Managing Complications Following Endoscopic Myotomy as a Treatment for Upper Esophageal Sphincter Achalasia: A Case Report

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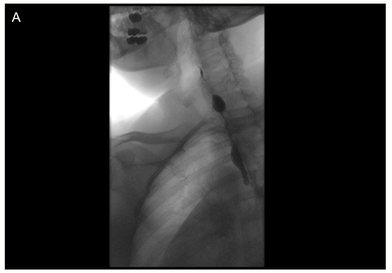
Abstract

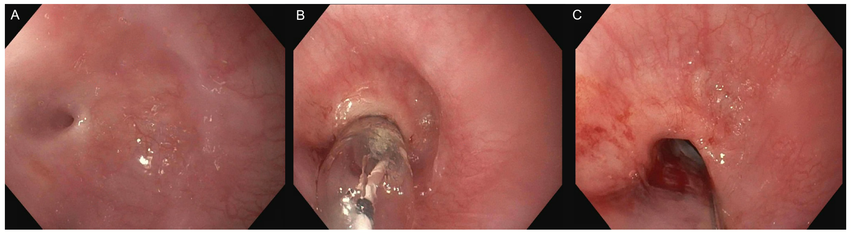
Achalasia is a chronic gastrointestinal disorder characterized by increased esophageal sphincter tone and dysmotility that causes worsening dysphagia. While this condition usually affects the lower esophageal sphincter, we present a rare case of upper esophageal sphincter (UES) achalasia of unknown etiology in a female in her sixth decade of life. This was managed via endoscopic UES myotomy but was complicated by an esophageal perforation and severe post-operative stenosis. Consequently, the patient was referred to gastroenterology and treated over the course of two months with six endoscopic dilatations and glucocorticoid injections. Few cases of idiopathic UES achalasia have been described to date.

Case Presentation

- A woman presented to the otolaryngology clinic with complaints of worsening dysphagia over the past few months.
- Esophagram showed a benign-appearing esophageal stricture with a prominent cricopharyngeal bar.
- Endoscopic UES myotomy was chosen for treatment of cricopharyngeal achalasia. The procedure was complicated by esophageal perforation which led to hospitalization.
- Two months following the procedure, increasing dysphagia to solids and liquids lead to 50-pound weight loss. She was referred to GI for further investigation.

Images

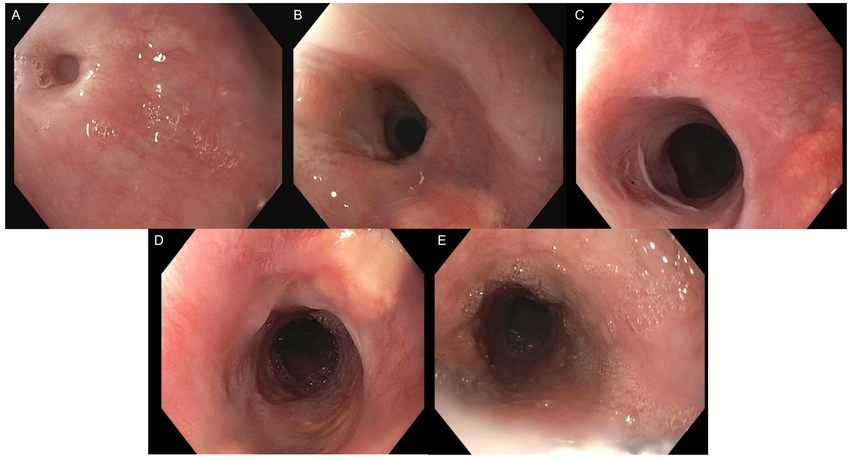




Above Left: Barium swallow x-ray image taken one month following the patient's endoscopic UES myotomy (A). Image shows evidence of contrast pooling proximally to a focal esophageal stricture.

Above Right: Anterograde view of the esophageal lumen proximal to the upper esophageal sphincter, 15cm distal to the upper incisors. Circumferential, full-thickness constriction reduced the luminal diameter to 2mm at the narrowest point (A). A 6mm through-the-scope balloon biliary dilator was inflated to dilate the esophageal stricture (B). Afterwards, a 24 French (8mm) Savary dilator was passed, and the esophageal mucosa was only mildly disrupted (C). These images were taken with an esophagogastroduodenoscope during the patient's first visit to the advanced endoscopy gastroenterology clinic.

Below: Anterograde view of the esophageal lumen proximal to the upper esophageal sphincter, 15cm distal to the upper incisors. These images were taken with an esophagogastroduodenoscope at the beginning of the patient's second, third, fourth, fifth, and sixth esophageal dilation appointments (A, B, C, D, and E, respectively).



Case Management

- Esophagram and esophagogastroduodenoscopy (EGD) revealed severe, circumferential constriction at the level of the UES.
- Dilation was initially done with a 6mm through-the-scope (TTS) balloon biliary dilator, followed by an 8mm Savary dilator.
- A percutaneous endogastric (PEG) tube was placed, given the necessity of additional dilations.
- During the second through sixth dilations, a combination of TTS and Savary dilators were used to enlarge the esophageal lumen to a final diameter of 20mm. Local triamcinolone injections (2mL at 40mg/mL) were administered in all four quadrants to prevent fibrosis and restenosis.
- Following the sixth dilation, the patient reported tolerating regular food and regaining weight, so her PEG tube was removed. She was instructed to resume her usual diet and contact GI if her symptoms returned.

Conclusions

- Managing complications resulting from UES myotomy may be the responsibility of the GI care team.
- Serial dilations with circumferentially administered steroid injections are a practical consideration for most patients.
- Esophageal self-dilation may be a reasonable solution for benign, refractory esophageal strictures, particularly in patients who reside in rural and underserved areas.