Small Bowel Obstruction

A small bowel obstruction is a blockage in the small intestine.

Small bowel obstructions are usually caused by scar tissue, hernia, or cancer. In the United States, most obstructions occur as a result of prior surgeries. The bowel often forms bands of scar (called adhesions) after being handled during an operation. The more surgeries that involve the bowel, the more scars are likely to form. If the bowel becomes trapped in adhesions, it may lead to a small bowel obstruction. In severe cases, the blood supply might be compromised, and the bowel tissues might die. This is a life-threatening situation.

Symptoms
The small bowel constantly moves digested food and stomach juices forward from the stomach to the colon.
- A small bowel obstruction caused by adhesions may occur as early as a few weeks and as late as several years after a surgery without any obvious inciting event.
- An obstruction can cause the material inside the bowel to back up into the stomach. This causes nausea and vomiting of dark green bile (bilious vomiting).
- The bowel preceding the obstruction becomes large, dilated, and filled with the fluid and air that would otherwise move forward. This causes bloating (abdominal distention).
- When the bowel squeezes to push things forward past the obstruction, it causes cramping and discomfort.
- If fluid and air cannot advance beyond the obstruction, patients can no longer pass gas or have a bowel movement (obstipation).

Diagnosis and Treatment
A history of surgeries, hernia, or cancer is important to know about. A doctor’s examination accompanied by blood tests and an x-ray or computed tomography (CT) scan can confirm the diagnosis.

Most obstructions resolve by allowing the small bowel to rest and shrink back to its normal size, thus making the adhesions less problematic. This is accomplished by inserting a nasogastric (NG) tube (a thin plastic tube that goes through a nostril and into the stomach) that suctions fluid from the stomach. In addition, patients are not allowed to eat or drink during this time and are instead given intravenous fluids for hydration. Usually, a small bowel obstruction resolves after a few days. When a patient becomes less bloated, starts to pass gas, and has a bowel movement, the tube is removed and the patient is allowed to eat and drink.

If the patient is not better, then operative intervention may be necessary. The surgery is called lysis of adhesions, which means cutting the scar tissue and freeing up the trapped bowel. If any part of the bowel looks unhealthy or dead, it will be cut out and the healthy ends will be sewn back together.

Any hernia can also entrap the bowel and cause similar symptoms. A hernia can typically be detected during a doctor’s examination; in some cases imaging may be needed to ensure that a hernia is not the cause of the obstruction.

Warning Signs
- Severe pain or fever may be a sign that the bowel is not receiving enough blood or may be dead.
- Patients without any history of bowel surgery or without a hernia found on examination should undergo a CT scan to exclude cancer as a possible cause of the obstruction.

FOR MORE INFORMATION
Mayo Clinic
www.mayoclinic.org/diseases-conditions/intestinal-obstruction/symptoms-causes/syc-20351460

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