

ADVANCES IN GERD

Current Developments in the Management of Acid-Related GI Disorders

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Management of Reflux Disease in Elderly Patients

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G&H At what age does the typical symptomatic profile of a GERD patient begin to change?

KD It is difficult to pinpoint a specific age. The largest issue with older gastroesophageal reflux disease (GERD) patients is that they develop a disconnect between the severity of their symptoms and the severity of their underlying esophageal damage. Generally, this begins when patients are in their 50s and 60s, when the ability to sense acid in the esophagus begins to fade. This is a progressive phenomenon that becomes more profound as patients reach their 70s and 80s.

G&H Are there other factors beyond age that can contribute to this symptomatic disconnect?

KD Although no concrete data exist, one could surmise that obesity would increase the risk at a younger age, as would diseases that affect neurologic function. Early-onset Parkinson disease, multiple sclerosis, or any type of traumatic neurologic injury would promote this phenomenon at a much younger age.

G&H How do these changes affect the presentation of new GERD patients?

KD Younger patients who experience heartburn and indigestion often do so with straightforward, intermittent symptoms. When endoscopic evaluation is performed, it is likely that everything is normal and that the patient

is experiencing symptomatic, nonerosive reflux disease. Patients in their 50s and 60s who present with similar symptoms tend to have more significant endoscopic findings like erosive esophagitis or Barrett esophagus. However, some older patients do not present at all, or they present with symptoms that are not normally related to reflux. They may have chest pain, pulmonary symptoms, or gastrointestinal bleeding. On questioning, they may not describe a history of heartburn. Discovering reflux as the origin of these symptoms can be a challenge and often leads to delayed diagnosis.

G&H Are the extraesophageal symptoms in older patients generally a function of the physiology of older people in general or attributable to a history of untreated GERD?

KD With regard to extraesophageal symptoms, it may be a case of several factors coming together. Weight gain over time in a subset of patients, as well as increased incidence of hiatal hernia and progressive weakening of the lower esophageal sphincter, can lead to extraesophageal manifestations. Older patients tend to spend more time supine and, perhaps more importantly, they may reflux and not feel it. Thus, when they do experience symptoms, it may only be at the point when acid is entering their lungs causing a cough. The reflex mechanism that causes bronchospasm when unspirated acid is placed in the distended esophagus is not likely triggered in older patients, given the relatively well-documented fact that the sensory function of the esophagus fails as we age.

G&H How do these symptomatic differences affect the ways in which older patients need to be managed?

KD Newly presenting older patients are more likely to require endoscopic examination. In older patients, there is greater concern that they are developing symptoms due to a complication in the form of a stricture, a tumor, or something of that nature. They may also have had symptoms for a long time and, for whatever reason, not sought treatment, in which case they are at heightened risk for Barrett esophagus. Therefore, if they present with new or chronic GERD symptoms, they will require endoscopic examination earlier than younger patients presenting with similar symptoms.

Another consideration is the question of when to stop screening for Barrett esophagus. Ten years ago, I would have recommended stopping when the patient could no longer survive esophagectomy, which may be at a relatively young age. However, with ablative techniques now available, the idea of continuing to screen and survey patients into an older age has more validity.

In general, the therapy of GERD should be concentrated on the control of symptoms. Even in older patients, symptom control constitutes good practice for the vast majority. However, there will be some older patients who, because of the symptomatic disconnect described above, can be successfully treated in terms of symptoms but who continue to have complications of their disease. These patients, even if their heartburn is controlled with once-daily proton pump inhibitor (PPI) therapy, may require an ambulatory pH test to see if esophageal acid is actually being controlled.

Data confirm that the healing rate for older patients on PPI therapy is not substantially different from that seen in younger patients and, with regard to long-term monitoring, their symptoms can be followed without the need for more frequent endoscopy. However, if on the initial endoscopy, an older patient has Barrett esophagus, I might be more inclined to use higher-dose therapy to control their acid, with the realization that they have a compounded insult to their ability to sense reflux, due to the presence of Barrett and their aging.

G&H Is standard GERD therapy suitable for treating the dysphagia commonly seen in older patients?

KD Dysphagia symptoms must be respected in any patient but particularly in older patients because they are more likely to develop cancers, particularly if they have Barrett esophagus. These symptoms must therefore be evaluated beyond empiric treatment with endoscopy to find any stricture or tumor.

Some older patients develop dysphagia that we believe to be related to failing esophageal motility over time. There are two approaches in this situation. Esophageal manometry can be utilized to pinpoint the diagnosis. The argument against this centers around the lack of current therapy to address primary esophageal motility disorders. The other approach assumes that reflux plays a role in dysphagia symptoms in the older patient with a weakened esophagus and that PPI therapy, perhaps twice daily, should be considered.

For patients with difficulty swallowing pills, there are alternative PPI formulations that may be used. Traditional, capsule-based PPIs can be diluted in solution and swallowed or injected through a feeding tube. Fast melt tablets of lansoprazole (Prevacid, TAP) are available, as is an omeprazole/sodium bicarbonate (Zegerid, Santarus) powder for suspension. With the various formulary options, there is no patient for whom PPI therapy cannot be administered, regardless of underlying disorders.

G&H How do you approach those patients who are refractory to PPI therapy?

KD Patients who continue to reflux and aspirate, despite the fact that stomach acid has been neutralized, are difficult to evaluate and treat effectively. However, if, based on endoscopy, pH monitoring, and barium-swallow testing, the physician feels this to be the case, there are some data showing that age is not a contraindication to successful laparoscopic antireflux surgery in older patients. This surgery physically tightens the lower esophageal sphincter in order to reduce acid and nonacid reflux. We have seen some very heartening results, but even with the most comprehensive evaluation for the best-suited candidates, resolution of symptoms in patients refractory to PPI therapy only occurs in 50–60% of patients after antireflux surgery.

Although PPI therapy coupled with laparoscopic antireflux surgery constitute the current gold standards in these patients, there are also endoscopic procedures to plicate the lower esophageal sphincter in a manner similar to laparoscopic procedures. These methods have yet to achieve the same level of efficacy as laparoscopic surgery, but they might be considered as an option in the group of older patients in whom general anesthesia is contraindicated.

G&H Are there other pitfalls in the treatment of GERD that are particular to older patients?

KD It is important to thoroughly investigate any chest complaints in older patients and not assume that burning behind the sternum is reflux. Nearly every month, I have

a patient referred for reflux-related chest pain that turns out to be angina. In older patients, particularly women, angina tends to present in a more vague fashion. I would encourage physicians to at least perform an exercise test in difficult-to-control heartburn to make sure that GERD is truly the source of the problem.

Medications that are commonly prescribed in the elderly, such as anticholinergics or narcotics, may directly produce reflux and could require adjustment to achieve symptom relief. Older patients are also often taking aspirin or a nonsteroidal anti-inflammatory drug, in which case they can develop gastrointestinal bleeding if concomitant PPI therapy is withdrawn. Medication interactions with PPIs are quite rare, but prothrombin time should be checked if a patient who is taking warfarin sodium (Coumadin, Bristol-Myers Squibb) is started on a PPI.

Finally, counseling regarding lifestyle changes may require closer questioning in older patients. Older

patients may understand the importance of not eating at night, but they, and their physicians, must consider the similar problems that can be caused by a postlunchtime nap. Typical sleep patterns in elderly patients must be considered in order to avoid associated complications.

Suggested Reading

Miyamoto M, Haruma K, Kuwabara M, et al. Long-term gastroesophageal reflux disease therapy improves reflux symptoms in elderly patients: five-year prospective study in community medicine. *J Gastroenterol Hepatol.* 2007;22:639-644.

Ward EM, Wolfsen HC, Achem SR, et al. Barrett's esophagus is common in older men and women undergoing screening colonoscopy regardless of reflux symptoms. *Am J Gastroenterol.* 2006;101:12-17.

Achem SR, Devault KR. Dysphagia in aging. *J Clin Gastroenterol.* 2005;39:357-371.

Achem AC, Achem SR, Stark ME, DeVault KR. Failure of esophageal peristalsis in older patients: association with esophageal acid exposure. *Am J Gastroenterol.* 2003;98:35-39.



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