

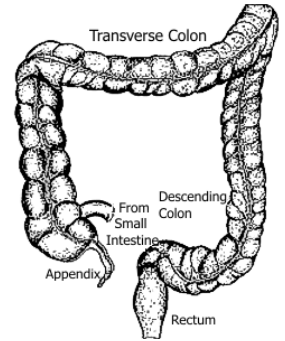
COLONOSCOPY INFORMATION

WHAT IS A COLONOSCOPY?

Colonoscopy is a procedure that allows the doctor to directly visualize the lining of the large bowel (rectum and the colon). Prior to the colonoscopy, powerful laxatives are used to clean out the bowel so that the lining can be seen.

For the procedure, a long flexible scope is used. The scope includes a small video camera as well as a channel to suction out any residual bowel contents. The scope is inserted into the rectum, through the anus, and then passed to the beginning of the colon (where the appendix is).

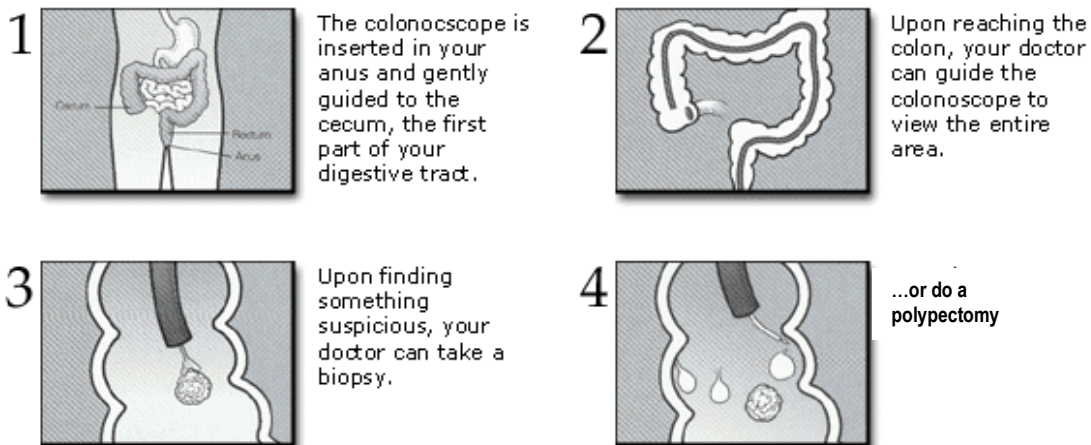
Usually, mild sedation is given through a vein to minimize any discomfort. Despite this mild sedation, patients remain awake enough to breathe on their own and follow instructions. Some patients are awake enough to watch the test on the monitor. The colonoscopy usually takes about 20 – 30 minutes to complete.



If at the time of the colonoscopy any polyps are identified, they can often be removed at that time. Polyps are abnormal growths of the lining of the colon that can progress to cancer. Most polyps do not cause symptoms. To remove a polyp, a wire loop is passed through a channel in the colonoscope and placed around the polyp. An electrical current is then used to cut through and seal the base of the polyp. Large polyps may need to be removed at a second colonoscopy at a hospital endoscopy unit.

After the colonoscopy, the patient rests in a recovery room for 30 – 60 minutes, and then is able to go home.

Because of the sedation, patients must have a responsible adult pick them up from the clinic and drive them home. People are considered legally impaired for 24 hours after the sedation and must not drive during that time.



Additional information about colon cancer and colonoscopy, including an online video about colonoscopy, is available at the Centre's website:
<http://www.ucalgary.ca/colonscreening/coloncancer/prep/colonoscopy>

ALTERNATIVES TO COLONOSCOPY

- For those at increased risk for colon cancer, colonoscopy is the preferred colon cancer screening test. Other tests can be used if absolutely necessary.
- For those at average risk for colon cancer, other tests, especially the fecal immunochemical test, are a perfectly reasonable alternative to colonoscopy.
*** These alternatives require a colonoscopy to confirm any abnormal findings and remove any polyps.*

Fecal Immunochemical Test: A single sample of stool is collected at home and taken to a lab to be tested for hidden blood, which can be a sign of colon cancer. It has no risks. There are no dietary restrictions. This test needs to be repeated yearly or every other year. A positive test requires a colonoscopy to determine the source of the blood.

CT Colonography (virtual colonoscopy): a special x-ray (CT scan) is taken of the colon. As with colonoscopy, this test also requires a bowel cleansing. The accuracy of CT Colonography may be close to that of colonoscopy. It is performed at private radiology clinics in Calgary, but the test is not routinely paid for by the Alberta Health Care Insurance Plan. Biopsies cannot be obtained and polyps cannot be removed. CT Colonography is often used for individuals who cannot undergo a complete colonoscopy, in which case it is covered by insurance.

BENEFITS OF COLONOSCOPY

- Colonoscopy is more accurate than other currently available colon cancer screening tests for detecting colon cancers and polyps. This does not mean that colonoscopy is perfect. Occasionally an abnormality may be missed by colonoscopy because of its location or because it is hidden by fluid or stool.
- Biopsies or tissue samples can be obtained through the scope.
- Polyps can be removed through the scope and are routinely removed to prevent them from turning into colon cancer.

POTENTIAL COMPLICATIONS OF COLONOSCOPY

- Colonoscopy is a safe procedure, but like any medical procedure complications can occur. The risk of a serious complication is approximately 1 in a 1,000 procedures. Death is extremely rare, but remains a remote possibility.
- Complications are more likely to occur when polyps need to be removed. A complication may require urgent treatment and surgery.
- The most common and the most severe complications are due to heart or lung complications from the sedation or bleeding or perforation of the colon caused by the scope or removing polyps.
- Bleeding may occur from a biopsy or polypectomy site that may require blood transfusion or surgery. The risk of bleeding following a routine colonoscopy is 0.07% (7 per 10,000 procedures) and following a polypectomy it is 1.2% (1.2 per 100 procedures).
- Perforation or a hole in the bowel following routine colonoscopy occurs in 0.05% (1 per 2000 procedures). The risk of perforation following polypectomy is 0.2% (1 in 500) and this may require surgery to repair the hole.
- The bowel preparation can cause changes in blood chemicals and water. Very rare cases of dehydration, kidney failure and muscle spasm have been reported.
- Irritation of the vein with a tender lump may occur at the spot where the sedation was injected. Heat packs or hot moist towels can be used to relieve the discomfort.
- Allergic reactions to the drugs may occur, usually as a rash and fever.
- Slowing of the heart and breathing may occur, usually from the sedation.
- Fluid can get into lungs, and can cause pneumonia.
- Heart attack, an irregular heartbeat, or a stroke is more likely to occur in a patient with underlying medical problems.