

Understanding common gastrointestinal

Classification	Common examples	Action	Indications
Antacids	Aluminum carbonate (Basaljel), aluminum hydroxide (AlternaGEL)	Reduce total acid load in the GI tract, elevate gastric pH to reduce pepsin activity, strengthen gastric mucosa	Ulcer pain, gastro-esophageal reflux (GERD)
Histamine, (H ₂) receptor antagonists	Cimetidine (Tagamet), nizatidine (Axid), ranitidine HCl (Zantac), famotidine (Pepcid)	Inhibit histamine action at H ₂ receptors in gastric parietal cells, reducing gastric acid output and concentration	Duodenal or gastric ulcer, GERD
Proton-pump inhibitors	Omeprazole (Prilosec), lansoprazole (Prevacid), rabeprazole (Aciphex), esomeprazole (Nexium)	Inhibit the activity of the proton pump and bind to hydrogen or potassium adenosine triphosphate located at the secretory surface of gastric parietal cells	Duodenal or gastric ulcer, GERD, erosive esophagitis, <i>Helicobacter pylori</i> infection
Anticholinergics	Dicyclomine HCl (Bentyl)—used in irritable bowel syndrome Scopolamine (Scopace)—used for motion sickness	Competitively antagonize the actions of acetylcholine and other cholinergic agonists within the parasympathetic nervous system; antispasmodics directly relax smooth muscle	Irritable bowel syndrome, nausea from motion sickness
Antiemetics Phenothiazines	Prochlorperazine (Compazine), promethazine (Phenergan)	Phenothiazines block postsynaptic dopamine receptors and block the chemoreceptor trigger zone for nausea. They also produce varying degrees of anticholinergic and alpha-adrenergic receptor blocking actions.	Nausea and vomiting
Serotonin (5-HT ₃) antagonist	Ondansetron HCl (Zofran)	Blocks serotonin (5-HT ₃) receptors peripherally and centrally	Nausea and vomiting
PABA derivative	Metoclopramide hydrochloride (Reglan)	Inhibits dopamine receptors in chemoreceptor trigger zone; increases lower esophageal sphincter tone, stimulates gastric motility	Nausea, delayed GI emptying
Antidiarrheals	Diphenoxylate HCl and atropine sulfate (Lomotil), loperamide (Imodium), bismuth subsalicylate (Pepto-Bismol), attapulgite (Kaopectate)	Kaolin and pectin mixtures decrease stool water content; opium preparations increase smooth muscle tone, inhibit GI motility and propulsion; bismuth preparations have a mild water-binding capacity	Noninfectious diarrhea
Anti-inflammatory	Mesalamine (Asacol, Pentasa, Rowasa)	Inhibits prostaglandin production in the colon	Inflammatory bowel disease
Laxatives Classes: Bulk forming, emollient, hyperosmolar, lubricant, stimulant	Psyllium (Metamucil), docusate sodium (Colace), magnesium hydroxide (Milk of Magnesia), bisacodyl (Bisalax), mineral oil	Promote movement of intestinal material from the colon and rectum	Constipation

drugs

Challenged by the variety of gastrointestinal (GI) drugs? Use this chart to review the main types of drugs—and the ones you see most often.

Adverse reactions

Precautions

Nursing considerations

Aluminum-containing antacids may cause constipation or hypophosphatemia; magnesium-containing antacids may cause diarrhea or hypermagnesemia

Use with caution in patients with renal impairment; monitor serum phosphate, calcium, and magnesium as needed.

Use cautiously in elderly patients, who are at greater risk for adverse reactions. Antacids interfere with the absorption of many drugs, so check interactions before administering together.

Mild and transient diarrhea, neutropenia, dizziness, fatigue; confusion in elderly patients, especially with cimetidine use

Use with caution in elderly or pregnant patients and in those with impaired renal or hepatic function; contraindicated in breast-feeding women.

Available over the counter and in higher doses by prescription. Avoid using cimetidine in elderly patients. Can be administered once daily or in multiple doses with meals and at bedtime.

Diarrhea, nausea, abdominal pain

Do not use in breast-feeding women; use with caution in pregnant women.

Give on empty stomach. Dosage may have to be adjusted in patients with severe liver disease. Potential for drug-drug interactions with omeprazole.

Dry mouth, decreased sweating, urinary hesitancy and retention, constipation, palpitations

Safety during pregnancy not determined.

Use cautiously with elderly patients; don't use concomitantly with diphenhydramine (Benadryl). Constipation can be treated with stool softeners.

Extrapyramidal symptoms (dystonic movement), orthostatic hypotension with reflex tachycardia, dizziness, sedation

Avoid alcohol use; use with caution in elderly patients; monitor for urine retention and for involuntary muscle movement.

Can be given orally, rectally, or intravenously (I.V.). Decrease dose in elderly patients; may be used in pregnant women who are getting dehydrated from hyperemesis.

Headache, diarrhea, constipation, fatigue, dizziness, sedation, musculoskeletal pain

No age-related problems have been reported.

Can be given I.V. or orally

Restlessness, seizures, suicidal ideation, extrapyramidal symptoms, agranulocytosis, bradycardia

Use with caution in patients with impaired renal function. Many drug-drug interactions. Consult a reliable drug reference.

Can be given orally or I.V. Elderly patients are more likely to experience extrapyramidal symptoms.

Bismuth may cause temporary darkening of the tongue and stools; kaolin and pectin may cause constipation; opium preparations may cause dizziness, nausea, vomiting, and dependence with long-term use

Use cautiously in elderly patients; don't use to treat diarrhea caused by an infection.

Teach patients to notify their health care provider if diarrhea becomes bloody or persists for more than 2 days.

Headache, dizziness, hair loss, fatigue, abdominal pain, rash

Contraindicated in patients sensitive to salicylates; monitor kidney function periodically.

Can be given orally or rectally

Flatulence, diarrhea, abdominal discomfort, weakness, dependence, fluid and electrolyte imbalance

Contraindicated in patients with a GI obstruction; use with caution in patients with large hemorrhoids.

High potential for abuse; can be given orally or rectally. Help patients regain normal bowel pattern by increasing fiber in diet. Encourage patients to stay active and to drink plenty of water. **N**

Source: *Nurses Drug Guide*, 4th ed. ©2002 Springhouse Corp., Springhouse, Pa.