Editorial

Primary Esophageal Motility Disorders: Incisive Decisions

CLINICIANS FREQUENTLY see patients who present with dysphagia, usually to both solids and liquids, or angina-like chest pain associated with abnormal esophageal motility; some patients have both. Often such persons experience heartburn, and the possibility of gastroesophageal reflux disease is raised. The term "primary esophageal motility disorders" is used collectively to describe the following esophageal manometric patterns: achalasia, diffuse esophageal spasm, nutcracker esophagus, hypertensive lower esophageal spasm, and nonspecific esophageal motility disorder.[1] Except for achalasia, no specific underlying disease or pathophysiology has been described for these conditions, and controversy exists about their clinical importance.

In this issue of THE WESTERN JOURNAL OF MEDICINE, Patti and Way provide a concise review of the evaluation and treatment of primary esophageal motility disorders and present arguments favoring surgical management.[2] They also review the many diagnostic modalities currently available for the diagnosis and assessment of these disorders before appropriate therapy. They conclude that the keys to successful management are an accurate diagnosis, correct pathophysiologic assessment, and in most cases, surgical treatment by an experienced surgeon.

The identification of abnormal esophageal motility patterns during stationary manometry has allowed for a standardized classification of esophageal motor abnormalities.[3] Barium esophagography and esophageal nuclear scintigraphy provide an assessment of the overall esophageal transport function and percentage of emptying. Endoscopy is used universally to evaluate esophageal mucosal integrity and to exclude cancer as a cause of symptoms. Intraesophageal ambulatory pH monitoring identifies abnormal exposure of the distal esophageal mucosa to gastric acid and documents reflux-associated chest pain or dysphagia. Finally, computed tomography, magnetic resonance imaging, and endoscopic ultrasonography are emerging new methods to assess esophageal wall thickening or neoplastic infiltration. Undoubtedly the use of these modalities in the workup of patients with esophageal motility disorders before and after any therapeutic intervention will not only enhance our understanding of these disorders but will also maximize treatment efficacy.

Many therapeutic options are available for esophageal dysmotility. These include the use of nitrates, anticholinergics, calcium channel blockers, analgesics, psychotropics, reassurance, biofeedback, bougienage, endoscopic pneumatic dilation, the endoscopic administration of botulinum toxin, and surgical intervention.[4] Because of the poor understanding of the underlying specific cause and mechanism(s) for symptom induction, however, therapy remains a challenge, and there are few prospective, double-blind, longitudinal trials with large enough samples of patients to support one modality over the other. Thus, most patients are treated with more than one modality. Medical therapies are tried first, followed by endoscopic approaches and ultimately surgical treatment. Furthermore, local expertise commonly dictates which treatment patients will receive.

In cases of esophageal achalasia, surgical myotomy has had the greatest efficacy (about 90%) of the various treatments available.[5] Postoperative gastroesophageal reflux is a major problem, however, ranging in incidence from 3% to 30%. Laparoscopic and thoracoscopic myotomies as therapy for achalasia can be performed with minimal morbidity, good clinical results, and at substantial cost savings when compared with traditional open approaches.[6,7] If large-scale prospective studies confirm the early surgical results, then the most cost-effective approach—balloon dilation, intrasphincteric administration of botulinum toxin, or surgery—will need to be reexamined.

The best therapy for symptomatic patients with either nutcracker esophagus or diffuse esophageal spasm is not known. Although most patients are treated first with smooth muscle relaxants such as nitrates and calcium channel blockers, many either have suboptimal or no response to these agents.[8] In carefully selected patients, thoracoscopic long myotomy may be successful. In a recent, nonrandomized study, 80% of patients treated with thoracoscopic myotomy had good or excellent results versus 26% of the patients treated medically.[9] Whether surgical therapy is superior to medical therapy cannot, however, be determined without a randomized clinical trial, and the overall experience with long myotomy is limited.

In summary, before making the decision for an incision in a patient with an esophageal motility disorder, clinicians should keep in mind that direct comparisons of the different modalities are not available, that long-term data on the results of minimally invasive surgical therapy for these disorders are lacking, and that the early encouraging results reported from experienced surgical groups may not be applicable to the general medical community. A referral to experienced centers for accurate classification and assessment of the severity of esophageal dysmotility, evaluation of the surgical risk and benefit, and enrollment in prospective medical and surgical trials seem prudent at this time.

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