

Department of anesthesia

Practical pharmacology

Dr. zaidoon abd alwahab altahan

gastrointestinal disorder

Altahanzaidoon@gmail.com

Gastrointestinal disorder

1. peptic ulcers
2. Gastroesophageal reflux disease (GERD)
3. Emesis
4. Diarrhea
5. constipation
6. irritable bowel syndrome (IBS)
7. inflammatory bowel disease (IBD).

DRUGS USED TO TREAT PEPTIC ULCER DISEASE AND GASTROESOPHAGEAL REFLUX DISEASE

- Two main goals in treatment of peptic ulcer disease
 1. eradicating the H. pylori infection
 2. reducing secretion of gastric acidthese done by giving suitable drugs
- Antimicrobial drugs to eradicating the H. pylori infection
- H₂ receptor antagonists and proton pump inhibitor to reducing acid secretion

Antimicrobial agents

- We use **ethier** quadruple therapy of (bismuth subsalicylate, metronidazole, and tetracycline plus a PPI) is a recommended **first-line option**
- This usually results in a 90% greater eradication rate **or Triple therapy** consisting of (PPI combined with amoxicillin ((metronidazole may be used in penicillin-allergic patients)) plus clarithromycin

H2 receptor antagonists

- Cimetidine, famotidine, nizatidine and ranitidine
- reducing acid secretion by approximately 70%
- The use of these agents has **decreased** with the advent of Ppis .
- Used for GERD and peptic ulcer

Proton pump inhibitor

- Dexlansoprazole, esomeprazole, lansoprazole, omeprazole, pantoprazole and rabeprazole
- PPIs inhibit both basal and stimulated gastric acid secretion by more than 90%
- Used for GERD and peptic ulcer **recommended used**
- **Omeprazole and esomeprazole** may decrease the effectiveness of clopidogrel because they inhibit CYP enzyme and prevent the conversion of clopidogrel to its active metabolite

Antacids

- Commonly used antacids are combinations of salts of aluminum and magnesium, such as **aluminum hydroxide** and **magnesium hydroxide** , Calcium carbonate to reacts with HCl
- Antacids are used for symptomatic relief of peptic ulcer disease, heartburn, and GERD.
- They should be administered after meals for maximum effectiveness.