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The small bowel is plugged by a scar, hernia, or twist — the loop above swells, and if the twist chokes off blood, the tissue dies.

THE ONE-LINE TRUTH

Something is blocking the small bowel, so nothing can squeeze past it.

The chain — how it unfolds

1. A scar band, hernia, tumor, twist, or stone physically blocks the small bowel. — why: The obstruction is the upstream break — nothing can pass, so everything above it backs up like a clogged drain.
2. The bowel above the block dilates (swells) with fluid, gas, and undigested food. — why: The gut's squeezing waves (Peristalsis) keeps squeezing food forward, but it hits a wall and cannot empty, so the loop balloons out like a water balloon filling past its limit.
3. The patient vomits — first food, then bile (yellow-green), then feculent (brown, foul-smelling) fluid if the block is low in the small bowel. — why: The stomach and proximal bowel are overfilled and cannot push forward, so the vagus nerve triggers reverse flow (vomiting) to try to decompress the system and protect the airway.
4. Dehydration and electrolyte imbalance develop: low potassium, low chloride, metabolic alkalosis (the blood turning too alkaline) (blood becomes too basic). — why: Vomiting dumps stomach acid (hydrochloric acid, HCl) and potassium into the toilet, and third-spacing (fluid leaking into the bowel wall and lumen) drains water and salt out of the bloodstream.
5. The swollen bowel wall compresses its own blood vessels (the small arteries and veins in the wall), choking off oxygen supply. — why: As the loop stretches, pressure inside rises and squeezes the capillaries shut — like stepping on a garden hose. If the obstruction is also a volvulus (twist) or incarcerated hernia (tight squeeze), the main mesenteric vessels are kinked from the outside, doubling the starved blood flow (ischemia) (oxygen starvation).
6. The bowel wall becomes blood-starved (ischemic) (purple, swollen, oxygen-starved) and then infarcted (black, dead). — why: Without oxygen, the cells in the bowel wall die. The tissue turns from pink to purple (ischemia) to black (necrosis, or tissue death) — like frostbite, but from lack of blood instead of cold.

7. Dead bowel perforates (breaks open), spilling bacteria and stool into the peritoneal cavity (the space around the organs in the belly). — why: Dead tissue cannot hold together; the wall falls apart, and billions of gut bacteria pour into a normally sterile space, triggering massive infection (peritonitis) and septic shock.
8. Peritonitis and sepsis: fever, severe constant abdominal pain, rigid belly, low blood pressure, organ failure. — why: The immune system goes into overdrive (systemic inflammatory response syndrome, SIRS) trying to fight the infection, but the flood of bacteria and toxins overwhelms it, blood vessels leak, blood pressure drops, and organs (kidneys, lungs, brain) start to fail from poor oxygen delivery.

Spot it — what you see, and why

- Crampy belly pain that comes and goes in waves: The bowel muscle squeezes hard trying to push food past the blocked spot, like a garden hose kinking and unkinking — each squeeze makes a cramp.
- Throwing up — early (green or yellow) if the block is high in the small bowel, late (brown, foul-smelling) if the block is lower down: Food and liquid pile up above the blockage and have nowhere to go but backwards. High blockages fill the stomach quickly, so vomiting starts fast. Low blockages take longer to back up into the stomach.
- Belly bloating and swelling: Gas and fluid build up in the loops of bowel above the blockage because they cannot move forward, stretching the belly like a balloon.
- No poop and no passing gas: Nothing can make it through the blocked section of bowel, so the exit path is empty — the body stops moving waste out.
- Loud, high-pitched bowel sounds early on (hyperactive bowel sounds): At first, the bowel muscle works overtime, squeezing fast and hard to push past the block. That rushing fluid and gas makes loud squealing or tinkling noises you can hear through a stethoscope.
- Quiet or silent belly sounds later (hypoactive or absent bowel sounds): After hours of squeezing and failing, the bowel muscle gets exhausted and stops moving — a sign that the bowel may be very stretched, injured, or dying.

Red flags — act now

- Fever above 100.4°F (38°C) with steady, severe belly pain — warns that the bowel may be losing blood flow or tearing
- Fast heart rate (tachycardia over 100 beats per minute) or low blood pressure — signs the body is losing fluid fast or going into shock
- Belly is rigid, very tender to touch, or shows guarding (muscles tighten to protect) — suggests the bowel may have torn and spilled contents into the belly (peritonitis)

- Vomit or belly pain that smells like feces — late sign of a low, complete blockage or dead bowel
- No urine output or very dark urine — the body is dangerously low on fluid

Treat it — in this order

1. NPO (nothing by mouth) + nasogastric (NG) tube decompression → The NG tube is a thin tube through the nose into the stomach that sucks out backed-up fluid and air. This shrinks the swollen bowel, stops vomiting, and takes pressure off the block. For partial SBO (some stuff still passing), this rest can let adhesions relax and the block heal on its own.
2. IV fluids (normal saline or lactated Ringer's) + electrolyte replacement (potassium chloride, sodium chloride) → Replaces the water and salt that vomiting stripped away. This restores blood pressure, fixes heart rhythm (low potassium can cause dangerous beats), and gets the kidneys working again. The bowel also needs water to heal.
3. Water-soluble contrast (Gastrografin) by mouth or NG tube → Diagnostic and therapeutic: it shows on X-ray whether contrast moves through (partial block) or stops (complete block). The high salt in Gastrografin also pulls water into the bowel, which can loosen adhesions and help a partial block resolve. If contrast reaches colon in < 24 hours, 80% of patients avoid surgery.
4. Surgery (exploratory laparotomy or laparoscopy): lysis of adhesions, hernia repair, bowel resection, or bypass → Physically cuts away scar tissue (adhesions), pushes bowel back through a hernia and patches the hole, removes dead or cancerous bowel, or bypasses a block that cannot be removed. Restores blood flow and bowel passage.
5. Pain control (IV opioids like morphine or fentanyl, used carefully) → Relieves severe pain so the patient can breathe and cooperate with care. Pain itself worsens stress and dehydration.

Your top priorities at the bedside

1. Make the patient NPO and insert or maintain nasogastric tube on low continuous suction, measuring and recording output every 4 hours — why: The blocked intestine fills with swallowed air, digestive juice, and bacteria that back up and cause vomiting; suctioning decompresses (empties) the bowel above the blockage, relieves pressure, prevents aspiration (vomit entering lungs), and reduces risk of perforation
2. Start large-bore IV access and give isotonic crystalloid fluids (normal saline or lactated Ringer solution) at the rate ordered, monitoring urine output hourly — why: Vomiting and third-spacing into the distended bowel cause hypovolemia (low blood volume) and electrolyte loss; aggressive IV fluid replacement restores circulating volume, perfuses (supplies blood to) organs, and prevents acute kidney injury and shock

3. Monitor vital signs every 1 to 2 hours, watching for a fast heart rate (tachycardia) (fast heart rate above 100), fever above 100.4 Fahrenheit, or low blood pressure below 90 systolic — why: A fast heart rate (Tachycardia) and low blood pressure signal worsening dehydration or sepsis (infection in the bloodstream); fever suggests strangulation, starved blood flow (ischemia), or perforation; these changes mean the obstruction is becoming surgical emergenc