

Treatment of Gastroesophageal Reflux Disease

Gastroesophageal reflux disease (GERD) is defined by the American College of Gastroenterology as “symptoms or mucosal damage produced by the abnormal reflux of gastric contents into the esophagus”¹ and is associated with significant impairment in quality of life. It is estimated that over 40% of Americans experience GERD symptoms monthly. Reflux disease is also common in pregnancy and affects approximately 50% of pregnant women, many of whom experience symptoms daily.³

KEY POINTS

- There are no data to demonstrate superiority of step-down therapy (starting with a PPI) vs. step-up therapy (starting with an H₂ antagonist); however, clinical trials have shown PPIs control symptoms better than H₂ antagonists.¹
- PPIs are often preferred as first-line therapy due to efficacy and tolerability and should be dosed 30-60 minutes prior to a meal to allow for maximum acid suppression.¹
 - Twice daily dosing is generally not recommended for GERD.
- Mild-to-moderate GERD may be treated effectively with H₂ antagonists; cimetidine (Tagamet®) is not generally preferred because of numerous drug interactions.
- Long-term use of acid suppressant therapy has been associated with infrequent but significant clinical consequences such as vitamin B12 deficiency, fractures, and upper respiratory infections.^{4,5,6}
- Pharmacists should be able to differentiate typical symptoms of GERD from atypical or alarm symptoms and refer patients for further medical evaluation if necessary.

Currently, there are two major treatment approaches for GERD. “Step-up therapy” involves the initiation of OTC antacids and/or H₂ antagonists in addition to lifestyle changes with progression to prescription and/or surgical treatments if needed. In “step-down therapy,” a proton-pump inhibitor (PPI) is used initially at a dose that is appropriate for adequately controlling symptoms, but is decreased over time to the lowest effective dose. **While “step-down therapy” is routine in clinical practice and favored by many experts, there are no conclusive data as to cost-effectiveness or other considerations to support one treatment approach over another.**

There may be risks associated with long-term use of acid suppressants, including vitamin B12 deficiency, impaired calcium absorption leading to fractures, and upper respiratory infections.^{4,5,6} These risks have been reported in retrospective reviews and as such do not demonstrate a definitive causal link. However, **clinicians should be aware of the potential long-term risks associated with these agents and use the lowest effective**

dose for the shortest duration possible to control symptoms. In addition, monitoring of symptom control as well as signs of these potential adverse effects is recommended.

Pharmacist counseling points for GERD patients

Pharmacists are often the first healthcare professionals encountered by patients seeking advice for their GERD symptoms. **While many patients who suffer from mild GERD may be controlled with various OTC medications, patient-pharmacist interaction is an important step in determining if a patient is a candidate for self treatment or whether he or she should seek further medical evaluation.** In making this distinction, pharmacists should assess patients' symptoms and be able to differentiate typical, atypical, and alarm symptoms associated with GERD.

Typical Symptoms

Self treatment is appropriate if a patient has experienced substernal burning or "heartburn," hypersalivation, acidic taste in the mouth, and belching with or without mild regurgitation infrequently or episodically for < 4 weeks.⁹ Patients with persistent symptoms or symptoms occurring ≥ 2 times per week are advised to see their physician. Additionally, certain patient groups such as the elderly, pregnant women, or those with GERD symptoms accompanying chronic NSAID use should also be referred for medical evaluation.⁹

Atypical Symptoms

In addition to typical symptoms, some patients may also report wheezing, cough, chronic hoarseness, nausea and vomiting, dental deterioration, or jaw pain. These patients should be referred for evaluation by a physician.

Alarm Symptoms

Patients reporting dysphagia or odynophagia (painful or difficulty swallowing), choking, frequent vomiting, signs of GI bleed, unexplained weight loss, or chest pain should be advised to seek immediate medical attention.²

Counseling on proper administration and length of therapy with OTC acid suppressants is also important for optimal symptom control and for determining if a patient needs medical evaluation. A physician referral is warranted if symptoms return or worsen following discontinuation of a two-week trial of an OTC PPI or H2 antagonist or if the patient is taking more than the recommended dose or combination therapy to relieve symptoms.

References

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