

Colonoscopy

A colonoscopy is a medical procedure that examines the large bowel. The colonoscope is the device used to perform a colonoscopy. This device consists of a long, firm and flexible plastic tube with a tiny video camera and light at one end. The gastroenterologist carefully guides this instrument in various directions to look inside the colon. The picture from the camera appears on a television monitor to provide a clear, magnified view of the colon lining.

The colon

The colon (large bowel) is the last portion of the digestive tract. It is a hollow tube about 1.5 metres long that ends at the rectum and anus. The main function of the colon is to store unabsorbed food before it is eliminated in the faeces.

The colon is a complex and important organ in terms of the gastrointestinal health of a person. Two to three kilograms of bacteria are present in the colon to digest unabsorbed fibre and starch. They produce a multitude of intestinal gases, most of which are reabsorbed and expired on the breath.

The colon produces short chain fatty acids, some of which may be important in prevention of conditions such as colon cancer. It also reabsorbs liquid so that only 100–200 millilitres are present in the faeces.

Conditions that may be diagnosed with colonoscopy

A colonoscopy can be used to look for cancer of the colon (bowel cancer) or colon polyps, which are growths on the lining of the colon that can sometimes be cancerous or may grow to be cancerous.

A colonoscopy may be performed to find the cause of signs and symptoms including:

- Bleeding from the rectum
- Blood in the stools
- Pus or mucus in the stools
- Unexplained abdominal pain
- Changes in bowel habits such as unexplained and long-lasting diarrhoea
- Screening and surveillance for colorectal cancer.

Medical issues to consider

Before the procedure, you need to discuss a range of issues with your doctor including:

- You must not be taking any blood thinning agents such as aspirin, plavix or warfarin.
- List all medications (prescription and non-prescription), vitamins, minerals and herbal supplements you are currently taking.
- The bowel must be clean so that the doctor can see the colon lining. This cleaning process varies, but you may be told to modify your diet and avoid certain foods in the week before the procedure.
- You will be given a 'bowel preparation kit' and instructions on how to use it. The kit contains substances that help cleanse the bowel. It may also include liquid preparations that are designed to stimulate bowel movements, as well as laxative tablets and other preparations. It is vital that you strictly follow the instructions given to you by medical staff.
- You will be advised not to consume any foods or liquids, other than the liquids provided in the bowel preparation kit, in the eight to 10 hours before the procedure.

Colonoscopy procedure

Before the colonoscopy procedure, an intravenous line is inserted into the back of your hand to provide medications that make you relaxed and drowsy. You will be given medications that provide deep sedation so that you will not have any recollection of the procedure nor feel pain.

Colonoscopy is performed in a designated unit that is either freestanding or associated with a hospital, and this is used for endoscopy procedures only. The patient lies on their left-hand side with their knees tucked up to their chest. The colonoscope is gently inserted through the anus and up into the colon, and air is introduced to help the colonoscope pass. Once the colonoscope has reached the point where the colon joins the small intestine, the doctor slowly withdraws it while looking carefully at the colon lining. Photographs may be taken. The procedure generally takes 15 minutes to one hour.

If colon polyps are found during a colonoscopy, they are removed and the tissue is sent for analysis to determine if the polyp is cancerous. Polyp removal or biopsy may cause excessive bleeding, which may require blood transfusion or re-insertion of the colonoscope to control the bleeding.

Immediately after the procedure

After the procedure, you can expect:

- Bloating
- Gas
- Mild cramping
- You may be offered a drink and something light to eat about one hour after you are fully awake

Usually you can go home after about four hours.

Possible complications

Colonoscopy is a safe procedure, although complications sometimes occur. These include:

- Excessive bleeding
- Perforation or puncture of the colon wall.

Taking care of yourself at home

Be advised by your doctor, but general suggestions include:

- Patients should not drive themselves home after a colonoscopy procedure, due to the effects of the medications that are given.
- Don't consume alcohol, as it may interact with the medications.
- Follow all dietary suggestions.

Long-term outlook

Any abdominal bloating, pain and flatulence will resolve within a couple of days. These symptoms are caused by the air that is pumped into the colon during the procedure. You will need to see your doctor again to discuss the results of your colonoscopy. Treatment depends on the diagnosis.

Other tests

There are alternative tests to colonoscopy, but they aren't always appropriate. Sometimes, these tests are done in conjunction with colonoscopy, because of the extra information they provide. These tests can include:

- **CT scan** - a special contrasting dye is swallowed, then pictures are taken of the digestive tract.
- **Sigmoidoscopy** - a similar procedure to the colonoscopy, except the sigmoidoscope is much shorter. The device can't access past the sigmoid colon, which is the section of bowel that joins directly to the rectum.

Where to get help

- Your doctor
- Gastroenterologist

Things to remember

- A colonoscopy is a medical procedure that examines the large bowel.
- The colonoscope consists of a long, firm and flexible plastic tube with a tiny video camera and light at one end.
- A colonoscopy can be used to look for cancer of the entire colon (bowel cancer) or colon polyps, and to help diagnose symptoms such as unexplained diarrhoea, abdominal pain or blood in the stool. Early cancers and polyps can be removed at the same time.

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Gut Foundation Research Institute

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