

Gastrointestinal Medications

<p>Anti-ulcer Medications H-2 Antagonists /</p> <ul style="list-style-type: none"> ▪ Cimetidine (Tagamet) ▪ Famotidine (Pepcid) ▪ Nizatidine (Axid) ▪ Ranitidine (Zantac) 	<p>Inhibits activity of histamine at the H2 receptor sites resulting in inhibition of gastric acid secretion, decreasing secretions and allowing ulcers to heal. Considered equally effective but pharmacokinetics, adverse reactions and interactions may differ.</p>	<p>Monitor for interaction with such drugs as oral anticoagulants, beta-blockers, benzodiazepines, tricyclic antidepressants and others. May inhibit the metabolism of other drugs increasing the toxicity.</p>	<p>To ensure absorption, do not give an antacid within 1 hour before or after giving an H2 receptor blocker When administering EV, do not mix with other drugs. Rapid IV injection as a bolus may cause dysrhythmias and hypotension.</p>
<p>H2 Antagonists – these are somewhat less effective in acid suppression when compared to the PPIs. Use is more limited. Histamine is found in the mucosal cells of the GI tract; this substance activated H2 receptors to increase gastric acid secretion. The major components of gastric secretion include hydrochloric acid and intrinsic factor, both of which are produced by the parietal (acid-forming) cells; pepsinogen, which is synthesized by chief cells, and mucus. The principal functions of mucus is to protect the epithelial cells of the GI tract from an attack by pepsin and irritation by the HDI secreted by the stomach</p>			
<p>Gastric Acid Pump Inhibitors</p> <p>Proton Pump Inhibitor</p> <ul style="list-style-type: none"> ▪ Esomeprazole (Nexium) ▪ Omeprazole (Prilosec) ▪ Lansoprazole (Prevacid) ▪ Pantoprazole (Protonix) ▪ Rabeprazole (Aciphex) 	<p>Suppresses gastric acid secretion at the secretory surface of the gastric parietal cells by inhibiting the hydrogen/potassium adenosine triphosphatase enzyme system at the secretory surface of the gastric parietal cells. Therefore, they block the final step of acid production, inhibiting both basal and stimulated gastric acid secretion.</p>	<p>Proton Pump Inhibitors – suppress gastric acid secretion They are indicated for the treatment of GERD, peptic ulcer disease, and hypersecretory conditions with excessive gastric acid such as Zollinger-Ellison syndrome (a condition caused by neuroendocrine tumors, usually of the pancreas, which secrete excessive amounts of gastrin. This stimulates the stomach to secrete great amounts of hydrochloric acid and pepsin, which in turn leads to peptic ulceration of the stomach and small intestines. About 60% of the tumors are malignant. Hyperacidity produced by the tumor can be treated with proton pump inhibitors. Surgical removal may be curative.) PPIs are indicated in combination with antimicrobials in a number of peptic ulcer disease treatment protocols to eradicate H. Pylori. In addition, PPIs are used to prevent and treat NSAID-induced upper GI ulcers but may not protect against NSAID-induced lesions in the jejunum or ileum.</p>	<p>Administer 30 minutes before breakfast and at bedtime if ordered twice a day. Do not crush, break or chew.</p>
<p>Monitor liver function tests for possible abnormal values, including increased AST, ALT, alkaline phosphatase and bilirubin levels. Increase your calcium intake or take a calcium supplement while using as it can interfere with calcium absorption. Avoid smoking, alcohol, aspirin and NSAIDS while taking, there may interfere with healing Report black tarry stools, diarrhea or abdominal pain</p>			
<p>Antacids</p> <p>Chemical compounds that buffer or neutralize HCl in the stomach and thereby increase gastric pH.</p> <ul style="list-style-type: none"> ▪ Aluminum hydroxide (Amphojel, Alternagel) ▪ Calcium Carbonate (Tums) ▪ Magnesium hydroxide (MOM) ▪ Sodium bicarbonate ▪ Aluminum and magnesium hydroxides (Maalox, Mylanta) 	<p>Antacids buffer or neutralize gastric acid, usually acting locally. Antacids are used in GERD, gastritis, and peptic ulcer disease to relieve pain and prevent further damage to esophageal and gastric mucosa. Antacids interfere with the absorption of many drugs given orally. Separate administration times by at least 2 hours</p>	<p>Monitor for constipation or diarrhea resulting from antacids therapy. Notify MD if either develops Although most antacids have little systemic effect, electrolyte imbalances can develop. Monitor serum electrolytes, particularly sodium, calcium and magnesium.</p>	<p>Take your antacid frequently as prescribed 1-3 hours after meals and at bedtime. Avoid an antacid for approximately 2 hours before and 1 hour after taking another medication Shake suspensions well prior to administration Chew tablets thoroughly and follow with 4-6 ounces of water</p>
<p>Report worsening symptoms, diarrhea or constipation Continue taking for the duration prescribed. Although pain and discomfort often are relieved soon after treatment begins, healing takes 6-8 weeks.</p>			

<p style="text-align: center;">Antiemetics</p> <ul style="list-style-type: none"> ▪ Phenothiazine ▪ Butyrophenone ▪ Prokinetic GI agent - Reglan ▪ Anticholinergic ▪ Selective serotonin receptor antagonist SSRI ▪ Benzodiazepine ▪ Glucocorticoid ▪ Cannabinoid ▪ Substance P/neurokinin 1 receptor antagonist 	<p style="text-align: center;">Inflammatory Bowel Disease Medication</p> <ul style="list-style-type: none"> ■ Aminosalicylate <ul style="list-style-type: none"> ■ Mesalamine, balsalazide, olsalazine, sulfasalazine ■ Immunomodulators <ul style="list-style-type: none"> ■ Azathioprine, methotrexate, mercaptopurine ■ Corticosteroids <ul style="list-style-type: none"> ■ Prednisone ■ Biologic response modifiers <ul style="list-style-type: none"> ○ Monoclonal antibodies directed against tumor necrosis factor alpha.
<p style="text-align: center;">Laxatives</p> <ul style="list-style-type: none"> ▪ Osmotic and saline laxatives (milk of magnesia, polyethylene glycol) ▪ Stimulant laxatives (dulcolax, evac-u-lax, senna laxative) ▪ Bulk laxatives (fibercon, citrucal, metamucil) ▪ Emollients or fecal softening agents (colace, docusate) 	<p>Osmotic and saline laxatives=contain poorly absorbed salts or carbohydrates that remain in the bowel, increasing osmotic pressure and drawing water into the intestine. Stool volume increases, consistency decreases and peristalsis is stimulated. May have an irritant effect on the bowel.</p> <p>Stimulant laxatives=work by stimulating the motility and secretion of intestinal mucosa. Their use results in watery stool, often accompanied by abdominal cramping and pain. They are used to relieve constipation but should be the initial treatment. Also used for bowel prep.</p> <p>Bulk laxatives=contain vegetable fiber which is not digested or absorbed in the gut which creates bulk and draws water into the intestine, softening the stool mass</p> <p>Emollients or fecal softening agents=reduce stool surface tension and form an emulsion of fat and water, used to prevent straining</p>
<p style="text-align: center;">Antidiarrheals</p> <ul style="list-style-type: none"> • Absorbents - Coats the wall of the GI tract, absorbing the bacteria or toxins and passing them out with the stools (Kaopectate) • Antisecretory –antiinflammatory and antibacterial effects. (Pepto-Bismol) • Synthetic opioids - Slows GI motility by a direct effect on the opioid receptor in the gut (Lomotil, Imodium) 	<p>Absorbents: acts locally to bind substances that cause diarrhea.</p> <p>Assess for contraindications to antidiarrheal therapy such as some infections or chronic inflammatory bowel disease including ulcerative colitis.</p> <p>If fever present, check before administration</p> <p>Administer at least 1 hour before or 2 hours after other oral medications as they may interfere with absorption.</p> <p>Antisecretory –anti-inflammatory and antibacterial effects. (Pepto-Bismol) has potential toxic effects and interacts with drugs such as aspirin or anticoagulants. (Coumadin)</p> <p>Opium and derivatives act on the CNS to decrease the motility of the ileum and colon , slowing transit time and promoting more water absorption. They decrease the sensation of a full rectum and increase anal sphincter tone.</p> <p>Do not administer Lomotil to patients receiving MAOIs, hypertensive crisis may occur.</p> <p>Observe closely for increased effects of other CNS depressants such as alcohol, narcotic analgesic or barbiturate sedatives.</p> <p>Observe for abdominal distention, toxic megacolon may occur if given to patients with ulcerative colitis</p>