

# Esophageal Obstruction due to Resorbable Hiatal Hernia Mesh: A Rare Surgical Complication Requiring Endoscopic Repair

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## INTRODUCTION

Antireflux surgery restores the anatomical barrier and may be a last resort option for patients with refractory GERD or PPI intolerance. Mesh reinforcement in antireflux surgery may cause complications including mesh migration, bleeding, esophageal perforation, and post-fundoplication stenosis. Intraluminal penetration of prosthetic surgical mesh is an extremely rare complication. This case report documents the diagnosis and endoscopic treatment of a patient with surgical mesh obstructing her distal esophageal lumen.

## CASE PRESENTATION

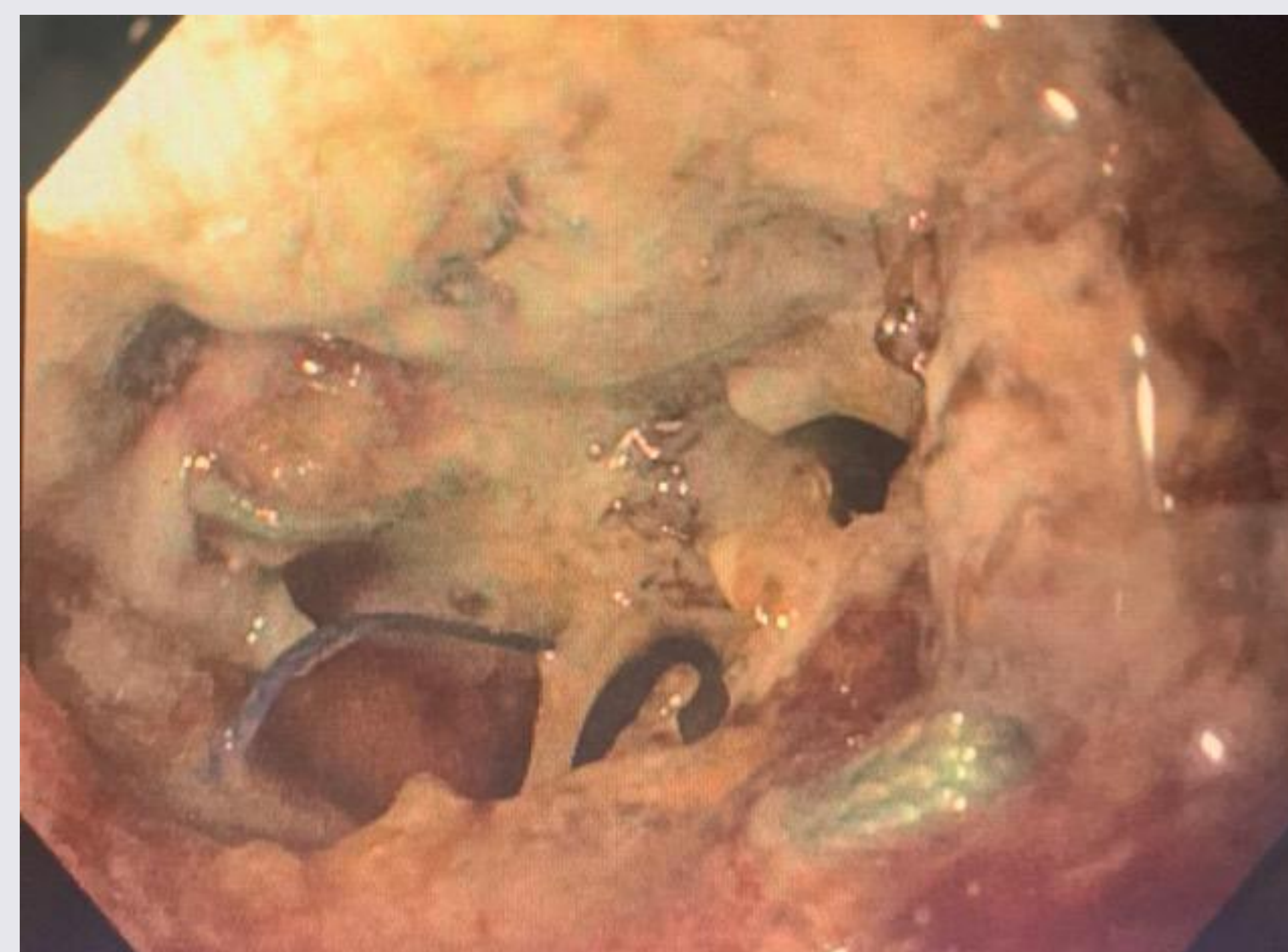
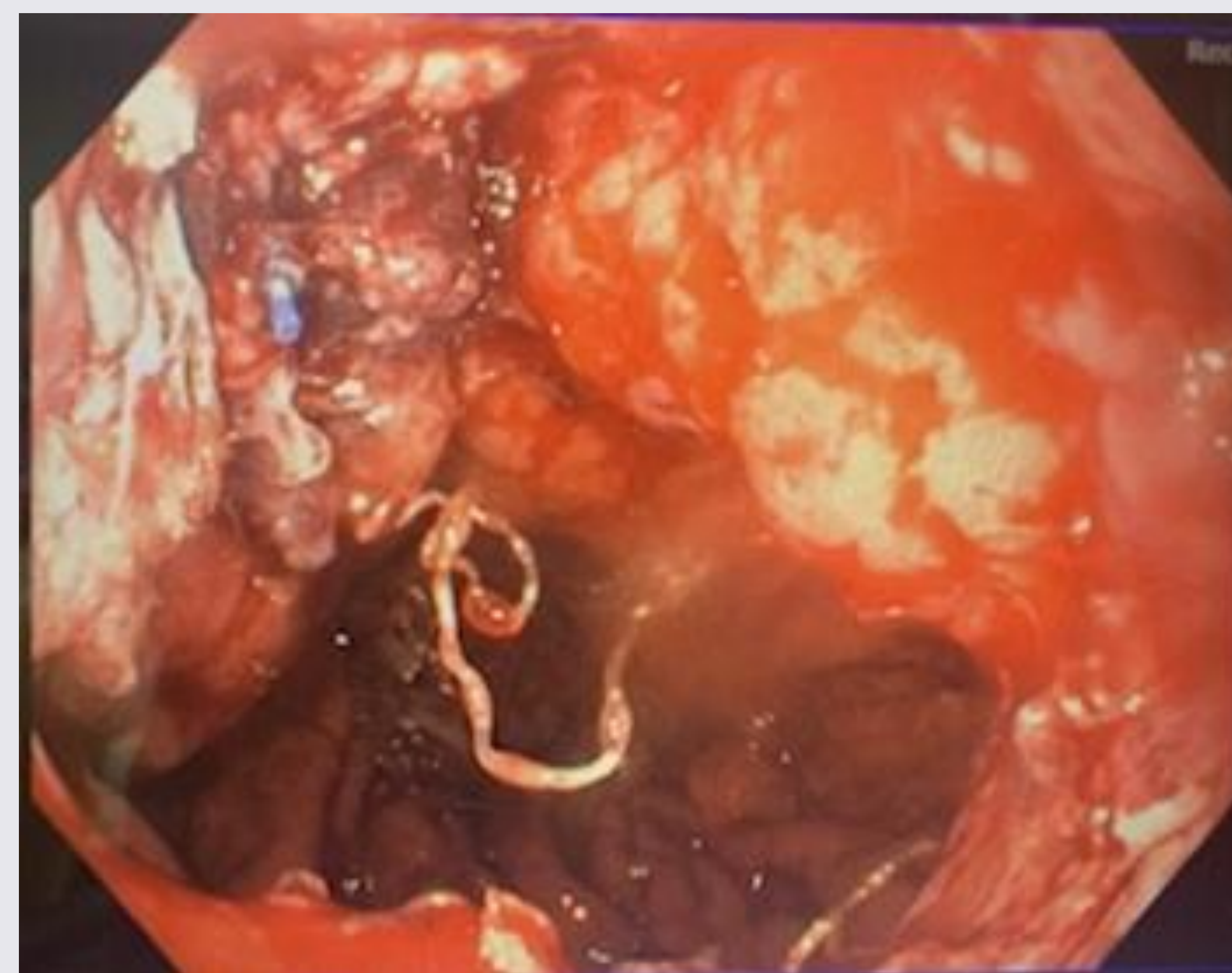
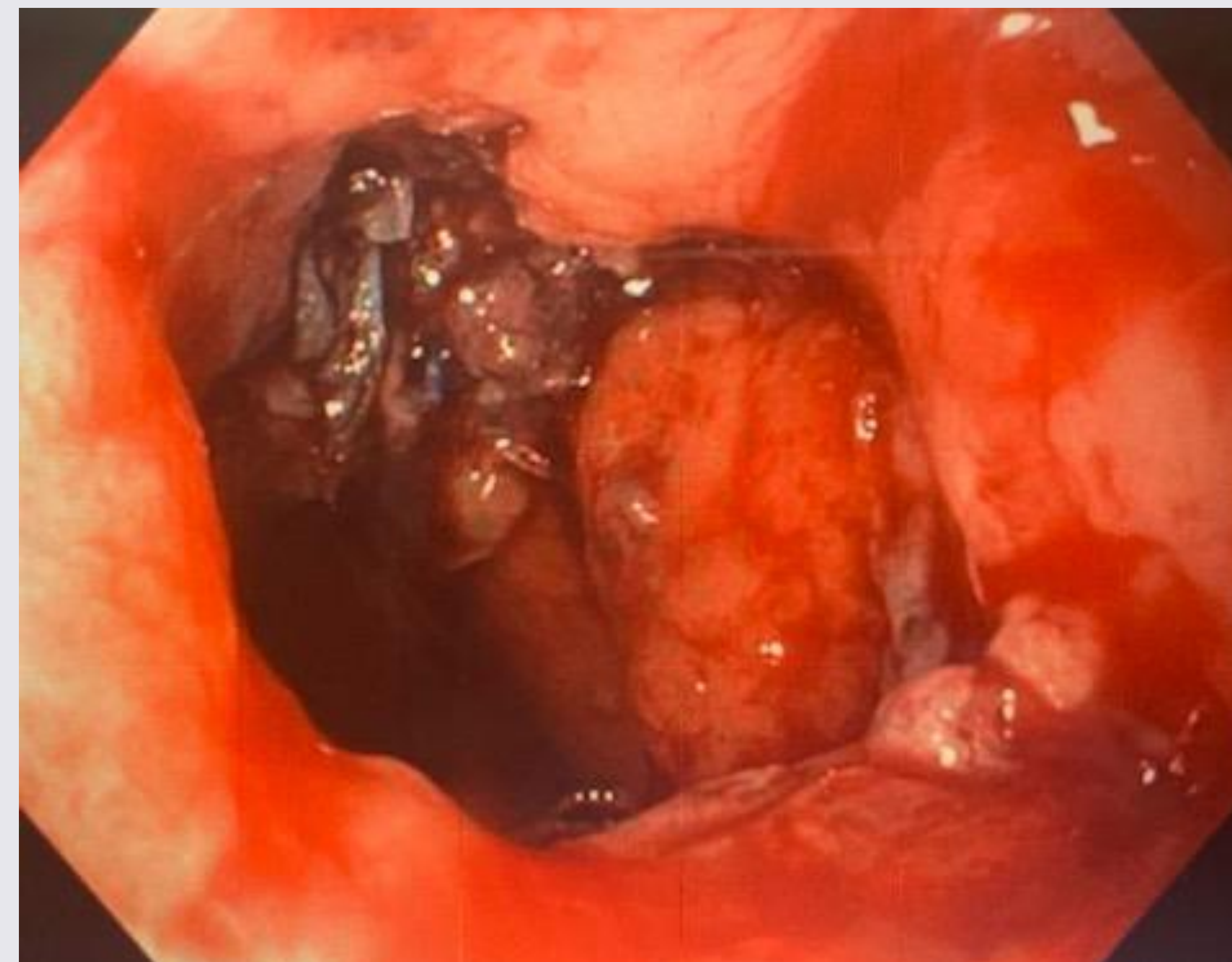
A 73-year-old woman with a history of GERD due to large hiatal hernia underwent antireflux surgery with Toupet Fundoplication and robotic hiatal hernia repair with Phasix mesh.

Shortly thereafter, she developed a perforation and stricture requiring emergency stent placement and a 2-month hospital stay.

After returning home, the patient began experiencing dysphagia, regurgitation, substernal chest pain, and weight loss. She underwent an esophagram which showed delayed passage of contrast to the stomach.

Upper endoscopy was performed, revealing a large piece of mesh partially obstructing the distal esophageal lumen. This was confirmed to be the Phasix mesh previously placed for her hiatal hernia repair, and the portion causing obstruction was trimmed with endoscopic suture cutters and a flexible grasper.

After this procedure, the patient made a complete recovery and made no further complaints of dysphagia, chest pain, or regurgitation.



## DISCUSSION

Patients with refractory GERD or PPI intolerance may benefit from antireflux surgery. Mesh reinforcement of hiatal hernias greater than 5cm has been shown to decrease rates of recurrence compared to surgical suturing alone. Mesh migration is a rare complication. Higher erosion rates have been observed in patients with recurrent hiatal hernia repairs or with permanent mesh. One study identified 50 cases of mesh migration between 1998 to 2019, with the most common erosion sites being the esophagus (50%) stomach (25%) and GE junction (23%). PTFE and polypropylene mesh were found to have the highest migration rates. Our patient experienced erosion and luminal obstruction by Phasix absorbable mesh, an extremely rare complication. Providers should maintain a high index of suspicion in patients with a history of hiatal hernia repair and mesh placement who present with dysphagia or symptoms of obstruction due to the potential for mesh obstruction.

## DISCUSSION

Hiatal hernias repaired with mesh reinforcement are shown to have lower recurrence rates, but complications can occur. Suspicion for intraluminal mesh obstruction should be considered in patients with a history of hiatal hernia repair who present with dysphagia. Endoscopic repair is an excellent option for patients wanting to avoid another surgical procedure.

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