

Flexible endoscopic management of Zenker's diverticulum

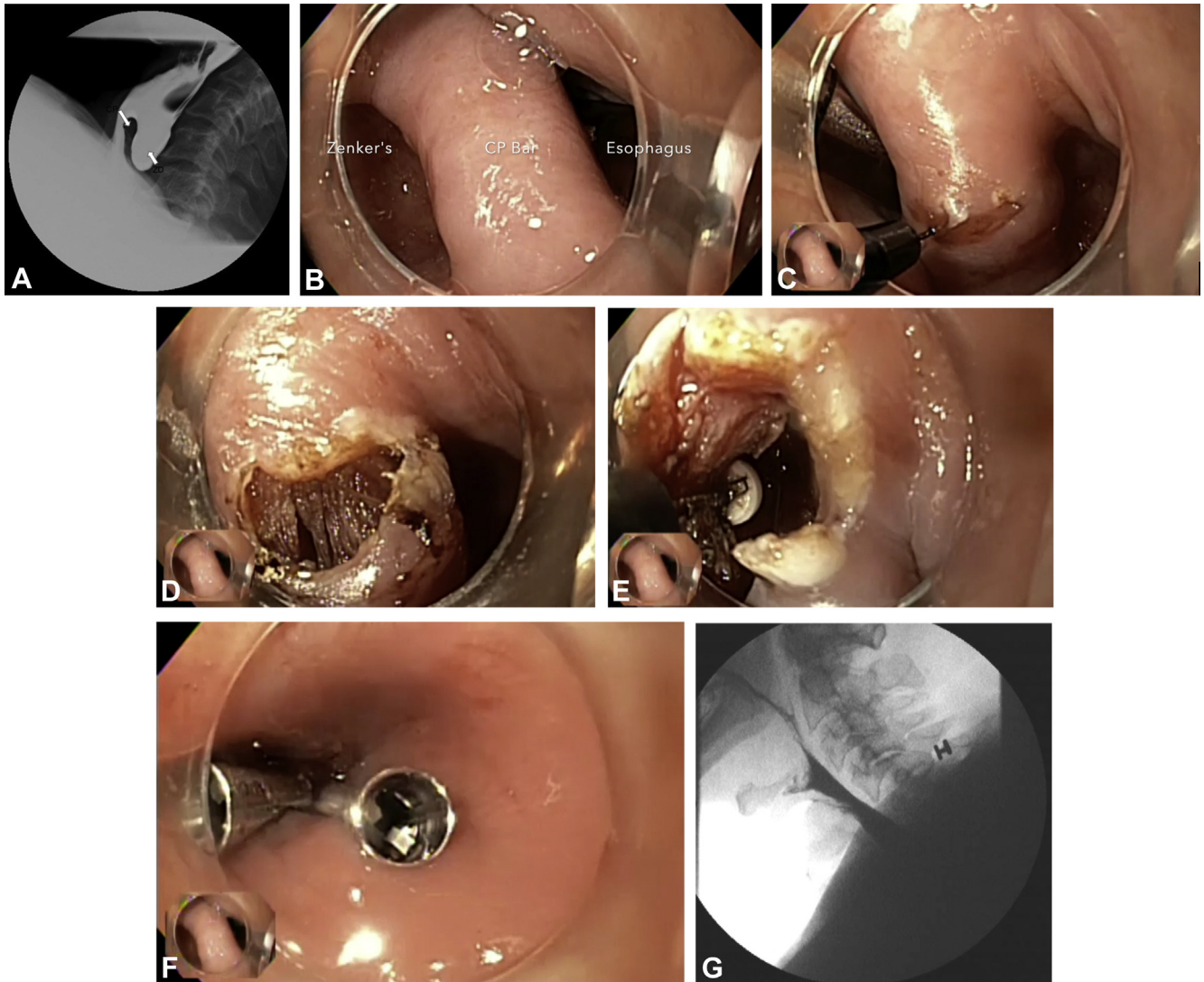


Figure 1. **A**, Barium esophagram revealing ZD and a prominent CP. **B**, Landmark triad of ZD to the left, a prominent cricopharyngeus (*CP bar*) in the middle, and the esophagus with nasogastric tube to the right. **C**, Needle-knife used to initially incise through prominent cricopharyngeus. **D**, Muscle fibers of cricopharyngeus visible after incision with the needle-knife. **E**, Ceramic ball insulated tip knife, which allows more controlled cutting, in use. **F**, Through-the-scope clips applied at base of diverticulum after cricopharyngeal incision to close any potential defects. **G**, Barium esophagram after myotomy revealing a small residual ZD. Intubation was also notably easier after myotomy. *ZD*, Zenker's diverticulum; *CP*, cricopharyngeal muscle.

A 76-year-old man was referred for a longstanding history of progressive oropharyngeal dysphagia with associated food impaction. A barium esophagram revealed Zenker's diverticulum (ZD) (Fig. 1A), and he subsequently underwent cricopharyngeal myotomy with a flexible endoscope (Video 1, available online at www.VideoGIE.org). Both flexible and rigid endoscopic myotomy are

treatment modalities for ZD; however, the flexible approach may be preferred in the elderly because there is a lower failure rate in this population, who may have limited neck extension.

Endoscopy with the patient under general anesthesia was performed. Nasogastric intubation notably was difficult, given the degree of hypertrophy of the cricopharyngeus

Written transcript of the video audio is available online at www.VideoGIE.org.

(Fig. 1B). A nasogastric tube was successfully placed and remained in place to separate the posterior esophageal wall and diverticulum while the septum was incised. The cricopharyngeus was initially incised with a needle-knife and later with a ceramic ball insulated tip knife. The neck and chest were periodically examined for crepitus to assess for esophageal perforation. After a successful incision through the cricopharyngeus, through-the-scope clips were placed to close any potential defect between the esophagus and the diverticulum (Figs. 1C-F). A barium esophagram after the myotomy revealed a small residual ZD (Fig. 1G), with subsequent resolution of dysphagia.

Flexible endoscopic treatment of ZD is an effective technique, particularly in elderly patients, in whom neck extension can be difficult. Although extensive research on this subject is limited, case series have corroborated that flexible endoscopic management of ZD is effective in resolving dysphagia, with minimal procedural adverse events.

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