

A Multidisciplinary Approach to an Esophageal Perforation

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Background

- Regardless of cause, esophageal perforations entail a significant mortality rate. Prompt diagnosis and minimally invasive interventions with a multidisciplinary approach can lead to favorable outcomes [1]. Strict endoscopic intervention is generally limited to small perforations (<2cm) [2]. In this report, we discuss a case utilizing a simultaneous endoscopic and surgical approach for large perforation repair.

Image

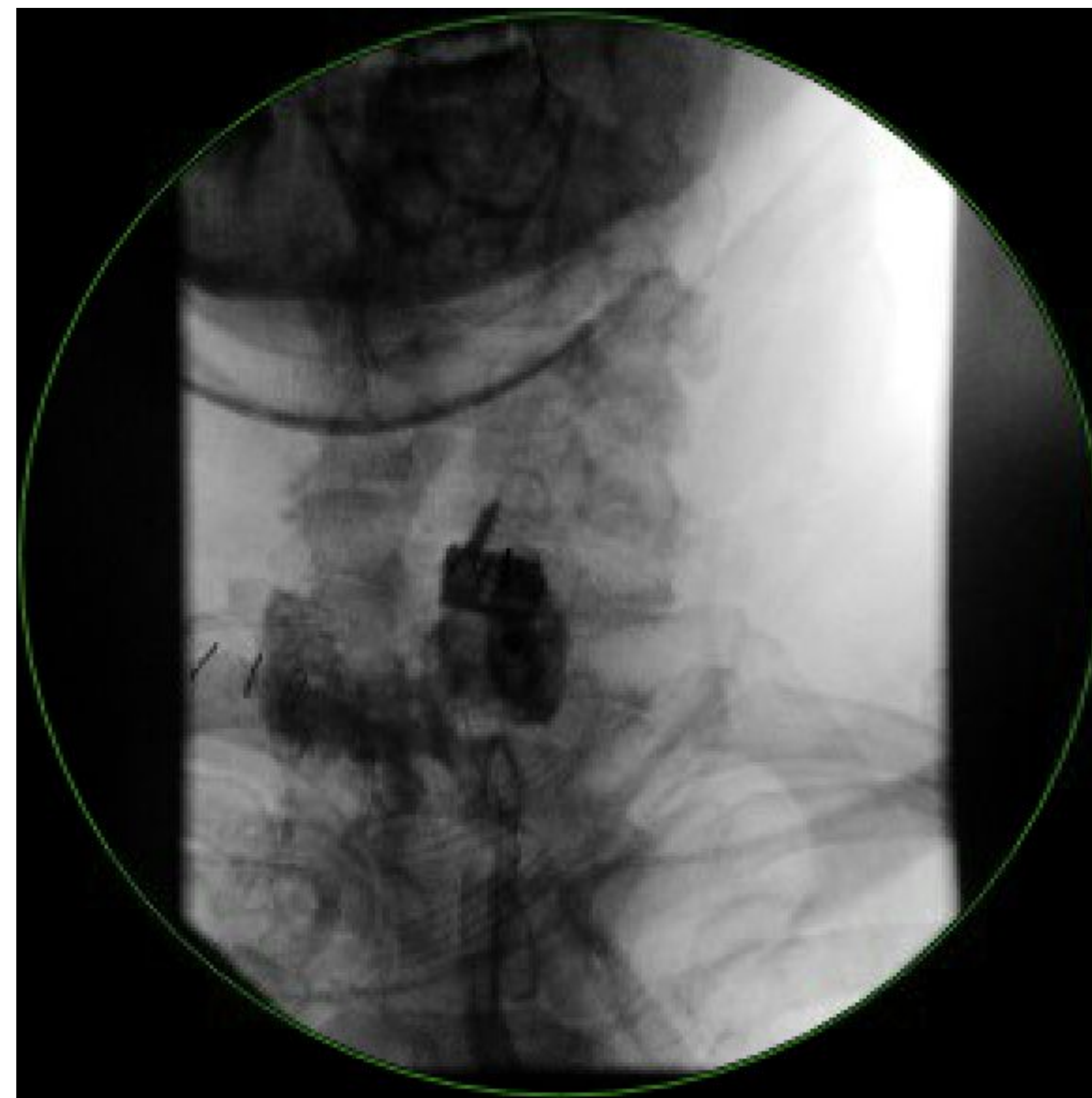


Figure 1: Barium esophagram revealing active leakage of contrast to the right of the pharyngeal-esophageal junction, around the level of C7.

Case Report

- A 50 year-old female with past medical history of alcohol use presented after ground-level fall. She was diagnosed with C6 fracture and underwent anterior cervical discectomy and fusion with Neurosurgery. Postoperatively, she experienced dysphagia and mild odynophagia but tolerated a regular diet. One week later, she returned for neck pain with copious amounts of mucopurulent drainage from her incision site. Patient underwent washout of a subcutaneous abscess with neurosurgery, however began to experience some worsening dysphagia postoperatively. A gastrografin swallow was performed which revealed an active contrast leak to the right of the pharyngeal-esophageal junction around C7, as seen in Figure 1.
- Patient subsequently underwent a major operation involving Advanced Gastroenterology, Otolaryngology, and Neurosurgery specialists. Endoscopic exam revealed a semicircular 3 cm esophageal perforation 17 cm from the incisors and sutures were placed along with a nasogastric tube endoscopically. Meanwhile, ENT and Neurosurgery performed an incision and debridement of the neck wound and placed a JP drain. Over the following weeks, patient was managed with strict NPO, tube feedings, and broad-spectrum IV antibiotics. One month later, patient successfully passed a video swallow without signs of aspiration or extravasation.

Discussion

- With advancements in endoscopy and emerging techniques, there are now multiple options for management of patients with esophageal perforations. These include techniques such as endoscopic suturing, stent or clip placements, and endoluminal vacuum [3]. Advanced endoscopy may be utilized in conjunction with surgical intervention involving drainage, source control or debridement [3]. Ideally, patients with esophageal perforations should be managed at centers with advanced gastroenterology and surgical subspecialists with expertise in the matter.

References

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