CONDITION

Bowel obstruction

Learn how a bowel obstruction blocks the movement of food, fluid, and gas, including symptoms, causes, diagnosis, treatment, complications, and when to seek urgent care.

WHAT IT IS
Partial or complete intestinal blockage

BODY SYSTEM
Digestive

MAIN SYMPTOMS
Cramping abdominal pain, swelling, vomiting, inability to pass stool or gas

WHAT CAUSES IT
Physical blockage or impaired bowel movement

HOW IT IS DIAGNOSED
CT scan

MAIN TREATMENT
Hospital care, decompression, sometimes surgery

CAN IT BE CURED?
Sometimes - depends on cause and damage

IS IT AN EMERGENCY?
Sometimes - severe constant pain or shock

LONG-TERM OUTLOOK
Recovery varies with risk of future obstruction

Overview

A bowel obstruction is a partial or complete blockage that prevents food, fluid, digestive juices, and gas from moving normally through the small intestine or colon.

Most obstructions are mechanical , meaning something physically blocks the intestine, such as scar tissue, a hernia, a tumor, or twisting of the bowel. Similar symptoms can occur when the intestine is open but its muscles and nerves do not move contents forward. This is called ileus when it is usually short-term, such as after surgery. Intestinal pseudo-obstruction is another movement disorder that resembles a blockage.

A partial obstruction allows some material to pass, while a complete obstruction blocks it more fully. Symptoms alone cannot reliably distinguish between them.

Pressure can build inside the intestine and reduce or cut off its blood supply. This can damage the bowel wall and cause a hole, called a perforation. Prompt assessment is important because some people need close observation, a procedure, or emergency surgery.

A possible bowel obstruction requires urgent medical evaluation. Do not use laxatives or enemas unless a clinician has confirmed they are safe.

Symptoms

Symptoms vary with the location, severity, and speed of onset. Common symptoms include:

Small-bowel obstruction may cause vomiting and cramping relatively early. A blockage lower in the colon may cause more swelling and constipation, with vomiting developing later. These patterns cannot confirm the location or severity.

Passing stool does not rule out an obstruction. Material already beyond the blockage may still pass, and some people with a partial blockage continue to pass small amounts.

Seek urgent medical care for persistent abdominal pain, repeated vomiting, increasing swelling, or inability to pass stool or gas. Mention any history of abdominal surgery, hernia, cancer, or previous obstruction.

Call emergency services or go to an emergency department for:

These signs may indicate reduced blood flow, perforation, severe infection, or dehydration.

- Cramping or wave-like abdominal pain
- Abdominal swelling or bloating
- Nausea or vomiting
- Trouble passing stool or gas
- Constipation
- Reduced appetite or fullness
- Diarrhea or small amounts of stool with some partial obstructions
- Severe, constant, or rapidly worsening abdominal pain
- A rigid, very tender, or markedly swollen abdomen
- Vomit containing blood or material that looks like stool
- Bloody or black stool
- Fainting, confusion, severe weakness, or difficulty staying awake

- Fever with worsening abdominal symptoms
- Trouble breathing or signs of shock, such as pale, cool, clammy skin

Causes and risk factors

The most common cause of small-bowel obstruction in adults is abdominal adhesions . These bands of internal scar tissue may form after abdominal or pelvic surgery and can kink or trap the intestine, sometimes years later.

A hernia occurs when tissue pushes through a weak area in the abdominal wall. If trapped bowel loses its blood supply, it is called a strangulated hernia and requires emergency treatment.

Other mechanical causes include:

Cancer is an important cause of large-bowel obstruction, but testing is needed to identify the cause.

Ileus can occur after surgery or with severe infection, abdominal inflammation, major illness, electrolyte disturbances, or medicines that slow the bowel, including opioids like oxycodone or morphine . Acute colonic pseudo-obstruction, also called Ogilvie syndrome, is more common in people who are hospitalized, seriously ill, or recovering from surgery or trauma.

Risk is higher with previous abdominal or pelvic operations, hernias, inflammatory bowel disease, abdominal or pelvic cancer, prior radiation treatment, or a previous obstruction.

- Colorectal, small-bowel, or nearby cancers
- Narrowing from Crohn's disease or diverticular disease
- Volvulus , in which the bowel twists
- Intussusception , in which one section slides into another
- Impacted stool
- Gallstones that enter the intestine
- Swallowed objects or compacted material
- Narrowing after radiation treatment or other injury

Diagnosis

A clinician will ask when symptoms began, whether pain is constant or comes in waves, and

whether stool or gas can pass. Important history includes operations, hernias, bowel disease, cancer, medicines, fever, vomiting, and previous obstructions.

The examination may check hydration, abdominal swelling and tenderness, scars, and hernias. A rectal examination may be needed. Bowel sounds alone cannot confirm or exclude an obstruction.

Blood tests may identify dehydration, infection, anemia, kidney problems, or abnormal electrolyte levels. Lactate may help assess reduced blood flow or severe illness, but a normal result does not completely rule out bowel injury.

Imaging is central to diagnosis. A CT scan can often show the location and cause of a blockage and signs of twisting, inflammation, reduced blood flow, or perforation. Contrast may be used depending on the situation and the person's health.

Abdominal X-rays may show widened bowel loops or abnormal gas patterns but can miss an obstruction or its cause. Ultrasound may be useful in children, pregnancy, or selected adult cases.

A water-soluble contrast study may help predict whether some adhesive small-bowel obstructions will resolve without surgery. Endoscopy is used only in selected large-bowel obstructions, such as certain cases of volvulus or tumor-related narrowing.

Treatment and management

Treatment depends on the cause, location, severity, and whether blood flow is threatened. Care usually takes place in a hospital because findings can change quickly.

Initial treatment may include:

A nasogastric tube can reduce vomiting, pressure, and discomfort, although it does not correct every cause.

Some partial small-bowel obstructions caused by adhesions improve with bowel rest, fluids, decompression, and close monitoring. This is appropriate only when there are no signs of perforation, strangulation, or worsening injury. Failure to improve may require surgery.

Urgent surgery is generally needed when the bowel is completely blocked, its blood supply appears threatened, perforation is suspected, or symptoms worsen despite treatment. Surgery may release adhesions, repair a hernia, untwist the bowel, remove a tumor, or remove damaged intestine.

After bowel removal, healthy ends may be joined. Sometimes the surgeon creates a stoma , an opening on the abdomen through which stool enters a collection bag. It may be temporary or

permanent.

Selected colon blockages can be treated endoscopically. Some sigmoid volvulus cases may be untwisted through a flexible tube. A stent may open a tumor-related narrowing before planned surgery or provide symptom relief when surgery is unsuitable.

Ileus and pseudo-obstruction are treated differently because there is no physical blockage to remove. Treatment may include addressing the underlying illness, correcting fluids and electrolytes, reviewing medicines that slow the bowel, encouraging appropriate movement, and decompressing the bowel. Some cases require medication, endoscopic decompression, or surgery.

Antibiotics like amoxicillin or doxycycline may be given when bowel injury, infection, or perforation is suspected, but they are not required for every uncomplicated obstruction.

After recovery, food is restarted gradually as directed. A low-fiber diet may help some people with an ongoing narrowed area, but it is not appropriate for everyone. Follow the care team's instructions rather than making major diet changes independently.

- Temporarily avoiding food and drink under medical supervision
- Fluids and electrolytes through a vein
- Medicines for pain and nausea
- A tube through the nose into the stomach to remove fluid and air
- Repeat examinations, blood tests, or imaging

Complications

Vomiting, reduced intake, and fluid trapped in the bowel can cause dehydration, electrolyte disturbances, kidney problems, and low blood pressure.

Pressure may reduce the bowel's blood supply. Ischemia means tissue is not receiving enough blood and oxygen. Strangulation means blood flow has been cut off by trapped or twisted bowel. Tissue may die without prompt treatment.

A weakened bowel wall can perforate, allowing intestinal contents to leak into the abdomen. This can cause peritonitis , sepsis, and shock. Vomiting may also lead to aspiration into the lungs.

Other complications include poor nutrition after prolonged illness, surgical wound problems, new adhesions, and future obstruction.

Follow up

Follow-up depends on the cause and treatment. After discharge, clinicians may review bowel function, hydration, nutrition, medicines, wounds, and recovery. People with cancer, inflammatory bowel disease, hernias, or movement disorders may need specialist care.

Follow instructions about diet, activity, lifting, wound care, and returning to work. Ask before restarting laxatives, fiber supplements, or medicines that affect bowel movement.

Contact the treating team promptly if vomiting returns, swelling increases, pain worsens, bowel movements stop unexpectedly, or a surgical wound becomes red, drains fluid, or opens.

Seek emergency care for severe or constant pain, repeated vomiting, a rigid abdomen, fainting, confusion, fever with worsening symptoms, blood in vomit or stool, or inability to pass stool or gas with increasing swelling.

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