

INTRODUCTION

- Duodenal varices (DV) are a rare but potentially serious complication of portal hypertension and carry a high risk of massive gastrointestinal bleeding.
- This is a report of successful treatment of a massive DV hemorrhage with endoscopic band ligation.

CASE REPORT

A 52 year old male with a past medical history of idiopathic non-cirrhotic portal hypertension since childhood, was transferred to our hospital for management hematemesis and melena.

Medical History: Significant for recurrent gastric and esophageal variceal bleeds, which were treated with sclerotherapy. He underwent splenorenal shunt surgery and splenectomy approximately 23 years ago with good response.

Pertinent Physical Exam Findings: Lethargic male, anicteric sclera, mild abdominal distension.

Imaging: Abdominal post contrast CT imaging demonstrated Thrombosis in portal vein and right hepatic vein; precluding management with TIPS. Multiple duodenal varices seen entering the wall of second portion of duodenum. (**Figure 1**)

Laboratory Data: Hemoglobin 7.4 g/dL on transfer despite receiving 5 units of packed red blood cells (PRBC) at another hospital. Total bilirubin 3.9 mg/dL, AST 20 IU/L, ALT 23 IU/L, INR 1.2.

Endoscopy: Esophagogastroduodenoscopy (EGD) with visualization of spurting DV in second part of duodenum (**Figure 2**). Endoscopic band ligation (EBL) of DV with one band was performed and hemostasis achieved. Post EBL patient was hemodynamically stable and his melena resolved.

Follow up: EGD 2 weeks later showed of obliteration of the banded DV. Surveillance EGD 5 months later showed complete regression of banded DV with scarring at the site and non-bleeding varices on opposite duodenal wall (**Figure 3**).

Figure 1: Post Contrast CT Abdomen

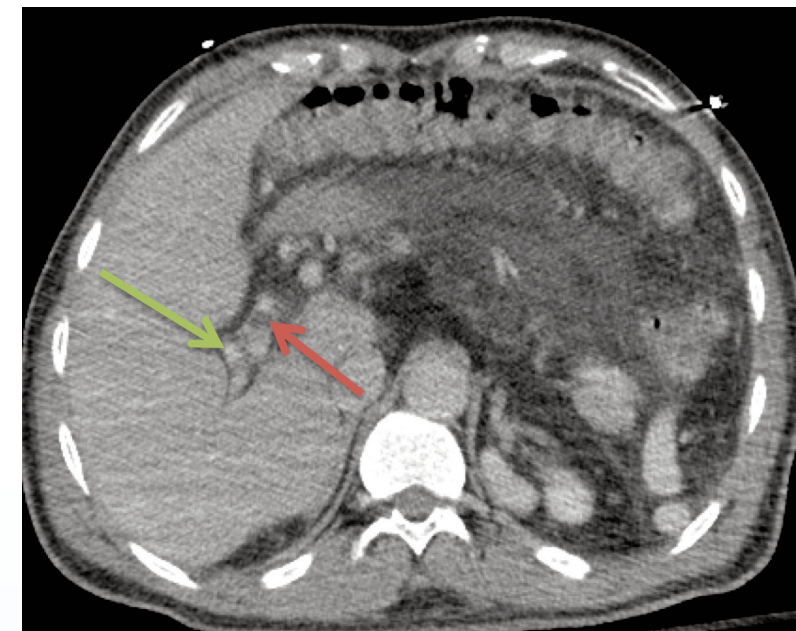


Figure 1A: Postcontrast axial image demonstrates thrombosed portal vein (red arrow) with multiple collaterals at porta hepatis (green arrow).

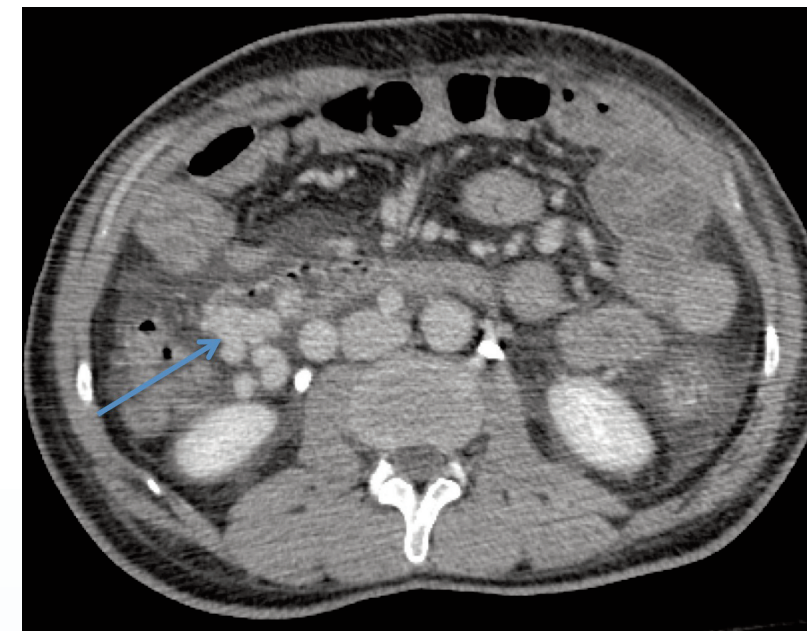


Figure 1B: Postcontrast axial image demonstrates multiple duodenal varices (blue arrow).

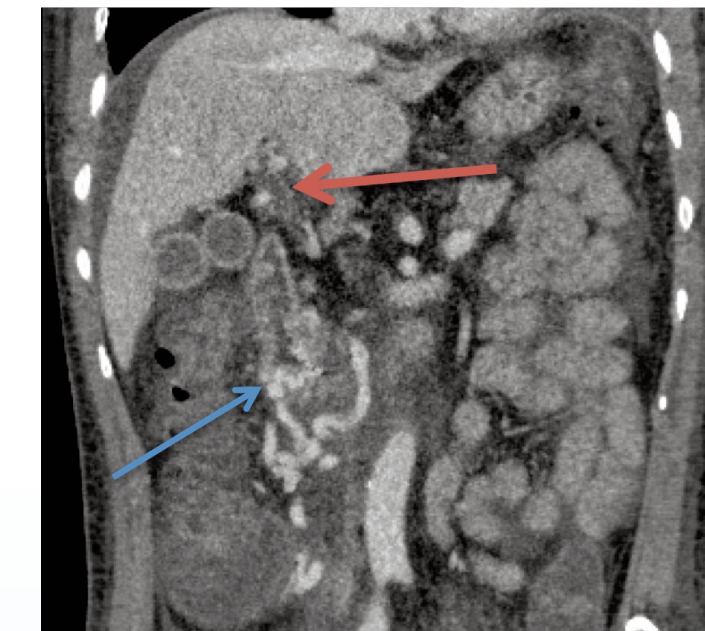


Figure 1C: Postcontrast coronal reconstruction demonstrates multiple duodenal varices (blue arrow) entering in the wall of the second part of duodenum. Thrombosed portal vein (red arrow) is also seen.

Figure 2: EGD

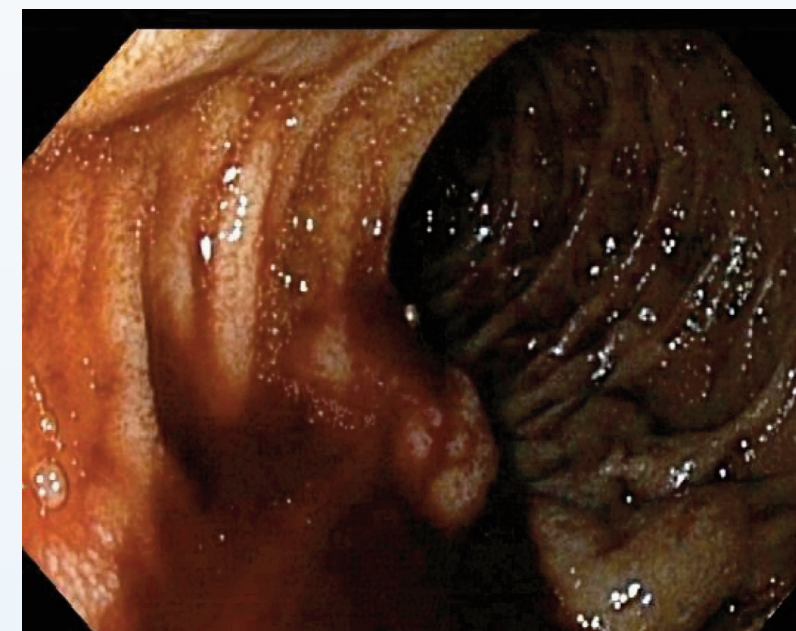


Figure 2A: Active variceal bleed in 2nd portion of duodenum

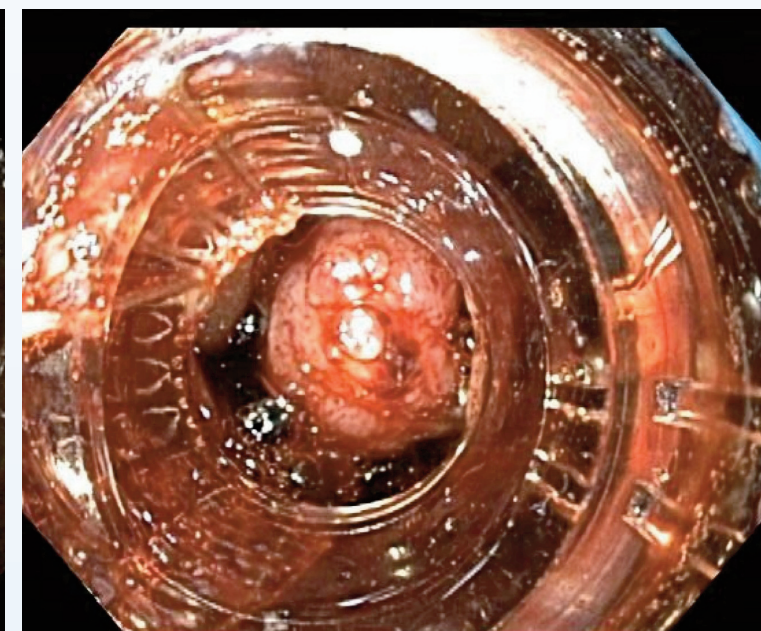


Figure 2B: Status post band ligation of bleeding duodenal varix

Figure 3: Follow-up EGD

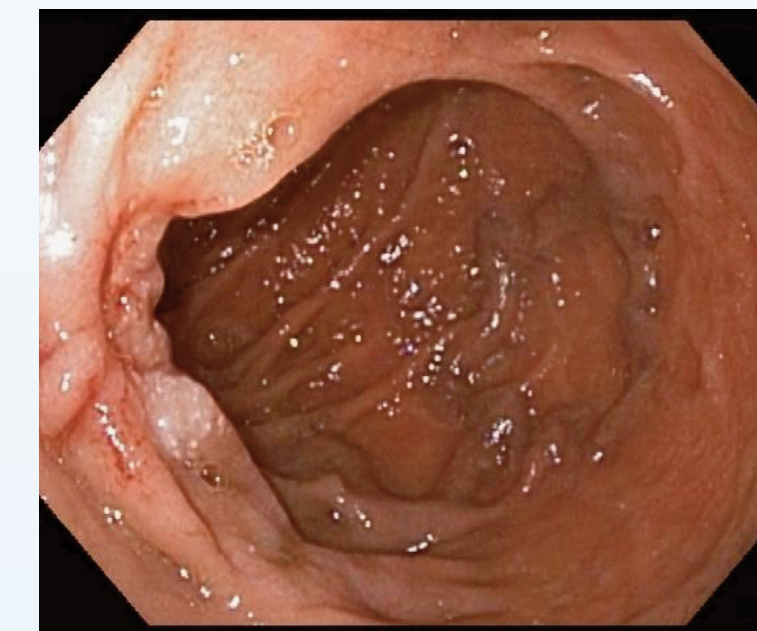


Figure 3: Obliteration of the banded duodenal varix but additional noted on opposite wall

DISCUSSION

- DV occur in 0.4% of all patients with portal hypertension and account for one third of bleeding from ectopic varices.
- Blood flow in DV is frequently high and results in profuse bleeding. Prognosis is poor with mortality rates as high as 40%.
- EBL is widely accepted as a primary therapy for esophageal variceal bleeding; however, there is no widely accepted treatment modality for duodenal varices.
- This case represents successful EBL as a treatment for DV hemorrhage in a patient where other modalities, such as TIPS, were impossible or contraindicated.
- Due to the formation of additional varices in other intestinal sites after EBL, surveillance endoscopy or capsule endoscopy should be used to monitor for their development.

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None of the authors have any relevant disclosures to report