CONDITION

Small bowel obstruction

A small bowel obstruction is a partial or complete blockage that stops food, fluid, and gas moving through the small intestine.

WHAT IT IS
Partial or complete blockage of the small intestine

BODY SYSTEM
Digestive system

MAIN SYMPTOMS
Cramping pain, vomiting, swollen abdomen, difficulty passing stool

WHAT CAUSES IT
Adhesions, hernias, tumours, inflammation, or twisting

HOW IT IS DIAGNOSED
Abdominal CT, sometimes X-rays

MAIN TREATMENT
Hospital care, decompression, fluids, sometimes surgery

CAN IT BE CURED?
Sometimes - blockage can return after treatment

IS IT AN EMERGENCY?
Yes - suspected blockage needs urgent hospital assessment

LONG-TERM OUTLOOK
Usually good with prompt treatment, but recurrence is possible

Overview

A small bowel obstruction is a blockage in the small intestine. The small intestine is the long, narrow part of the digestive system between the stomach and the large intestine. It absorbs nutrients and moves food, fluid, and gas forward.

An obstruction can be partial, allowing some material through, or complete. Most are mechanical obstructions, meaning something physically blocks or squeezes the bowel. Less often, the bowel stops moving properly without a physical blockage. This is called an ileus or intestinal pseudo-obstruction and is managed differently.

When material cannot move forward, fluid and gas collect above the blockage. The bowel may stretch, causing pain, swelling, nausea, and vomiting. Fluid can also shift out of the bloodstream and into the bowel, leading to dehydration and changes in body salts called

electrolytes.

In some cases, the obstruction also cuts off blood flow to part of the bowel. This is called strangulation. The affected tissue can become damaged or develop a hole, known as a perforation. Prompt assessment helps identify people who need urgent surgery.

Symptoms

Symptoms may begin suddenly or build over several hours or days. They can be different with a partial blockage than with a complete one.

Common symptoms include:

With a partial obstruction, you may still pass gas or loose stool. Passing some stool does not rule out a blockage, especially early in the illness. Vomiting may contain green or yellow bile and, with a blockage farther down the bowel, may develop an unpleasant faecal smell.

Pain that comes and goes is common because the bowel contracts against the blockage. Pain that becomes severe and constant is more concerning for reduced blood flow, perforation, or inflammation inside the abdomen.

Other possible symptoms include loss of appetite, thirst, a dry mouth, reduced urination, a fast heartbeat, fever, or weakness. Babies and young children may be unable to describe their pain. They may have repeated vomiting, a swollen abdomen, unusual sleepiness, or episodes of drawing their knees toward their chest.

- Cramping or wave-like abdominal pain
- A swollen or tight-feeling abdomen
- Nausea and vomiting
- Difficulty passing stool or gas

Causes and risk factors

Bands of internal scar tissue called adhesions are a leading cause of small bowel obstruction in adults. They can form after abdominal or pelvic surgery. An adhesion may pull, narrow, or trap a loop of bowel. Obstruction can develop soon after surgery or many years later.

A hernia is another important cause. A hernia occurs when tissue pushes through a weak area in the abdominal wall. Bowel caught inside a hernia can become blocked or lose its blood supply. Groin, navel, and surgical-scar hernias can all be involved.

Other causes include:

The likely cause differs with age. Intussusception and some conditions present from birth are more relevant in children. Adhesions, hernias, inflammatory bowel disease, and tumours are more common causes in adults.

Risk is higher after abdominal or pelvic surgery, but most people who have surgery do not develop an obstruction. A previous obstruction increases the chance of another, especially when adhesions remain.

- Crohn's disease, which can cause inflammation and narrowed areas called strictures
- Tumours inside the bowel or cancers pressing on it from nearby
- Twisting of the bowel, called volvulus
- One part of the bowel sliding into another, called intussusception
- A swallowed object or a mass of undigested material
- A gallstone entering and blocking the bowel, which is uncommon

Diagnosis

A suspected small bowel obstruction requires prompt medical assessment. A healthcare professional will ask when the symptoms began, whether you can pass gas or stool, and whether you have had abdominal surgery, a hernia, Crohn's disease, or cancer.

During an examination, they may check for abdominal swelling, tenderness, surgical scars, or a hernia. They may listen for bowel sounds and look for signs of dehydration or infection. A rectal examination is sometimes needed.

A CT scan of the abdomen and pelvis is commonly used to confirm the obstruction, find its location and likely cause, and look for reduced blood flow or perforation. Contrast material may be given into a vein to make structures easier to see. The imaging team considers kidney function, allergies, pregnancy, and other relevant factors before using contrast.

Abdominal X-rays may show widened bowel loops and fluid levels, but they can miss some obstructions or provide less detail than CT. Ultrasound may be useful in children, during pregnancy, or in settings where CT is not suitable.

Blood tests do not confirm an obstruction by themselves. They help assess dehydration, kidney function, electrolyte changes, infection, anaemia, and possible bowel injury.

Treatment and management

Small bowel obstruction is usually treated in hospital. The immediate goals are to relieve pressure, replace lost fluid, control symptoms, and decide whether the bowel can recover without an operation.

You will generally be asked not to eat or drink at first. Fluids and electrolytes are given through a vein. Medicines may be used for pain and nausea.

A thin tube may be passed through the nose into the stomach. This is called a nasogastric tube. It removes trapped fluid and air, which can reduce vomiting and abdominal pressure. Not everyone needs one.

Some partial obstructions caused by adhesions improve with bowel rest, fluids, observation, and decompression. The hospital team will monitor symptoms, examination findings, urine output, blood tests, and imaging. A water-soluble contrast study may sometimes help show whether the blockage is likely to clear and may help bowel contents move forward.

Surgery is more likely when there is:

During surgery, the cause of the blockage may be released or removed. Damaged bowel may need to be taken out, with the healthy ends joined together. Occasionally, an opening called a stoma is needed so bowel contents can leave through the abdomen into a bag. Whether this is temporary or permanent depends on the findings and the person's overall condition.

Treatment is tailored to the cause. For example, a hernia may need repair, while a Crohn's-related narrowing may require medical treatment, endoscopic treatment, surgery, or a combination.

- A complete blockage
- Concern about reduced blood flow, dead bowel tissue, or perforation
- A trapped or strangulated hernia
- A tumour or another cause unlikely to resolve without an operation
- Worsening symptoms or failure to improve with non-surgical care

Complications

Dehydration and electrolyte changes are common because of vomiting, reduced intake, and fluid trapped in the bowel. These problems can affect the kidneys, blood pressure, heart rhythm, and general strength.

A strangulated obstruction cuts off the bowel's blood supply. Without enough blood and

oxygen, bowel tissue can die. Bacteria and bowel contents may then leak into the abdomen or bloodstream.

A perforation can lead to peritonitis, which is serious inflammation and infection of the abdominal lining. Infection may spread through the body and cause sepsis, a dangerous reaction to infection.

Surgery also has risks, including infection, bleeding, leakage where bowel ends are joined, and new adhesions. However, delaying necessary surgery can carry greater risk. The healthcare team weighs these issues using examination findings, scans, blood tests, and how symptoms change.

Prevention

Many small bowel obstructions cannot be fully prevented. Adhesions can form as part of normal healing after surgery, and there is no reliable way for a person to remove or prevent them at home.

Surgeons may use careful techniques and, in selected operations, adhesion-reducing materials. These measures lower some risks but cannot guarantee that adhesions will not form.

Treating a known hernia before it becomes trapped may prevent some emergencies. If you have Crohn's disease, keeping inflammation controlled may reduce the chance of scarring and narrowing, although it cannot remove all risk.

After an obstruction, follow the eating and activity advice given at discharge. A temporary low-fibre or modified diet is sometimes advised, but it is not appropriate for everyone and should not be continued indefinitely without guidance. Laxatives or extra fibre should not be used to treat possible obstruction unless a healthcare professional has confirmed they are safe.

Living with it and what to expect

Many people recover fully after the blockage clears or is treated surgically. Recovery time depends on the cause, the length of illness, whether bowel tissue was damaged, and whether an operation was needed.

After non-surgical treatment, eating usually restarts gradually once pain and swelling improve and the bowel begins passing gas or stool. After surgery, recovery also includes wound healing and a gradual return to normal activity.

Tiredness, reduced appetite, and changes in bowel habits can continue for a while. Follow-up may include reviewing the cause, checking surgical healing, and planning treatment for conditions such as Crohn's disease, a hernia, or cancer.

An obstruction caused by adhesions can return months or years later. Surgery can relieve adhesions but can also lead to new ones, so an operation is not routinely used just to prevent a future episode. Some people have repeated obstructions, while others never have another.

Once recovered, many people return to their usual work, food, exercise, and daily activities. Long-term restrictions are not always needed. Any ongoing diet plan should match the cause of the obstruction and your nutritional needs rather than follow a general "bowel obstruction diet."

When to get medical help

Go to an emergency department promptly if you have repeated vomiting, cramping abdominal pain, increasing abdominal swelling, or difficulty passing gas or stool. Do not wait for symptoms to become severe. Do not eat, take laxatives, or attempt to manage a suspected obstruction at home while waiting for assessment.

Call emergency services if symptoms include severe or constant abdominal pain, fainting, confusion, marked weakness, trouble breathing, or signs of shock such as cold clammy skin. Fever with worsening abdominal pain or a very tender, rigid abdomen also needs emergency care.

If you have recently been treated, seek urgent reassessment if pain, swelling, vomiting, fever, or inability to pass gas returns. Arrange routine follow-up for wound concerns that are not rapidly worsening, persistent changes in appetite or bowel habits, questions about diet, or management of the condition that caused the blockage.

Common questions

Can a small bowel obstruction clear on its own?

Some partial obstructions, especially those caused by adhesions, clear with hospital observation, intravenous fluids, bowel rest, and sometimes a nasogastric tube. It is not safe to assume that a blockage will clear without assessment because complete obstruction and reduced blood flow may need surgery.

Can I still pass stool if I have a bowel obstruction?

Yes. With a partial obstruction, liquid stool or gas may still pass. Early in a complete obstruction, stool already beyond the blockage may also come out. Passing stool does not rule out an obstruction when other symptoms are present.

What does small bowel obstruction pain feel like?

It often causes cramping pain that comes in waves as the bowel contracts. The abdomen may feel swollen or tight. Severe pain that becomes constant is more concerning and needs emergency assessment.

Will I need surgery?

Not everyone does. Some adhesive partial obstructions improve without an operation. Surgery may be needed for complete obstruction, a trapped hernia, damaged bowel, perforation, certain tumours, or symptoms that do not improve with hospital treatment.

What can I eat after a bowel obstruction?

Food is usually restarted gradually after the bowel begins working again. Some people are temporarily advised to eat softer or lower-fibre foods. The right plan depends on the cause, treatment, and whether narrowed bowel remains, so follow the discharge advice you receive.

Can a small bowel obstruction come back?

Yes. Recurrence is possible, particularly when adhesions caused the first episode. New abdominal pain, vomiting, swelling, or inability to pass gas should be assessed promptly even if a previous obstruction settled without surgery.

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