Highlights From the New ACG Guidelines for the Diagnosis and Management of GERD

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**G&H** When and why were new guidelines released for the diagnosis and management of gastroesophageal reflux disease?

**NS** New guidelines on the diagnosis and management of gastroesophageal reflux disease (GERD) were written by Dr. Philip Katz, Dr. Lauren Gerson, and Dr. Marcelo Vela on behalf of the American College of Gastroenterology (ACG) and were published in the March issue of *The American Journal of Gastroenterology*. (The guidelines are available for free at http://gi.org/wp-content/uploads/2013/03/ACG_Guideline_GERD_March_2013.pdf.) These guidelines were released in response to the multitude of changes that had occurred in the field of GERD since the last set of guidelines (which were published in 2005). Those changes included the recognition of extraesophageal manifestations of GERD as well as the advent of new endoscopic and surgical procedures for GERD.

**G&H** How were the guidelines developed?

**NS** The goal of the ACG’s guidelines process is to provide highly objective, evidence-based guidelines that are pragmatic and that can give clinicians the best guidance available for management of GERD. Therefore, there was an initial extensive review of the literature, and pertinent questions for care of the disease were developed. For each of these questions, evidence was reviewed in a systematic fashion and graded in terms of strength. Taking into account the totality of the evidence, the authors generated a recommendation and graded the strength of that recommendation. However, the strength of the recommendation and the strength of the evidence did not always match. For example, I would strongly recommend that a person not jump out of a 10-story building; however, there are no studies looking at people who jump out of 10-story buildings. Thus, this is a strong recommendation based on weak evidence. There are times when a recommendation is strong despite weak evidence, and there are times when there is strong evidence that generates weak recommendations. Clinicians should look at the recommendations and understand the quality of the evidence that underlies them as well as how strongly the authors felt about the evidence.

**G&H** What were the most important new diagnostic guidelines for GERD?

**NS** The new guidelines discuss how clinicians should diagnose and treat extraesophageal reflux, which, in my opinion, is an area that is particularly confusing, not only for gastroenterologists but also for ear, nose, and throat physicians as well as primary care physicians. According to the guidelines, an upper endoscopy likely does not have much utility in the diagnosis of patients who manifest extraesophageal symptoms that may be secondary to GERD (such as hoarseness, clearing of the throat, or chronic cough). This is because upper endoscopies often have normal findings in these individuals. Even if an upper endoscopy shows abnormalities, these findings may not indicate that the patient’s symptom complex is being caused by GERD. Therefore, the authors of the guidelines thought that a 24-hour pH study might be a...
better initial diagnostic test. This is important because, in the real world, these patients often undergo an upper endoscopy as an initial evaluation, which usually produces negative findings.

**G&H** How do the new guidelines address proton pump inhibitor use, particularly in terms of their potential risks?

**NS** The new guidelines recognize several potential risks of proton pump inhibitor (PPI) use—such as community-acquired pneumonia and *Clostridium difficile* infection leading to *C. difficile* colitis—and discuss the strength of the evidence for these risks. In general, the data suggest that there are associations between some of these complications and PPI use. However, I think it is fair to say that, in general, none of these concerns prohibit or strongly curtail the use of PPIs in patients who need them. It is reasonable to expect that there will be some complications associated with PPIs because no drug is free of risks. However, PPIs are still overall the most effective class of medications for GERD.

**G&H** According to the new guidelines for GERD, how effective are nonmedical treatment options such as lifestyle modification?

**NS** There is some reasonable evidence that lifestyle modification can be useful to treat some GERD patients (e.g., by elevating the head of the bed and waiting 3 hours after eating to go to bed in patients with nocturnal GERD). On the other hand, draconian changes in diet are not recommended for the most part because they are relatively hard to maintain. There is no strong evidence supporting the long-term efficacy of significant diet changes because eliminating entire classes of foods (such as acidic/spicy foods or carbohydrates) is associated with poor compliance. If the patient knows that he or she has a trigger food or foods—for example, every time the patient drinks alcohol, he or she experiences reflux—then, clearly, the recommendation should be to avoid alcohol.

**G&H** How is refractory GERD treatment addressed in the guidelines?

**NS** There is a fair amount of discussion regarding refractory GERD treatment in the new guidelines, probably because nowadays primary care doctors are fairly good at treating patients with uncomplicated GERD, and gastroenterologists disproportionately treat patients with refractory GERD. The authors of the guidelines make several commonsensical suggestions. First, doctors should make sure that patients are taking their PPIs and are doing so in an optimal manner. (For example, are patients taking PPIs 30–60 minutes before a meal? Are they taking the appropriate dosage? Or are they taking their medication only on an as-needed basis, which often tends to happen in patients on long-term therapy?)

If those questions do not explain the patient’s refractory GERD, further investigation is needed, usually in the form of an upper endoscopy, if one has not yet been performed. Although the yield of endoscopy is not very high in these patients, on rare occasions there may be evidence of another condition causing GERD-type symptoms (often eosinophilic esophagitis, an allergic condition of the esophagus that can mimic GERD and may not resolve with PPI treatment). If the upper endoscopy has negative findings, then the next step is to perform a 24-hour pH study to determine whether or not the patient has GERD. Often, patients who have GERD symptoms that are refractory to PPI treatment, particularly twice-daily PPI therapy, will not show pathologic GERD on a 24-hour pH study and are found to have functional heartburn; such patients are often treated with centrally acting agents as opposed to acid suppressants.

**G&H** How do the new guidelines reflect recent advances in endoscopic and surgical management of GERD?

**NS** One of the important take-home points from the new guidelines is that, while surgery is a very effective treatment option for patients with severe GERD (particularly those who regurgitate food particles), patients who have no response to PPIs or medical therapy are generally poor surgical candidates. This group is at high risk for poor response to surgery, and such patients should not generally be referred to surgery. If they are, this decision should be undertaken with a good deal of forethought and a little bit of trepidation.

Another important point is that, unlike surgery for classic GERD symptoms such as heartburn, surgery for extraesophageal symptoms of GERD, such as chronic cough and throat clearing that have not responded to PPI therapy, is associated with lower rates of success. This may have to do with the multifactorial nature of these complaints. If GERD is only one of several causes of chronic cough in a given patient, it is unsurprising that surgery to address GERD may not extinguish the cough in that patient.

**G&H** Are there any other key new guidelines?

**NS** One interesting area that doctors should be aware of is the use of pH impedance studies, which is a relatively new technology. The addition of impedance to pH studies
allows the clinician to detect nonacidic or weakly acidic reflux. According to the new guidelines, pH testing on an acid suppressive medication should be performed with impedance pH monitoring, not with traditional pH monitoring. Data suggest that reflux events that are acidic become nonacidic when patients take acid suppressive medications, making the events undetectable by traditional pH monitoring; however, these nonacidic reflux events can be detected by impedance pH monitoring.

**G&H** What long-term questions for future research were pointed out in the guidelines?

**NS** The guidelines are very comprehensive in terms of covering the diagnosis and treatment of GERD. However, as with all disease states, there are still many unresolved issues, such as optimal testing algorithms for GERD and the best use of new technologies such as impedance pH testing and high-resolution manometry. The authors of the guidelines also reflect on the current poor understanding of the pathogenesis and treatment of extraesophageal reflux, an area that will certainly undergo further investigation in the future. In addition, the authors appropriately reflect on the preliminary nature of the current data on several of the endoscopic treatment options for GERD, and I suspect that this area will also be further elucidated over time.

**G&H** Were there any significant changes in the new GERD guidelines?

**NS** The authors did a good job of incorporating some of the newer data with respect to extraesophageal reflux disease and were able to make much firmer statements regarding this issue than in the previous set of guidelines, especially with respect to testing and treatment algorithms. The authors also incorporated some of the newer diagnostic technologies previously mentioned as well as some of the newer nonsurgical options for reflux.

**G&H** Do you foresee any obstacles to widespread adoption of any of these guidelines?

**NS** Physicians often have ingrained habits; for instance, it is still common for some physicians to perform 1 or more endoscopies in patients with extraesophageal reflux symptoms, despite the known low yield of this examination in patients on PPI therapy. In addition, barium swallows—which should not be used for the diagnosis of GERD according to the new guidelines—are still commonly used among primary care providers. This can be attributed to clinicians’ habits, which are hard to change. I am hopeful that, as more evidence and societal statements such as the ACG guidelines become available, some of these less helpful practices will be extinguished over time.

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