

Stenting of Tracheo-Esophageal Fistula Under Direct Visualization

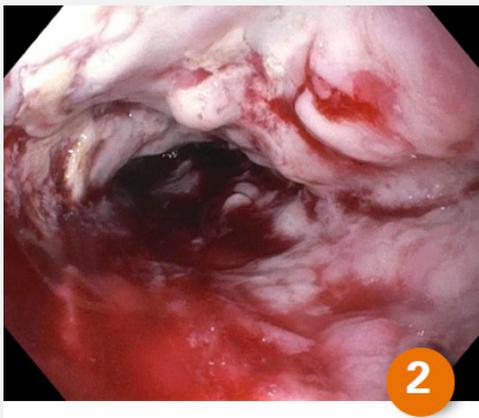
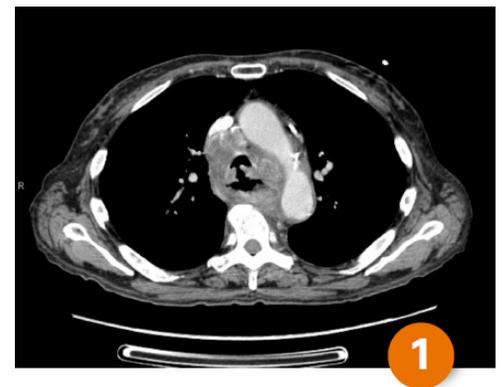
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Patient History & Assessment

A 56-year-old female with a history of chest pain, productive cough, and dysphagia of 4 months duration and 40-50 pound weight loss presented to the ED. She had no known past medical or surgical history, though an extensive smoking history of 40 pack-years and daily alcohol consumption. She is unable to tolerate any oral intake, stating that she immediately regurgitates or aspirates solids and liquids. The patient underwent a CT scan that demonstrated a suspected primary esophageal malignancy with tracheoesophageal fistula. We planned to perform endoscopy for biopsies and feeding access, likely stent and PEG.



Procedure

An EGD was performed and identified a large fungating mass from 21-32 cm from the incisors. The scope was able to traverse it without dilation. Concomitant bronchoscopy identified a 5 mm tracheo-esophageal fistula (TEF) in the membranous wall 3-4 cm proximal to the carina.

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Procedure

We biopsied the mass and placed a PEG for feeding access. We exchanged for a therapeutic dual channel scope. Without fluoroscopy and under direct vision we covered the fistula with an 18 mm x150 mm fully covered Agile™ Esophageal Stent, with a through-the-scope delivery system. The clean margins were then ablated. The lesion was closed with the use of a single endoclip to reduce the risk of bleeding post resection. (Figure 3)



Post Procedure

An EGD was performed and identified a large fungating mass from 21-32 cm from the incisors. The scope was able to traverse it without dilation. Concomitant bronchoscopy identified a 5 mm tracheo-esophageal fistula (TEF) in the membranous wall 3-4 cm proximal to the carina.

Discussion

This case demonstrates the safety and feasibility of through-the-scope stent placement without the use of fluoroscopy for malignant TEF. There are increasing concerns over radiation exposure of staff and patients. In addition, many centers lack the space or expertise for efficient and safe fluoroscopy on short notice and in varied locales (OR, endoscopy suite, outpatient surgical center, etc). This demonstrates an alternative approach that takes these concerns into account without compromising patient or provider safety.

Images provided courtesy of Dr. Moremen

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