PROCEDURE

Colonoscopy

A colonoscopy uses a flexible camera to examine the large intestine and remove or sample abnormal tissue.

PURPOSE
Examine the colon and remove or sample abnormal tissue

PROCEDURE TYPE
Diagnostic and therapeutic, endoscopic and minimally invasive

WHERE IT IS DONE
Endoscopy suite or hospital outpatient department

ANAESTHESIA
Usually moderate or deep sedation; sometimes none or general

HOW LONG IT TAKES
About 30 to 60 minutes

PREPARATION
Clear liquids, fasting, bowel-cleansing laxative, and medication review

RECOVERY
Same day; no driving after sedation

MAIN RISKS
Bleeding, bowel perforation, sedation reactions, incomplete examination

RESULTS
Visual findings immediately; biopsy results usually within several days

Overview

A colonoscopy examines the rectum and colon, or large intestine, using a thin, flexible tube with a light and camera. The colonoscope is passed through the anus and guided around the colon.

During the procedure, the clinician can take tissue samples called biopsies and remove growths called polyps. Most colonoscopies are outpatient procedures, and sedation is usually offered.

Why the procedure is performed

Colonoscopy can screen for colorectal cancer before symptoms develop. It may find and remove polyps that could later become cancerous.

It may also investigate:

Colonoscopy can also be used to stop bleeding, widen a narrowed area, or remove certain foreign objects.

- Rectal bleeding or blood in stool
- Persistent changes in bowel habits
- Unexplained abdominal pain
- Iron-deficiency anaemia
- An abnormal stool test or scan
- Inflammatory bowel disease
- Previous polyps or colorectal cancer

Who should and should not have it

Colonoscopy may be appropriate for cancer screening, follow-up after an abnormal test, monitoring a bowel condition, or investigating symptoms. Its benefits should be weighed against your health, preferences, and procedural risks.

It may be avoided, changed, or delayed if you have:

Routine colonoscopy may also be delayed during pregnancy unless the reason is urgent. Older age alone does not rule it out, but overall health, life expectancy, previous results, and possible treatment should be considered.

Tell the team if you take blood thinners like warfarin or apixaban , have diabetes or an implanted heart device, are or may be pregnant, or have had sedation problems. Do not stop prescribed medication unless instructed.

- A suspected or known hole in the bowel
- Severe active inflammation or swelling of the colon
- Serious heart or breathing problems that make sedation unsafe
- An unstable medical condition needing treatment first
- Inadequate bowel preparation

How to prepare

Your colon must be empty so its lining can be seen. Poor preparation can hide polyps or require the procedure to be repeated.

The treating facility's instructions take priority , because products and schedules differ. Preparation usually involves a temporary low-fibre diet, clear liquids, fasting, and a prescribed laxative. The laxative causes frequent watery bowel movements, so stay near a toilet. Barrier cream may help prevent skin irritation.

Clear liquids may include water, clear broth, and drinks without pulp. Avoid excluded colours that could resemble blood, and follow the stated cutoff time for all food and drink.

Ask how to manage insulin, diabetes tablets, blood thinners, iron, and other medicines. Do not adjust them yourself.

Arrange for a responsible adult to take you home after sedation. Some facilities require someone to stay with you afterward.

Contact the facility if you cannot finish the preparation, are vomiting repeatedly, or your bowel movements have not become watery and relatively clear.

What happens during the procedure

The team will review your health, preparation, allergies, medicines, and consent. An intravenous line is usually placed for sedation.

You normally lie on your left side while the lubricated colonoscope is guided through the colon. Carbon dioxide or air opens the bowel for a clearer view. You may feel pressure, bloating, or cramping. Your heart rate, blood pressure, breathing, and oxygen level are monitored.

The clinician examines the lining, removes polyps, and takes biopsies if needed. The procedure usually takes 30 to 60 minutes, although the total appointment is longer.

Recovery and what to expect afterward

Mild cramping, bloating, or pressure is common for several hours. Passing gas and gentle walking may help. A small amount of blood with the first bowel movement can occur after a biopsy or polyp removal.

You can usually eat and drink once awake unless told otherwise. Rest for the day and follow any additional restrictions after treatment or removal of a large polyp.

After sedation, do not drive, cycle on public roads, operate machinery, drink alcohol, make

important legal decisions, or perform safety-sensitive work for the period specified by your facility-often until the next day. You will need a ride home.

Most people resume usual activities the next day, although physical work may require more time.

Risks and possible complications

Colonoscopy is generally safe, but possible complications include:

No test finds every polyp or cancer, especially if bowel preparation is poor or the scope cannot examine the entire colon.

- Bleeding, particularly after biopsy or polyp removal; delayed bleeding may occur several days later
- Perforation, or a hole in the bowel, which may require endoscopic repair, antibiotics like amoxicillin or doxycycline , or surgery
- Sedation-related breathing, blood pressure, or heart rhythm problems
- Infection or abdominal pain after polyp removal
- Injury to nearby organs
- An incomplete examination

Results and follow up

The clinician can often explain visual findings immediately. Because sedation may affect your memory, written results or a support person can help.

Biopsy and polyp samples are examined in a laboratory, with results usually available within several days. Follow-up depends on the examination quality, findings, laboratory results, and personal and family history. The team should explain how results will be delivered and whether another examination or appointment is needed.

Alternatives

The best alternative depends on whether the goal is screening, investigating symptoms, or treatment. A positive non-invasive screening test usually still requires colonoscopy.

Scans or other tests may help assess active bleeding or certain symptoms, but they do not

provide the same direct view or treatment options.

- Faecal immunochemical test (FIT): Checks stool for hidden blood at home but must be repeated regularly and may miss non-bleeding abnormalities.
- Stool DNA test: Checks for blood and altered DNA. False results are possible, and an abnormal result requires colonoscopy.
- CT colonography: Creates colon images without sedation, but still requires bowel preparation and inflation. It uses radiation and cannot take biopsies or remove polyps.
- Flexible sigmoidoscopy: Examines only the rectum and lower colon, so it can miss abnormalities farther along.
- Colon capsule endoscopy: Uses a swallowed camera but still requires preparation and cannot take biopsies or remove polyps.

When to call your healthcare team

Contact the endoscopy team for ongoing mild discomfort, medication or diet questions, missing results, or uncertainty about follow-up.

Seek urgent medical advice for:

Call emergency services for heavy bleeding, fainting, severe breathing difficulty, chest pain, confusion, or sudden severe abdominal pain. Do not drive yourself if seriously unwell.

- Increasing or severe abdominal pain
- Fever or chills
- Repeated vomiting
- Persistent or increasing rectal bleeding
- Dizziness, weakness, or inability to keep fluids down
- A swollen, firm abdomen that is not improving

Common questions

Will I be asleep?

Moderate sedation makes you drowsy but responsive; with deep sedation, you are usually unaware of the procedure. Some colonoscopies use no sedation, while general anaesthesia is reserved for selected situations.

Can I drive home?

No, not after sedation. Arrange for an adult to take you home and follow your facility's driving restrictions.

How painful is a colonoscopy?

Sedation makes it comfortable for many people, although pressure, bloating, or cramps may occur. Tell the team if you are uncomfortable.

When will I know the results?

Visual findings are often discussed the same day. Biopsy and polyp results usually take several days.

What if I cannot finish the bowel preparation?

Call the facility. Do not change the dose or add another laxative without instructions. You may need a revised preparation plan or new appointment.

Can a colonoscopy miss cancer or polyps?

Yes. Small or flat abnormalities may be missed, especially if the bowel is not clean or the entire colon cannot be examined.

Sources

- National Institute of Diabetes and Digestive and Kidney Diseases. Colonoscopy . Reviewed November 2022.
- American Society for Gastrointestinal Endoscopy. Understanding Colonoscopy .
- Shaukat A, Kahi CJ, Burke CA, Rabeneck L, Sauer BG, Rex DK. ACG Clinical Guidelines: Colorectal Cancer Screening 2021. American Journal of Gastroenterology . 2021;116(3):458-479.
- Gupta S, Lieberman D, Anderson JC, et al. Recommendations for Follow-Up After Colonoscopy and Polypectomy. Gastrointestinal Endoscopy . 2020;91(3):463-485.e5.
- Kothari ST, Huang RJ, Shaukat A, et al. ASGE review of adverse events in colonoscopy. Gastrointestinal Endoscopy . 2019;90(6):863-876.e33.
- NHS. Colonoscopy . Reviewed January 2024.