

## Introduction

- Caustic ingestions can lead to recalcitrant strictures of the upper esophagus. Endoscopic treatment options include dilations and/or covered esophageal stents. A stricture at a high anatomic location renders traditional stenting difficult. Dilation has the risk of perforation and fistula development.

## Case Description

- 28-year-old woman with a history of caustic ingestion of bleach was found to have airway injuries, severe proximal digestive tract injuries, and transmural gastric necrosis.
- She underwent a total gastrectomy and cervical esophagostomy followed by Roux esophagojejunostomy and stepwise reconstruction.
- She then had esophageal strictures initially treated with Savary dilation complicated by perforation and fistula formation between upper stricture and pleura.
- Endoscopy revealed a 3-mm lumen at the upper esophageal sphincter (UES).
- Initial contrast injection revealed no passage into esophagus, with contrast passing to pleura.
- XP gastroscope was used to pass a guidewire through the proximal stricture and into the esophagus.

## Case Description

- A 10mm x 6cm biliary fully covered self-expanding metal stent (FCSEMS; Gore Viabil Biliary Endoprosthesis) was deployed across the stricture, covering the fistula.
- The patient subsequently had repeated endoscopies for stent migration and to reach the distal stricture for stenting.

## Imaging

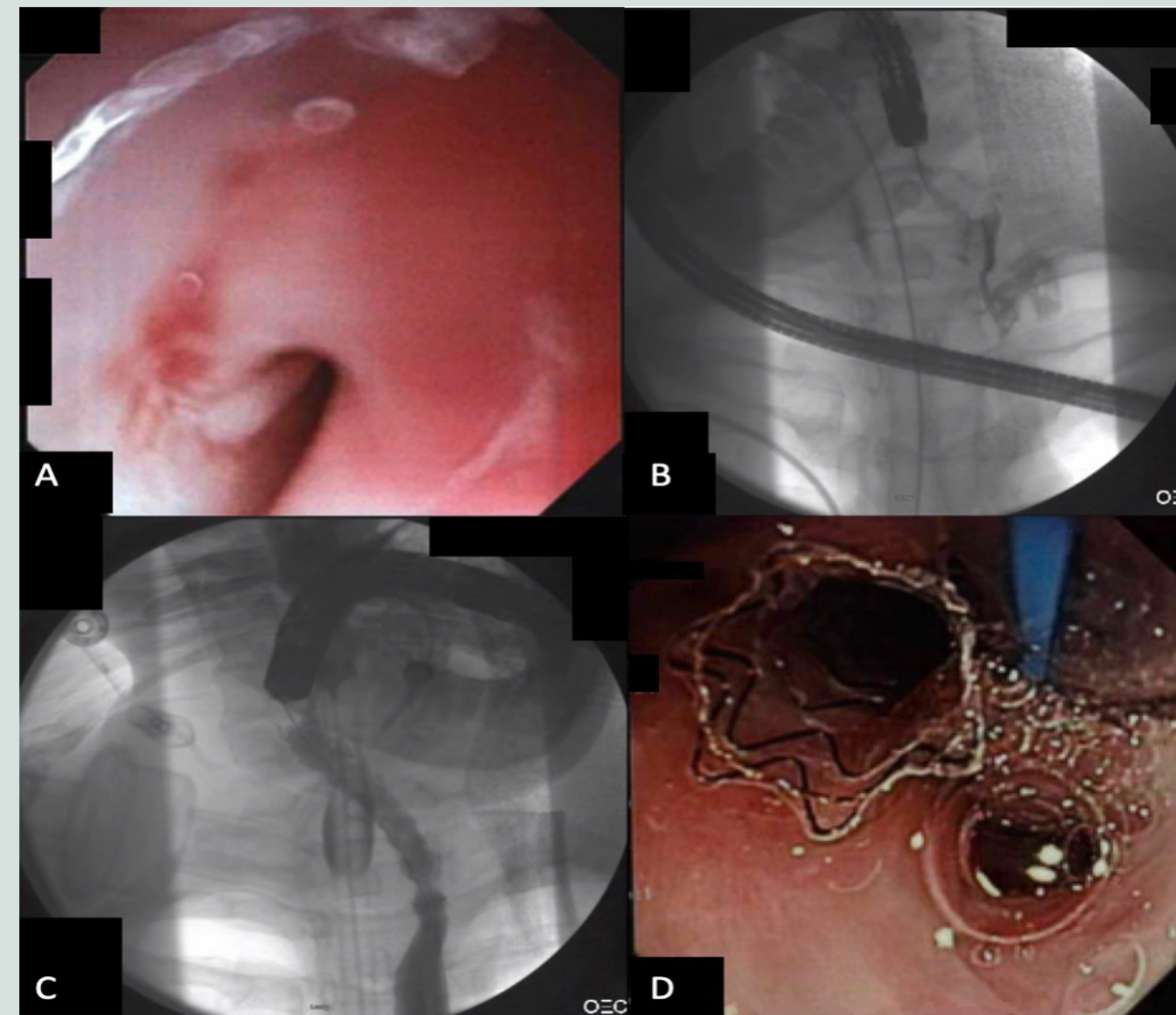


Figure 1: Endoscopic and fluoroscopic imaging showing (A) proximal esophageal stricture from caustic ingestion, (B) contrast injection showing stricture with fistula to pleura prior to stenting, (C) contrast injection through biliary FCSEMS deployed across proximal stricture without evidence of leak, and (D) proximal endoscopic view of the biliary FCSEMS above the arytenoid and close to endotracheal tube in subsequent endoscopy.

## Case Discussion & Conclusion

- Esophageal stents are not typically placed across the UES due to foreign body sensation.
- The anatomic location of the stricture and presence of fistula required stenting across the UES.
- We chose a biliary FCSEMS that had anti-migratory features (flanges and conformability) and did not foreshorten.
- The stent did migrate multiple times requiring re-intervention over a period of months, eventually allowing access to the distal esophageal stricture after upper esophageal remodeling around the shape of the stent.
- Colonic interposition was a less preferred option due to lack of healthy pharyngeal or esophageal tissue for anastomosis.
- By using biliary stents in the esophagus, we were able to simultaneously treat a difficult stricture and fistula, allowing eventual access to a distal stricture for endoscopic treatment.

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