- This new minimally invasive test provides three dimensional images that can depict many polyps and other lesions as clearly as when they are directly seen by an optical colonoscopy.
- Virtual Colonoscopy has a markedly lower risk of perforating the colon than conventional colonoscopy. Most of those examined do not have polyps, and can be spared having to undergo a full colonoscopy.
- Virtual Colonoscopy is a less invasive option for patients who do not wish to have a colonoscopy, which involves inserting a flexible tube into the colon to view the bowel wall.
- Virtual Colonoscopy is an excellent alternative for patients who have clinical factors that increase the risk of complications from colonoscopy, such as treatment with blood thinners or severe breathing problems.
- Elderly patients, especially those who are frail or ill, will tolerate CT colonography better than conventional colonoscopy.
- Virtual Colonoscopy can be helpful when a colonoscopy cannot be completed because the bowel is narrowed or obstructed for any reason, such as by a large tumour.
- If a conventional colonoscopy cannot reach the full length of the colon — which occurs up to 10 per cent of the time — Virtual Colonoscopy can be performed on the same day because the colon has already been cleansed.

- Virtual Colonoscopy provides clearer and more detailed images than does a conventional barium enema x-ray examination.
- In 5 per cent of patients, CT colonography shows abnormalities outside the colon which would otherwise be missed because colonoscopy only looks at the interior surfaces.
- Virtual Colonoscopy is tolerated well. Sedation and pain-relievers are not needed, so there is no recovery period.
- Virtual Colonoscopy is less costly than a colonoscopy.
- No radiation remains in a patient's body after a CT examination

Questions or Concerns

If you have any questions, please do not hesitate to contact our staff. You can also speak to your referring physician.

It is our policy to confirm your appointment 72 hours prior to your examination. If at this point you do not feel able to attend, please inform our staff so we may offer your appointment to another patient.

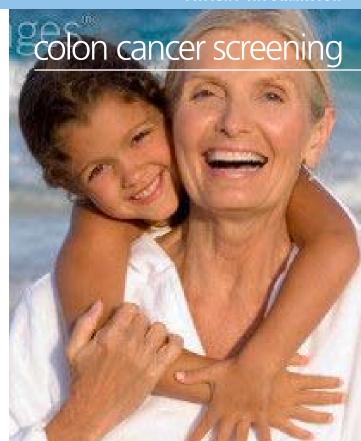
If however, you do not come to your scheduled appointment and have not cancelled 72 hours prior, you will be charged a \$100 'no show' fee. Please note that this 'no show' fee will not be covered by OHIP.

Please contact our booking office.

Monday to Friday 8 a.m. to 4 p.m. 416-586-4800 ext 4418



Joint Department of Medical Imaging
University Health Network, Mount Sinai &
Women's College Hospitals
5th Floor
Mount Sinai Hospital
600 University Avenue
Toronto, Ontario Canada M5G 1X5
T 416-586-4800 ext 4418 F 416-586-3180
www.mountsinai.ca



Virtual Colonoscopy

The safe, minimally invasive exam that could save your life



About Colon cancer

Colon cancer is the second most lethal form of cancer.

The main risk in developing colon cancer is that polyps found inside an intestine may grow and become malignant over time if not removed.

This is most common in patients over 50. If the polyps are identified and removed in a timely fashion we can prevent the development of a cancerous lesion.

What is a Virtual Colonoscopy?

Virtual Colonoscopy is an advanced method of analyzing the bowel in a non-invasive way which is safer and is more comfortable for more patients. Also known as virtual colonography, this method does not require you to be sedated or undergo anaesthesia.

A CT scanner is used to produce two and three dimensional images of the entire large bowel, which usually includes a virtual "fly-through", or map, of the entire colon.



What are alternate methods?

Conventional colonoscopy remains the standard for assessing the bowel. Though it is invasive and requires sedation, conventional colonoscopy allows for tissue removal and biopsy for analysis.

How is the bowel assessed?

Patient preparation is required so that the bowel is as empty and clean as possible. Air is introduced into the colon through a small, flexible catheter placed in the rectum.

In our Department we use carbon dioxide to distend the colon as it is very easily absorbed after the test and is better tolerated than room air, which can cause cramping. Distending the colon enables us to assess it for the presence of polyps. If you still experience cramping, inform our technologist.

Why do I need to drink barium or telebrix?

Bowel preparation is the most difficult part of this test for most patients. It is important to cleanse the bowel so that stool is not mistaken for a polyp. The bowel preparation, however, has different results on different patients. The barium coats any residual stool, while the telebrix coats any residual fluid.

Our computer is then able to virtually (remove) the stool from the pictures, so that the radiologist can better analyze the images of your colon.

I am concerned about the effects of bowel preparation on my current medications. What should I do?

Most bowel preparation is safe and well tolerated. You should continue to take all of your medication. If you take metformin, please inform our bookings staff.

Please also inform us if you have any of the following conditions:

Diabetes

Asthma

Kidney problems

Glaucoma

Angina

Allergies

Reaction to iodine or intravenous contrast

What happens during a Virtual Colonoscopy?

The technologist will explain the procedure. Please let him/her know of any issues with bowel preparation.

- The examination takes 15 to 20 minutes.
- You will be asked to lie on the scanner.
- You may have a cannula (tube) inserted into one of your arm veins

- The technologist inserts a short catheter into the rectum.
- A muscle relaxant may be injected to avoid bowel spasm.
- You may be given intravenous contrast through the cannula.
- Air is introduced via the tube into your bowel.
- This is done in a controlled manner via a specially designed pump.
- It is normal to feel some bloating and mild discomfort.
- Once we are happy that there is sufficient air then we take images through the entire bowel.
- You will be asked to lie in different positions to distribute the air before taking the images.



What do I do after the test?

Although you are free to go home immediately after the test, in some circumstances we may offer same-day endoscopy if an abnormality is detected on your CT study.

This would require you to give us your contact details for a two-hour period after the examination. As the bowel needs to remain clean while we are analyzing the data, we ask you not to eat for that period.

Most patients feel sufficiently comfortable to return to their normal activities (e.g. go to work after the procedure.) You will be able to eat and drink normally. If you have ingested the oral tagging (barium) it is normal for your stools to be chalky or white for a few weeks after the test.