

Gastroesophageal Reflux Disease (GERD)

1. Initial treatment should include lifestyle changes such as diet and exercise.
2. Occasional and mild GERD can be managed with OTC antacids and histamine- H_2 receptor antagonists (H_2 RAs).
3. Initial proton pump inhibitor (PPI) therapy should be omeprazole because it is available generically and all PPIs are considered equivalent.
4. After eight weeks, discontinue therapy to assess the need for continuous therapy.
5. Intermittent maintenance therapy: Symptom relief can be maintained with a two- to four-week course of therapy when symptoms recur in 50% of patients.
6. Treat patients who require continuous maintenance therapy with the same drug that successfully relieved acute symptoms.

Alarm Symptoms

Alarm symptoms suggest a more serious disease process.¹

General	Respiratory symptoms caused by gastric acid
Dysphagia	Choking
Bleeding	Coughing
Weight loss	Shortness of breath
Chest pain	Hoarseness

Lifestyle Changes¹

- Raise the head of the bed 6 inches.
- Avoid overeating.
- Avoid tight-fitting clothes.

- Stop smoking.
- If overweight, lose weight.
- Avoid high-fat meals.
- Avoid eating two to three hours before bedtime.
- Avoid peppermint, fatty food, chocolate, alcohol, coffee, onions, and garlic.

Occasional and Mild GERD, Nonerosive Reflux Disease (NERD)

- Most reflux patients have NERD.²
- Antacids are effective in relieving symptoms of mild GERD, though the evidence to support the use of antacids is of poor quality. Antacids have a rapid onset of action but a short duration.¹
- H₂RAs are effective for mild GERD. Most early H₂RA studies were done in patients with mild to moderate nonerosive esophagitis. H₂RAs have an onset of action of approximately 30 minutes and relieve symptoms for approximately 10 hours.¹
- A meta-analysis concluded that PPIs are not more effective for symptoms of NERD than H₂RAs.³

Moderate GERD

- After three months of H₂RAs, symptoms are reduced in 80% of patients with mild esophagitis and healed in 80% of patients. H₂RAs are effective in healing mild esophagitis but probably not effective enough to consider using in moderate to severe esophagitis.⁴
- A meta-analysis estimated healing rates at 3 months for all grades of erosive esophagitis as 28% for placebo, 52% for H₂RAs, and 84% for PPIs. 77% of PPI patients and 48% of H₂RA patients were heartburn free. The average healing rate per week for all severities of esophagitis was 50% faster with a PPI; 11.7% of PPI patients healed each week compared with 5.9% of H₂RA patients.⁵
- Doubling the dose of an H₂RA has not been shown to be more effective in reducing or eliminating GERD symptoms compared to continuing the standard dose.⁶

70 Effective Pharmacotherapy

- All H₂RAs are equivalent⁷
 - Ranitidine (eg, *Zantac*) 150 mg twice a day or 300 mg at bedtime
 - Famotidine (eg, *Pepcid*) 20 mg twice a day or 40 mg at bedtime
 - Nizatidine (eg, *Axid*) 150 or 300 mg at bedtime
 - Cimetidine (eg, *Tagamet*) 400 or 800 mg at bedtime

Severe GERD

- PPIs reduce the recurrence of GERD by 80% to 90%.⁵
- PPIs heal 80% of patients with erosive esophagitis in 8 weeks.⁸
- Severe esophagitis requires maintenance therapy with a PPI.¹
- PPI studies use different endpoints and patient selection methods so no agent has demonstrated clear superiority. All PPIs are equivalent, so initially using generic omeprazole in PPI containing regimens would be the least expensive.^{1,4}
 - Omeprazole (eg, *Prilosec*) 20 mg/day
 - Lansoprazole (*Prevacid*) 30 mg/day
 - Pantoprazole (*Protonix*) 40 mg/day
 - Rabeprazole (*Aciphex*) 20 mg/day
 - Esomeprazole (*Nexium*) 20 mg/day
- Refractory cases of GERD will probably require twice-a-day dosing of PPIs.¹

Eradication of *Helicobacter pylori*

- There is conflicting data on whether eradicating *H. pylori* will lessen symptoms of GERD. More recent evidence suggests GERD symptoms will not be affected. Treatment should be decided on a case-by-case basis. Patients could be offered treatment along with an explanation of the benefit in reducing the risk for GI cancer, antibiotic-related side effects, and cost.⁹

Maintenance Therapy

- Most patients will need lifelong maintenance therapy although the intensity of therapy will vary among patients. Some patients will be controlled with antacids and lifestyle changes, while others will need a PPI.^{1,6,7}

- A one-year follow up of 73 patients who were initially treated with omeprazole found that 58% of patients were symptom free with no treatment, 24% of patients were controlled with an H₂RA, 7% were controlled with a prokinetic, and 1% required an H₂RA and a prokinetic.¹⁰
- No difference in efficacy was found in one study of 677 patients comparing intermittent maintenance therapy with H₂RAs and PPIs.¹¹

References

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