
Diarrhea

Last updated October 2023

Characteristics: Passing of loose or watery stools, at least three times in a 24-hour period. Often due to infectious etiology (eg, rotavirus, norovirus, adenoviruses, *E. coli*) but can occur as a side effect to medications. Most cases resolve with routine over-the-counter treatment.

Meds That Cause It: Antibiotics, proton pump inhibitors, donepezil, galantamine, memantine, rivastigmine, sertraline, acamprosate, lithium, metformin, stool softeners and other laxatives, rapid discontinuation of anticholinergic agents (cholinergic rebound) or opioid withdrawal.

Mechanism: Increased water content of stool, usually due to impaired water absorption and/or active water secretion by the bowel.

General Management:

- Push fluids and suggest dietary adjustments like the BRAT diet (bananas, rice, applesauce, and toast). Avoid high-fat foods.
- Get a travel and food history.
- Ask about recent antibiotic use.
- Assess for serotonin syndrome (presence of mental status changes, hyperthermia, hyperreflexia, autonomic instability).
- If on lithium, check serum lithium level for toxicity.

First-Line Medications:

- Antimotility agents: Loperamide (Imodium) two tablets (4 mg) initially, then 2 mg after each loose stool for no more than two days with a max dose of 16 mg/day. Avoid if fever or blood in stool.
- Bismuth salicylate (Pepto-Bismol) 30 mL or two tablets every 30 minutes, up to eight doses.

Second-Line Medications:

- Diphenoxylate/atropine (Lomotil) is an alternative antimotility agent that binds to opioid receptors in the gut. Start two tablets QID for no more than two days.

Clinical Pearls:

- Loperamide is also an agonist at opioid receptors in the gut; misuse and abuse of this over-the-counter drug has increased in recent years. Those using opioids know it can help with withdrawal-related diarrhea. Some have discovered that in high doses (100–200 mg/day), it can produce euphoria. In rare cases, high dose use has resulted in hospitalization for arrhythmias and death.
- If persistent, bloody, or accompanied by severe pain or volume depletion (dry mucous membranes, low BP), refer for further evaluation including need for stool testing.

Fun Fact:

Clear liquids like water, ginger ale, and electrolyte-rich sports drinks (eg, Gatorade) are often recommended for fluid repletion during bouts of diarrhea. Probiotic drinks may help too.