

Table 54. Treatment options for peptic ulcer disease.

Active *Helicobacter pylori*-associated ulcer:

1. Treat with anti-*H. pylori* regimen for 10–14 days. Treatment options:

Proton pump inhibitor twice daily
 Clarithromycin 500 mg twice daily
 Amoxicillin 1 g twice daily (or metronidazole 500 mg twice daily, if penicillin allergic)

Proton pump inhibitor twice daily
 Bismuth subsalicylate two tablets four times daily
 Tetracycline 500 mg four times daily
 Metronidazole 250 mg four times daily

Ranitidine bismuth citrate 400 mg twice daily (not available in US)
 Clarithromycin 500 mg twice daily
 Amoxicillin 1 g or tetracycline 500 mg or metronidazole 500 mg twice daily

(Proton pump inhibitors administered before meals. Avoid metronidazole regimens in areas of known high resistance or in patients who have failed a course of treatment that included metronidazole.)

2. After completion of 10–14 day course of *H. pylori* eradication therapy, continue treatment with proton pump inhibitor¹ once daily or H₂ receptor antagonist (as below) for 4–8 weeks to promote healing.

Active ulcer not attributable to *H. pylori*:

1. Consider other causes: NSAIDs, Zollinger-Ellison syndrome, gastric malignancy. Treatment options:

Proton pump inhibitors¹:

Uncomplicated duodenal ulcer: treat for 4 weeks
 Uncomplicated gastric ulcer: treat for 8 weeks

H₂ receptor antagonists:

Uncomplicated duodenal ulcer: cimetidine 800 mg, ranitidine or nizatidine 300 mg, famotidine 40 mg, once daily at bedtime for 6 weeks
 Uncomplicated gastric ulcer: cimetidine 400 mg, ranitidine or nizatidine 150 mg, famotidine 20 mg, twice daily for 8 weeks
 Complicated ulcers: proton pump inhibitors are preferred drugs

Prevention of ulcer relapse:

1. NSAID-induced ulcer: prophylactic therapy for high-risk patients (prior ulcer disease or ulcer complications, use of corticosteroids or anticoagulants, age > 70 with serious comorbid illnesses).

Treatment options:

Proton pump inhibitor once daily
 COX-2 selective NSAID (rofecoxib, celecoxib, valdecoxib)
 (In special circumstances: misoprostol 200 µg 3–4 times daily)

2. Chronic "maintenance" therapy indicated in patients with recurrent ulcers who either are *H. pylori*-negative or who have failed attempts at eradication therapy: once-daily proton pump inhibitor¹ or H₂ receptor antagonist at bedtime (cimetidine 400–800 mg, nizatidine or ranitidine 150–300 mg, famotidine 20–40 mg)

Proton pump inhibitors: omeprazole 20 mg, rabeprazole 20 mg, lansoprazole 30 mg, pantoprazole 40 mg, esomeprazole 40 mg.
 If proton pump inhibitors are given twice daily except esomeprazole (once daily).