PROCEDURE

Total abdominal colectomy

Total abdominal colectomy is surgery to remove the entire colon while leaving the rectum in place.

PURPOSE
Remove the colon to treat serious or high-risk disease

PROCEDURE TYPE
Therapeutic surgery, performed open or minimally invasively

WHERE IT IS DONE
Operating theatre

ANAESTHESIA
General

HOW LONG IT TAKES
About 2 to 5 hours

PREPARATION
Fasting, bowel preparation, antibiotics, and medicine changes as instructed

RECOVERY
Several hospital days; no driving while impaired or taking opioids

MAIN RISKS
Bleeding, infection, bowel leak, blood clots

RESULTS
Operative findings immediately; pathology usually within several days

Overview

A total abdominal colectomy is an operation to remove the entire colon, also called the large intestine. The rectum is left in place. This is different from a proctocolectomy, which removes both the colon and rectum.

After removing the colon, the surgeon must create a new route for waste. The end of the small intestine may be joined to the rectum. This is called an ileorectal anastomosis. Alternatively, the small intestine may be brought through an opening in the abdomen to form an ileostomy. Stool then drains into a bag worn outside the body.

An ileostomy may be temporary or permanent. The choice depends on the reason for surgery, the health of your rectum, whether the operation is planned or urgent, and whether joining the bowel is considered safe.

The operation may be performed through one longer abdominal incision or with several small incisions using laparoscopic or robotic instruments. The surgeon may need to switch to an open operation if this is safer.

Why the procedure is performed

A total abdominal colectomy may be recommended when disease affects much or all of the colon, or when leaving the colon in place creates an unacceptable risk.

Reasons include:

In an emergency, the main goal may be to control infection, bleeding, or severe inflammation. Reconstruction can sometimes be considered during a later operation.

- Ulcerative colitis that is severe, has not responded to medicines, or has caused dangerous complications
- Multiple cancers, widespread precancerous changes, or cancer involving more than one part of the colon
- Inherited conditions that cause many polyps or a high risk of colorectal cancer
- Severe slow-transit constipation that has not improved with appropriate nonsurgical treatment
- Major bleeding, blockage, loss of blood supply, perforation, or severe swelling of the colon
- Selected cases of Crohn's disease or other extensive colon disease

Who should and should not have it

This operation may be suitable if most or all of your colon needs to be removed and a smaller operation would not treat the problem adequately. Your surgeon will consider your diagnosis, test results, general health, previous operations, bowel function, and personal priorities.

An ileorectal connection is generally considered only when the rectum and anal muscles can function well enough. It may not be appropriate if the rectum has active disease, cancer, severe scarring, poor control, or a substantial future cancer risk.

Elective surgery may be delayed to treat an active infection, improve nutrition, correct dehydration or anaemia, or manage uncontrolled heart or lung problems. Smoking and poorly controlled diabetes can also affect healing.

Total colectomy may not be the right operation when disease can be treated safely with

medicines or a smaller resection. It may also be unsuitable if the risks of major surgery outweigh the expected benefit. In a life-threatening emergency, however, surgery may still be necessary despite high risk.

How to prepare

Your treating facility's own instructions take priority because preparation differs by diagnosis and operation.

You will usually have blood tests and may need imaging, heart testing, or an anaesthetic assessment. Tell the team about all prescription medicines, over-the-counter products, supplements, allergies, and previous reactions to anaesthesia.

Some medicines may need adjustment, especially blood thinners and medicines for diabetes. Do not stop a prescribed medicine unless your surgical team tells you to do so.

You may be asked to drink a bowel-cleansing solution and take antibiotics like amoxicillin or doxycycline before planned surgery. Bowel preparation is not appropriate in every situation, especially some emergencies or complete blockages. Follow your facility's instructions about when to stop eating and drinking.

If an ileostomy is possible, an ostomy nurse may mark the best position on your abdomen and explain how the pouch works. Arrange help at home and transport from the hospital.

What happens during the procedure

You receive general anaesthesia, so you are unconscious and do not feel the operation. A breathing tube supports your breathing. You may also have a urinary catheter and intravenous lines.

The surgeon separates the colon from surrounding tissues and seals the blood vessels supplying it. The entire colon is then removed while the rectum remains.

The surgeon may join the small intestine to the rectum. The connection is called an anastomosis. If a connection is not suitable or safe, the surgeon creates an ileostomy. In some urgent operations, the rectum is closed inside the abdomen and an end ileostomy is formed.

Removed tissue is sent to a laboratory. A pathologist examines it for inflammation, cancer, polyps, blood-vessel problems, and other abnormalities.

Recovery and what to expect afterward

Pain and soreness are expected, particularly around the incisions. Pain medicine should make it possible to breathe deeply, move, and rest. Tell the hospital team if pain is worsening or not controlled.

You may begin with liquids and move toward solid food as your bowel starts working. Temporary nausea, bloating, and reduced appetite are common. After an ileorectal connection, bowel movements are usually looser and more frequent than before. With an ileostomy, you will learn how to empty the pouch, protect the skin, and monitor output and hydration.

Walking usually begins soon after surgery to support recovery and reduce the risk of blood clots. Avoid heavy lifting and strenuous exercise until your surgeon clears you. Follow the wound and ostomy care instructions you receive.

Do not drive while taking opioid pain medicine, while your movement is limited, or until you can brake suddenly and control the vehicle safely. Your team may give a specific minimum period based on your operation and recovery.

Returning to work often takes several weeks. A desk job may be possible sooner than heavy physical work. Open surgery, complications, fatigue, and learning ostomy care can extend recovery.

Risks and possible complications

Important early risks include bleeding, wound or abdominal infection, blood clots, pneumonia, injury to nearby organs, and reactions to anaesthesia.

A bowel connection can leak. This may cause infection and sometimes requires antibiotics, drainage, or another operation. The bowel can also temporarily stop moving, known as an ileus, causing bloating, nausea, and vomiting.

Later risks include scar tissue causing a bowel blockage, an incisional hernia, narrowing or inflammation at a bowel connection, and ongoing changes in bowel function.

An ileostomy can cause skin irritation, blockage, retraction, prolapse, or a hernia around the opening. High output can lead to dehydration and changes in body salts. If the rectum remains, it may still produce mucus, bleed, become inflamed, or require future surveillance or surgery.

Results and follow up

Your surgeon can explain the main operative findings after the procedure. Laboratory

examination of removed tissue usually takes several days and may change the diagnosis or the need for further treatment.

Routine follow-up checks wound healing, eating, hydration, bowel or ileostomy function, pain control, and activity. Staples or other wound materials may need removal.

If the rectum remains, you may need ongoing endoscopic checks using a flexible camera. The schedule is based on why you had surgery, your pathology results, and your future cancer risk. If you have cancer, follow-up may also include scans, blood tests, or oncology treatment.

Alternatives

The alternatives depend on the condition being treated and whether surgery is urgent.

Medicines can control inflammation in many people with ulcerative colitis or Crohn's disease. They avoid immediate surgery but may not control severe disease or remove cancer risk.

Removing only the affected section of colon preserves more bowel. It is a smaller resection, but it leaves behind colon that may later develop inflammation, polyps, or cancer. It is not suitable when disease is widespread.

A proctocolectomy removes both the colon and rectum. Waste can pass through a permanent ileostomy or, in selected people, an internal ileal pouch joined to the anus. This avoids leaving a diseased rectum but involves more pelvic surgery and has its own risks, including frequent stools and pouch inflammation.

For slow-transit constipation, alternatives include dietary changes, laxatives, prescription medicines, and assessment or therapy for pelvic-floor problems. Surgery is generally considered only after careful testing and adequate nonsurgical treatment.

For selected blockages, endoscopic decompression or a colonic stent may provide temporary relief or palliation. These approaches do not remove the underlying diseased colon and are not safe or effective in every situation.

When to call your healthcare team

Contact your surgical team promptly for worsening wound redness, swelling, drainage, fever, repeated vomiting, increasing abdominal pain, inability to eat or drink, new rectal bleeding, or difficulty managing an ileostomy.

Call promptly if an ileostomy stops producing output along with cramps or swelling, or if output becomes very watery and you develop thirst, weakness, dizziness, dark urine, or much less

urine.

Seek emergency help for trouble breathing, chest pain, fainting, heavy bleeding, sudden severe abdominal pain, a rapidly swelling abdomen, or severe confusion. These are not routine recovery symptoms.

Common questions

Will I be asleep?

Yes. Total abdominal colectomy is performed under general anaesthesia. You will be unconscious and supported by an anaesthesia team throughout the operation.

Can I drive home?

No. You will remain in hospital for several days in most cases. After discharge, arrange for someone else to drive until you are no longer impaired by pain medicine and can move and brake safely.

How painful is it?

Abdominal soreness is expected, but pain treatment is provided. Minimally invasive surgery may cause less incision pain than open surgery, although the internal operation and recovery remain substantial.

Will I need a bag?

Not everyone does. You may have an ileostomy if the small intestine cannot or should not be joined to the rectum. Ask before surgery whether an ileostomy is expected, possible, temporary, or permanent.

When will I know the results?

The surgeon can usually discuss what was seen soon after the operation. The full pathology report commonly takes several days.

Will my bowel movements be normal afterward?

They will change because the colon normally absorbs water and stores stool. After an ileorectal connection, stools are often looser and more frequent. Function may improve over time, but it may not return to your previous pattern.

Sources

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