Ileus: Causes, Symptoms and Treatment

Ileus is a **temporary and functional** (non-mechanical) arrest of **intestinal peristalsis**, leading to impaired movement of bowel contents through the **small and/or large intestine**.

Distinguishing Point: Unlike mechanical obstruction, ileus has **no physical blockage**. The bowel appears patent but lacks the muscular contractions to move contents forward.

Types of Intestinal Obstruction

- 1. Mechanical Obstruction
 - Caused by a physical barrier in the intestine.
 - Examples: Volvulus, incarcerated hernia, intussusception, tumors, impacted feces, foreign bodies.
- 2. Non-Mechanical Obstruction (Ileus)
 - Due to paralysis of intestinal musculature, not an anatomical blockage.
 - · Also called paralytic ileus or adynamic ileus .
 - Most commonly seen postoperatively or due to intra-abdominal inflammation

Etiology of Ileus

Common Causes

- Postoperative ileus: Most frequent, especially after abdominal or pelvic surgery.
- **Peritonitis**: Inflammation from infection (e.g., perforated viscus).
- Retroperitoneal pathology :
 - Hematomas (e.g., ruptured AAA),
 - Inflammation (e.g., pancreatitis, retrocecal appendicitis),
 - Fractures (e.g., lumbar vertebrae).

Metabolic & Pharmacologic Causes

- Electrolyte Imbalances: Hypokalemia, hypomagnesemia.
- Drugs :
 - · Opioids (? GI motility via ?-receptors),
 - Anticholinergics ,
 - Calcium channel blockers (less common).

Other Contributing Conditions

- Renal failure
- Thoracic causes (e.g., pneumonia, myocardial infarction, lower rib fractures)

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Postoperative GI Recovery Timelines

GI Segment Normal Function Return

Small Intestine0-24 hoursStomach24-48 hours

Colon 48–72 hours (most affected)

Clinical Presentation

- Abdominal distention
- Nausea and vomiting
- Mild, vague abdominal discomfort
- Obstipation (no flatus or stool) or minimal watery stool
- Absent or hypoactive bowel sounds
- Non-tender abdomen (unless underlying inflammation)

Pain is typically non-colicky, which helps differentiate from mechanical obstruction.

Diagnosis

Clinical Evaluation

- History of recent surgery , trauma, infection, or medication use.
- Absence of bowel sounds on auscultation .

Imaging

- Abdominal X-ray :
 - Dilated loops of bowel with air-fluid levels.
 - Gas more prominent in the **colon** than in the small bowel (in postoperative ileus).
- CT Scan :
 - Useful to rule out mechanical obstruction, abscess, or complication.

Contrast Studies

- Water-soluble contrast enema or oral contrast can help distinguish ileus from mechanical obstruction.
- In ileus, contrast may diffuse slowly through the bowel without a clear point of obstruction.

Management

Supportive Treatment

- NPO (nil per os): No oral intake.
- Nasogastric decompression : For vomiting or severe distention.

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- IV fluids and electrolyte correction , especially potassium .
- Avoid opioids and anticholinergics (worsen motility).
- Minimal sedation to preserve gut activity.

Maintain **serum K? > 4.0 mmol/L** for optimal gut motility.

Persistent or Complicated Ileus

- If symptoms persist > 5–7 days , suspect mechanical obstruction ? Surgical consultation .
- Colonic pseudo-obstruction (Ogilvie's syndrome) :
 - Consider colonoscopic decompression .
 - IV neostigmine (cholinesterase inhibitor) may be used; cardiac monitoring required due to risk of bradycardia.

High-Yield Notes

- Most common cause of ileus : Postoperative state
- Classic triad : Abdominal distention + Vomiting + Absent bowel sounds
- Initial step in management : Supportive care (NPO, fluids, NG tube)
- Key complication to rule out: Mechanical obstruction or peritonitis
- Ogilvie's Syndrome = acute colonic pseudo-obstruction, often in elderly or immobile patients