

## Pharmacologic Therapies

5.2. Pharmacologic Therapies. The major pharmacologic agents currently used for treating GERD in children are gastric acid–buffering agents, mucosal surface barriers, and gastric antisecretory agents. Acid suppressant agents are the mainstay of treatment for all but the patient with occasional symptoms. The potential adverse effects of acid suppression, including increased risk of community-acquired pneumonias and GI infections, need to be balanced against the benefits of therapy.

5.2.1. Histamine-2 Receptor Antagonists (H2RAs) H2RAs exhibit tachyphylaxis or tolerance but PPIs do not. Tachyphylaxis is a drawback to chronic use. H2RAs have a rapid onset of action and, like buffering agents, are useful for on-demand treatment.

5.2.2. Proton Pump Inhibitors For healing of erosive esophagitis and relief of GERD symptoms, PPIs are superior to H2RAs. Both medications are superior to placebo. Administration of long-term acid suppression without a diagnosis is inadvisable. When acid suppression is required, the smallest effective dose should be used. Most patients require only once-daily PPI; routine use of twice-daily doses is not indicated. No PPI has been approved for use in infants younger than 1 year of age, and there are special concerns pertaining to prescription of PPIs in infants, as described in the Guideline.

5.2.3. Prokinetic Therapy Potential adverse effects of currently available prokinetic agents outweigh the potential benefits of these medications for treatment of GERD. There is insufficient evidence of clinical efficacy to justify the routine use of metoclopramide, erythromycin bethanechol, cisapride, or domperidone for GERD. Baclofen reduces the frequency of transient relaxations of the lower esophageal sphincter (TLESR), but it has not been evaluated in controlled trials for treatment of GERD in children.

5.2.4. Other Agents Buffering agents, alginate, and sucralfate are useful on demand for occasional heartburn. Chronic use of buffering agents or sodium alginate is not recommended for GERD because some have absorbable components that may have adverse effects with long-term use. Special caution is required in infants. If long-term use is required, more effective therapy is available.

Source: 2009 Pediatric Gastroesophageal Reflux Clinical Practice Guidelines: Joint Recommendations of the North American Society for Pediatric Gastroenterology, Hepatology, and Nutrition (NASPGHAN) and the European Society for Pediatric Gastroenterology, Hepatology, and Nutrition (ESPGHAN), p. 500-501

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