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FROM THE FAMILY PRACTICE INQUIRIES NETWORK

What is the best way to manage GERD symptoms in the elderly?

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EVIDENCE-BASED ANSWER

No evidence supports one method over another in managing uncomplicated gastroesophageal reflux disease (GERD) for patients aged >65 years. For those with endoscopically documented esophagitis, proton pump inhibitors (PPIs) relieve symptoms faster than histamine H2 receptor antagonists (H2RAs) (strength of recommendation [SOR]: **B**, extrapolation from randomized controlled trials [RCTs]). Treating elderly patients with pantoprazole (Protonix) after resolution of acute esophagitis results in fewer relapses than with placebo (SOR: **B**, double-blind RCT). Limited evidence suggests that such maintenance therapy for prior esophagitis with either H2RAs or PPIs, at half- and full-dose strength,¹ decreases the frequency of relapse (SOR: **B**, extrapolation from uncontrolled clinical trial).

Laparoscopic antireflux surgery for treating symptomatic GERD among elderly patients without paraesophageal hernia reduces esophageal acidity, with no apparent increase in postoperative morbidity or mortality compared with younger patients (SOR: **C**, nonequivalent before-after study). Upper endoscopy is recommended for elderly patients with alarm symptoms, new-onset GERD, or longstanding disease (SOR: **C**, expert consensus; see **TABLE**).

Elderly patients are at risk for more severe complications from GERD, and their relative discomfort from the disease process is often less than from comparable pathology for younger patients (SOR: **C**, expert consensus). Based on safety profiles and success in the general patient population, PPIs as a class are considered first-line treatment for GERD and esophagitis for the elderly (SOR: **C**, expert consensus).

CLINICAL COMMENTARY

Teasing out serious disease from routine GERD is a challenge in the elderly

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Who really needs the invasive workup and expensive medicine, and who needs the simple approach? Elderly patients can attribute symptoms to "just indigestion" when there are

other more serious diseases present (ie, angina, severe esophagitis, stricture, cancer). The physician may need a more detailed and patient approach to get the "real" story. Lifestyle changes and over-the-counter medications will resolve the majority of GERD symptoms. If the simple things don't work or there are warning signs/symptoms, then a further workup is needed. The older patient may then be willing to pay the cost of the long term PPI when they know that there is significant pathology and the potential for long term symptom relief.

EVIDENCE SUMMARY

Aggregated data from 2 randomized reflux esophagitis trials conducted in the United Kingdom were analyzed with respect to patient age. Comparison of symptom relief and esophageal lesion healing showed that elderly patients treated with omeprazole (Prilosec) fared better than those treated with either cimetidine (Tagamet) or ranitidine (Zantac).² The pooled data involved 555 patients with endoscopically proven reflux esophagitis, 154 of whom were over the age of 65. After 8 weeks, rates of esophageal healing among the elderly were 70% for those receiving omeprazole and 29% for those receiving H2RAs (41% difference; 95% confidence interval [CI], 26–55), while the rate of asymptomatic elderly patients was 79% for the omeprazole group and 51% for the H2RA group (28% difference; 95% CI, 12–44).³ Patients treated with omeprazole healed faster than those taking H2RAs, as shown by endoscopy, and more of them experienced symptom relief.

A multicenter, randomized, double-blind trial of GERD maintenance therapy started with an initial open phase in which elderly patients with GERD and documented esophagitis were treated and then had documented resolution of esophagitis by endoscopy after 6 months. The researchers then randomized 105 of these elderly patients to receive treatment with either low-dose (20 mg/d) pantoprazole or

FAST TRACK

Based on safety profiles and success in the general population, PPIs as a class are first-line treatment for GERD in the elderly

placebo for 6 months. Endoscopy was performed after 12 months for all patients, unless indicated sooner. Intention-to-treat analysis showed a disease-free rate of 79.6% (95% CI, 68.3–90.9) in the treatment group, compared with 30.4% (95% CI, 18.3–42.4) in the placebo group (number needed to treat [NNT]=2). Symptom reports concerning the same patients also suggest a marked drop in symptoms that correlated with healing.⁴

A prospective, nonequivalence, before-after study compared efficacy of, and complications from, laparoscopic surgery for symptomatic GERD between younger and older (≥65 years) patients. The investigators examined postoperative morbidity and mortality for 359 patients referred for laparoscopic surgery, either a partial or Nissen (full) fundoplication. They excluded those requiring more extensive surgery or repair of paraesophageal hernia. The 42 elderly patients had a higher mean American Society of Anesthesiologists score compared with the younger patients, reflecting higher preoperative comorbidity, but were similar with regard to weight and gender.

Before surgery, investigators performed 24-hour ambulatory pH monitoring. Preoperative exposure times to a pH below 4 (TpH <4) were similar for the younger and older patients (median 14.2% and 13.9%, respectively). Postoperative complication rates were similar for both groups. No deaths occurred. Minor postoperative complications involved 7% of the elderly patients and 6% of the younger group. The 24-hour pH monitoring scores showed improvement at 6 weeks after surgery for both groups, with the median TpH <4 at 1.1% (95% CL, 0.5) in the elderly vs a median of 1.8% (95% CL, 1.9) in the younger patients. At 1 year postoperatively, the values were also similar between the two groups; the median TpH <4 (95% CL) were 1.4% (1.5) in the elderly group and 1.2% (0.6) in the younger patient group.

The results of this study should be interpreted with caution, however. The study design is prone to bias, the patients had relatively low symptom scores at baseline, and sicker patients may have been excluded during the referral process.⁵

Warning signs and symptoms of dyspepsia and GERD that suggest complicated disease or more serious underlying process¹

Dysphagia
Unexplained weight loss
History of gastrointestinal bleeding
Early satiety
Iron deficiency anemia
Vomiting
Odynophagia (sharp substernal pain on swallowing)
Initial onset of heartburn-like symptoms after the age of 50 years
History of immunocompromised state
Anorexia

Recommendations from others

The Veterans Health Affairs/Department of Defense clinical practice guidelines recommend differentiating GERD (feelings of substernal burning associated with acid regurgitation) from dyspepsia (chronic or recurrent discomfort centered in the upper abdomen), of which GERD is a subset.⁶ The guidelines recommend gastroenterology consultation or upper endoscopy to rule out neoplastic or pre-neoplastic lesions if alarm symptoms (**TABLE**) suggesting complicated GERD are present.⁷

The Institute for Clinical Systems Improvement guidelines on dyspepsia and GERD recommend that all patients aged \geq 50 years with symptoms of uncomplicated dyspepsia undergo upper endoscopy non-urgently because of the increased incidence of peptic ulcer disease, pre-neoplastic lesions, malignancy, and increased morbidity out of proportion to symptoms that are more common in an older patient

FAST TRACK

Upper endoscopy is recommended for elderly patients with alarm symptoms, new-onset GERD, or longstanding disease

population. The guidelines also recommend endoscopy for patients aged ≥50 years with uncomplicated GERD and the presence of symptoms for greater than 10 years because of the increased risk of pre-neoplastic and neoplastic lesions, including Barrett's esophagus.⁸

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