PROCEDURE

Intestinal obstruction repair

Intestinal obstruction repair is surgery to remove or bypass a bowel blockage and treat damaged intestine.

PURPOSE
Relieve bowel blockage and remove or repair damaged intestine

PROCEDURE TYPE
Therapeutic surgery, usually open or minimally invasive

WHERE IT IS DONE
Operating theatre

ANAESTHESIA
General

HOW LONG IT TAKES
About 1 to 4 hours, based on findings and repair

PREPARATION
Fasting, blood thinner plan, IV fluids, and stomach decompression

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

MAIN RISKS
Infection, bleeding, bowel leakage, and recurrent obstruction

RESULTS
Surgical findings immediately; tissue results usually within several days

Overview

Intestinal obstruction repair is surgery to treat a blockage in the small or large intestine. The blockage may stop food, fluid, and gas from moving through the bowel. It can also reduce blood flow to part of the intestine.

"Repair" does not describe one single operation. The surgeon may release scar tissue, remove a growth, repair a hernia, untwist the bowel, or remove a damaged section. The healthy ends may be joined together. This join is called an anastomosis .

Sometimes the bowel cannot be joined safely during the same operation. The surgeon may create a stoma , an opening that brings the intestine through the abdominal wall. Waste then passes into a bag. A stoma may be temporary or permanent.

Surgery may be performed through several small cuts using a camera, called laparoscopic surgery, or through one larger abdominal cut, called open surgery. The safest approach may only become clear during the operation.

Why the procedure is performed

Surgery is used when the obstruction is unlikely to clear safely without an operation or when the bowel may be in danger.

Reasons include:

The immediate goals are to relieve pressure, restore movement through the intestine, and protect healthy bowel. If tissue has lost its blood supply or developed a hole, that section usually needs to be removed.

- A complete or persistent blockage
- Reduced blood supply to the bowel, called strangulation or ischemia
- A hole in the bowel, called perforation
- Scar tissue that traps or sharply bends the intestine
- A hernia containing blocked or damaged bowel
- A twisted bowel, called volvulus
- A tumour or another narrowing that cannot be managed less invasively
- Worsening pain, examination findings, blood tests, or scans despite non-surgical care

Who should and should not have it

You may be offered repair when the expected benefit of relieving the blockage is greater than the risks of surgery and anaesthesia. In some emergencies, delaying surgery could allow further bowel damage.

An operation may be avoided or delayed when a partial obstruction appears likely to settle with close hospital monitoring, intravenous fluids, and bowel rest. This is often considered for some obstructions caused by scar tissue when there are no signs of reduced blood flow or perforation.

Surgery may also not be the first treatment when:

There are few simple rules because an untreated obstruction can itself be dangerous. Your

surgeon should explain why surgery is being recommended, whether waiting is reasonable, and whether a stoma or bowel removal may be needed.

- The problem is temporary loss of bowel movement rather than a physical blockage
- A twisted or narrowed area can be treated safely by endoscopy
- A colonic stent could relieve selected cancer-related blockages
- A serious medical problem must be stabilised before anaesthesia
- The burdens of surgery do not fit your health goals or expected benefit

How to prepare

Obstruction repair is often urgent, so there may be little preparation time. The treating facility's own instructions take priority over general information.

You will usually be told not to eat or drink. Fluids are given through a vein. A tube may be passed through your nose into your stomach to drain fluid and reduce vomiting and pressure. This is called a nasogastric, or NG, tube.

Tell the team about all medicines, supplements, allergies, previous abdominal operations, and reactions to anaesthesia. Blood thinners like warfarin or apixaban can affect bleeding, but do not stop them on your own. The team will make a plan based on the medicine, your reason for taking it, and the urgency of surgery.

Blood tests and imaging help the team assess the blockage and your general condition. Antibiotics like amoxicillin or doxycycline may be given when bowel damage, leakage, or infection is a concern.

Before giving consent, ask about the possibility of open surgery, bowel removal, a stoma, blood transfusion, or another operation.

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.

The surgeon examines the abdomen and locates the blockage. What happens next is based on its cause and the condition of the bowel. The surgeon may:

A laparoscopic operation may need to be changed to an open operation if the bowel is very swollen, visibility is poor, or a more complex repair is required. This change is made for safety

and is not necessarily a complication.

- Cut bands of internal scar tissue, called adhesions
- Free bowel trapped in a hernia
- Untwist a section of intestine
- Remove a tumour or narrowed segment
- Remove bowel that is badly damaged or lacks blood flow
- Join healthy bowel ends or create a stoma
- Wash the abdomen if bowel contents have leaked

Recovery and what to expect afterward

Pain and tenderness are expected around the cuts. Pain relief may be given through a vein, by mouth, or through a regional anaesthetic technique. Tell your hospital team if pain is preventing deep breathing, coughing, or movement.

Eating restarts gradually. You may begin with sips of fluid once the team believes the bowel is recovering, then move toward regular food. The NG tube stays in place until drainage decreases and it is safe to remove. Passing gas or stool can be a sign that bowel activity is returning.

You will be encouraged to sit up and walk as soon as it is safe. Movement helps circulation and lung recovery. Avoid heavy lifting and strenuous abdominal activity until your surgeon clears you.

You cannot drive home after this operation. After discharge, do not drive while taking medicines that make you drowsy or until you can move comfortably, wear a seat belt, and perform an emergency stop. Follow the specific restriction given by your surgical team.

Returning to work may take several weeks. Timing is influenced by whether surgery was open or laparoscopic, whether bowel was removed, and how physical your job is. Recovery can take longer after infection, a stoma, or another complication.

Risks and possible complications

Possible risks include:

Your personal risk is affected by the cause and severity of the obstruction, whether bowel tissue is damaged, previous operations, and your overall health.

- Bleeding or infection
- Injury to the bowel or nearby organs
- Leakage from a bowel join
- A collection of infected fluid, called an abscess
- Temporary slowing of the bowel, called ileus
- Blood clots, chest infection, or anaesthesia complications
- Wound separation or later development of a hernia
- Need for a stoma or further surgery
- Short bowel problems if a large amount of intestine is removed
- Another obstruction, particularly when new scar tissue forms

Results and follow up

The surgeon usually knows immediately whether the blockage was relieved and whether bowel removal or a stoma was necessary. They will explain the findings after you are awake enough to understand.

If tissue was removed, it may be examined in a laboratory. These pathology results often take several days and may identify cancer, inflammation, or another cause.

Routine follow-up usually includes checking the wound, bowel function, eating, pain control, and activity. Staples or stitches may need removal. If you have a stoma, a specialist nurse can teach you how to care for it and discuss whether reversal may be possible.

Further treatment may be needed if the obstruction was caused by cancer, inflammatory bowel disease, or another ongoing condition.

Alternatives

The realistic alternatives depend on the reason for the blockage and whether the bowel appears threatened.

Bowel rest, intravenous fluids, and an NG tube may allow some partial obstructions to clear without surgery. This avoids an operation but requires close hospital monitoring and may fail or allow the blockage to return.

Water-soluble contrast imaging may help show whether an adhesive small-bowel obstruction

is likely to resolve. It does not replace surgery when there are signs of reduced blood flow, perforation, or worsening illness.

Endoscopic treatment can untwist some large-bowel volvulus or open certain narrowed areas. It is less invasive, but the blockage may return and perforation is possible.

A colonic stent can open selected blockages caused by cancer. It may act as a bridge to planned surgery or provide longer-term relief when major surgery is not suitable. It can move, become blocked, or damage the bowel.

Comfort-focused care may be considered when surgery is unlikely to provide a meaningful benefit or does not match your goals. Treatment then focuses on pain, nausea, vomiting, and other distress.

When to call your healthcare team

For routine concerns, contact your surgical team if you have questions about the wound, diet, medicines, bowel habits, stoma care, or returning to activity.

Seek prompt medical advice for:

Call emergency services for severe or rapidly worsening abdominal pain, fainting, major bleeding, marked breathing difficulty, chest pain, or confusion.

- Increasing abdominal pain or swelling
- Repeated vomiting or inability to keep fluids down
- Fever, wound redness, pus, or worsening tenderness
- No gas or stool along with increasing discomfort
- A stoma that stops working, becomes very swollen, or changes colour
- Persistent diarrhoea or signs of dehydration
- New calf pain or swelling

Common questions

Will I be asleep?

Yes. Intestinal obstruction repair is performed under general anaesthesia. You will be unconscious and supported by a breathing tube during surgery.

Can I drive home?

No. You will usually remain in hospital for several days. After discharge, wait until your team says driving is safe and you are no longer impaired by pain or medication.

How painful is it?

Abdominal soreness is expected, especially after open surgery. Pain should gradually improve and can usually be managed with a planned combination of medicines. Worsening pain needs assessment.

When can I eat normally again?

Eating resumes when your bowel begins to recover and vomiting or stomach drainage has settled. You may start with liquids and advance gradually.

When will I know what the surgeon found?

The surgical findings are usually available immediately after the operation. Laboratory results from removed tissue generally take several days.

Will I need a stoma bag?

Not everyone does. A stoma may be needed if the bowel cannot be joined safely, the abdomen is contaminated, or healing risk is high. Ask whether it is expected to be temporary or permanent.

Sources

- MedlinePlus Medical Encyclopedia. Intestinal obstruction repair. U.S. National Library of Medicine
- Di Saverio S, Coccolini F, Galati M, et al. Bologna guidelines for diagnosis and management of adhesive small bowel obstruction: 2017 update. World Journal of Emergency Surgery . 2018;13:24
- Maung AA, Johnson DC, Piper GL, et al. Evaluation and management of small-bowel obstruction: an Eastern Association for the Surgery of Trauma practice management guideline. Journal of Trauma and Acute Care Surgery . 2012;73(5 Suppl 4):S362-S369
- Vogel JD, Feingold DL, Stewart DB, et al. Clinical practice guidelines for the management of colonic volvulus and acute colonic pseudo-obstruction. Diseases of the Colon & Rectum . 2021;64(9):1046-1057
- Catena F, De Simone B, Coccolini F, Di Saverio S, Sartelli M, Ansaloni L. Bowel obstruction: a narrative review for all physicians. World Journal of Emergency Surgery . 2019;14:20