

Balloon Dilation of Recurrent Peptic Stricture in a Patient with Portal Hypertension

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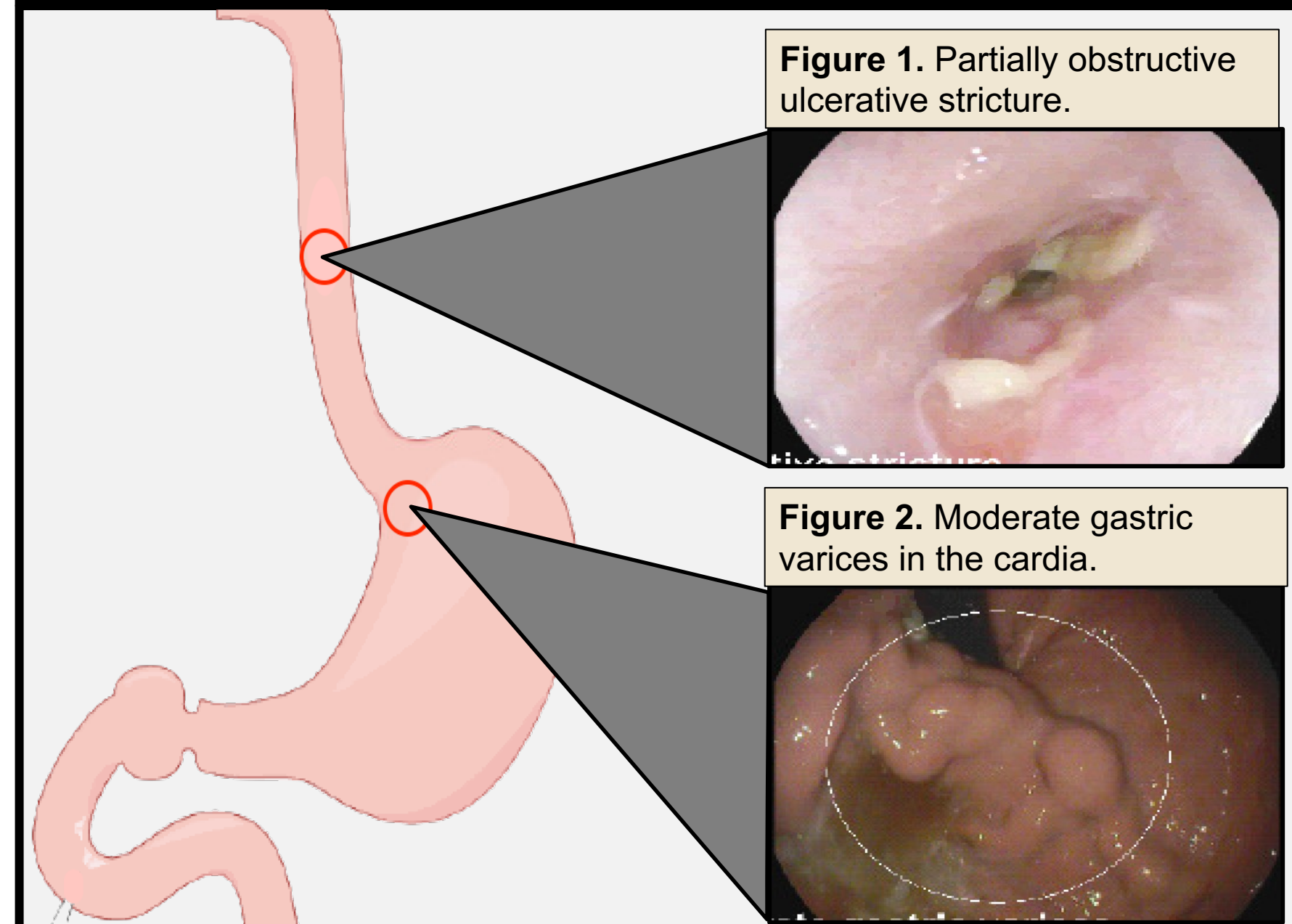
INTRODUCTION

- Incidence of esophageal strictures is 1.1 per 10,000 person-years and approximately 68% are from GERD.¹
- Balloon dilation is used to treat simple strictures while stenting and incisional therapy is reserved for severe or resistant disease.
- Gastroesophageal varices (GEVs) is a major complication of portal hypertension which occurs in 50% of patients at the time of diagnosis.²
- Variceal bleeding occurs in approximately one-third of patients with cirrhosis and has a mortality rate of 20%.³
- There are no documented cases describing the incidence of recurrent peptic stricture in a patients with portal hypertension and GEV.
- This case depicts a rarely reported intervention that physicians may be hesitant to pursue.

CASE PRESENTATION

- 61-year-old male with afib, alcoholic cirrhosis complicated by gastric and esophageal varices, and GERD presented with progressive dysphagia to both solids and liquids.
- Diagnosed with cirrhosis in 2008.
- Endoscopic variceal ligation (EVL) in 2009 for primary prevention of non-bleeding esophageal varices and placed on daily nadolol.
- Cirrhosis is compensated and no history of hepatic encephalopathy, ascites, variceal hemorrhage, or positive HCC screens.
- MELD consistently 8-9 with no indications for liver transplant referral.
- Long-standing GERD treated with PPI BID and as-needed H2 antagonist.
- Developed strictures in 2018 secondary to severe erosive esophagitis.
- Undergone multiple endoscopic balloon dilations for recurrent peptic strictures.
- In 2021, patient had episode of atrial fibrillation and started on apixaban and transitioned from nadolol to carvedilol.

ENDOSCOPIC ASSESSMENT



INTERVENTION AND OUTCOME

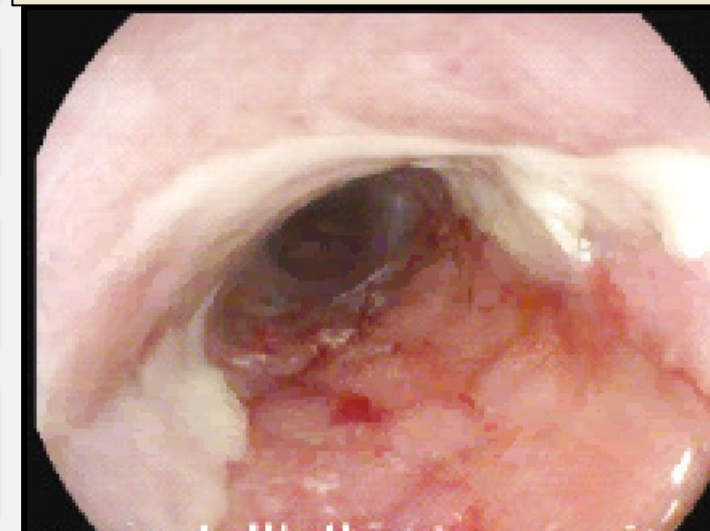
Injected stricture with triamcinolone acetonide in 1 cm increments across four quadrants.

Dilated with a 10-12 mm cre balloon under fluoroscopic guidance.

Dilation caused shallow mucosal tears with scant blood.

Outcome was complete resolut of symptoms and tolerated oral nutrition.

Figure 3. Stricture dilated with mild mucosal bleeding.



DISCUSSION

- There are concerns for underlying variceal hemorrhage during esophageal dilation due to his previous EBL for EV, active gastric varices (GV), and anticoagulation therapy.
- Only absolute contraindication to balloon dilations of benign esophageal strictures is active or partially healed esophageal perforation.⁴
- Varices along the cardia and lesser curvature normally extend into the esophagus, defined as gastroesophageal varix type 1 (GOV1). Although not seen in this pt.
- Cardiac varices disappear in 50-65% of GOV1 undergoing EBL and persistence of cardiac varices after EBL is associated with a higher rate EV recurrence.⁵
- There are conflicting studies on whether EBL causes aggravation and development of gastric varices due to resultant increased portal pressure to feeding vessels.^{6,7}
- Significant bleeding is rare complication of balloon dilation and occurs in approximately 0.4 – 1.2% of esophageal dilations.⁸
- Extensive literature review did not reveal any further risk stratification of esophageal dilation in patients with portal hypertension or GEVs
- This case demonstrates that performing balloon dilations in patients with previous successful EBL of EV and active gastric varices may be safe in absence of active esophageal varices, but larger studies evaluating safety is needed.

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