

## Peptic Ulcer Disease Interventions

Peptic ulcers are caused by an erosion of the mucosal wall of the gastrointestinal tract. These ulcers develop when excess hydrochloric acid and digestive enzymes (pepsin) disrupt the gastric mucosal barrier, causing breakdown. Medications to decrease or inhibit hydrochloric (gastric) acid secretion may be used in combination with diet and lifestyle modifications to treat peptic ulcer disease (PUD). Remember, patients with PUD should avoid NSAIDs, as these drugs may cause gastric irritation and bleeding.



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### Combination Drug Therapy

#### Combined Med-bottles

Triple or quadruple therapy may be used to treat peptic ulcers. Triple therapy involves a proton pump inhibitor (PPI) and two antibiotics, while quadruple therapy uses a PPI, bismuth, tetracycline, and metronidazole.

### Two Antibiotics

#### (2) Tutu ABX-guys

Clarithromycin and amoxicillin are used to treat peptic ulcers caused by *H. pylori*. These antibiotics are used along with a proton pump inhibitor for 7 to 14 days. Patients may require a second round of treatment due to the increased incidence of antibiotic resistance.

### Proton Pump Inhibitor (PPI)

#### Proton Pump with Inhibiting-chains

PPIs directly inhibit release of acid into the stomach. A decrease in the secretion of gastric acid will reduce the pain associated with peptic ulcers, while also allowing the ulcers to heal.

### Decrease Acid Secretion

#### Down-arrow Acidic-lemon

H2 blockers are used to block histamine receptors on gastric parietal cells, causing a decrease in gastric acid secretion. PPIs also minimize hydrochloric acid secretion; however, these medications work by directly inhibiting the gastric proton pump in the stomach.

### Avoid NSAIDs

#### Avoid-sign N-sad

Patients with PUD should avoid NSAIDs, as these drugs may cause gastric irritation and bleeding. Patients who must continue aspirin therapy should take enteric-coated aspirin to reduce the risk of side effects.

### Diet and Lifestyle Changes

#### Diet and Lifestyle Magazine

Dietary modifications to facilitate ulcer healing include elimination of caffeinated, and/or carbonated beverages, and foods that can cause GI upset, such as spicy foods. Smoking cessation, decreased alcohol intake, and stress management are also key in peptic ulcer healing.