



Endoscopic rectal variceal ligation

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A 62-year-old woman with hepatitis C cirrhosis (Model for End-Stage Liver Disease Na 11) and a history of esophageal variceal bleeding after endoscopic variceal ligation (EVL) presented with a 2-day history of hematochezia, lightheadedness, and palpitations. The initial Hb on presentation was 12 mg/dL. Her presenting heart rate was 106 beats per minute, and her systolic blood pressure was 112 mm Hg. She received intravenous fluid resuscitation with resultant resolution of tachycardia. Repeat Hb testing approximately 5 hours later was 9.1 mg/dL.

Pertinent laboratory values included an International Normalized Ratio of 1.2 seconds, sodium of 138 mmol/L, total bilirubin of 0.9 mg/dL, and 55,000/uL platelets. She was started on an octreotide infusion and ceftriaxone 1 g daily. An upper endoscopy revealed 2 columns of large esophageal varices without stigmata of bleeding.

Endoscopic variceal ligation was performed with the placement of 2 bands. However, given the absence of stigmata of bleeding on upper endoscopy, the decision was made to perform a flexible sigmoidoscopy. Sigmoidoscopy revealed blood-coated rectal mucosa and multiple large rectal varices, including 1 with a red wale sign and a small area of active oozing. Endoscopic rectal variceal ligation was thus performed in a proximal-to-distal fashion until a total of 6 bands

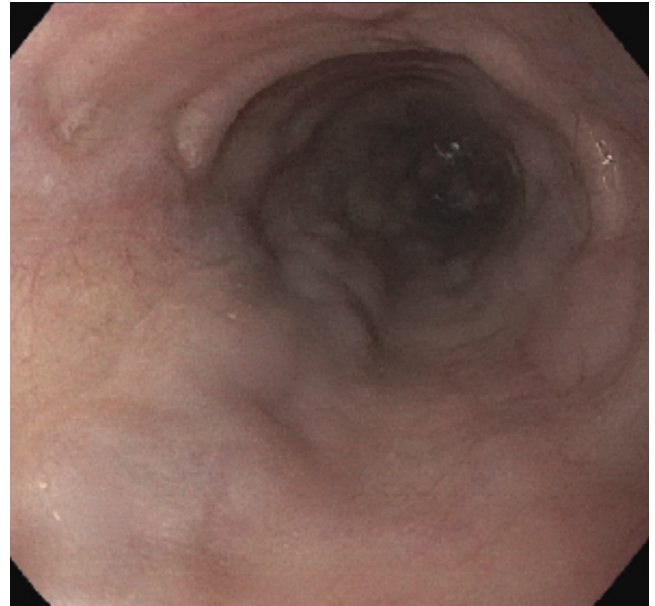


Figure 2. Esophageal varices.

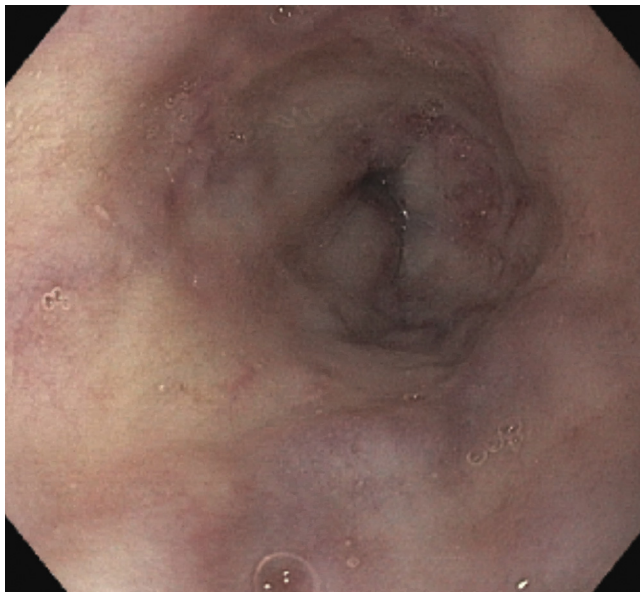


Figure 1. Esophageal varices.

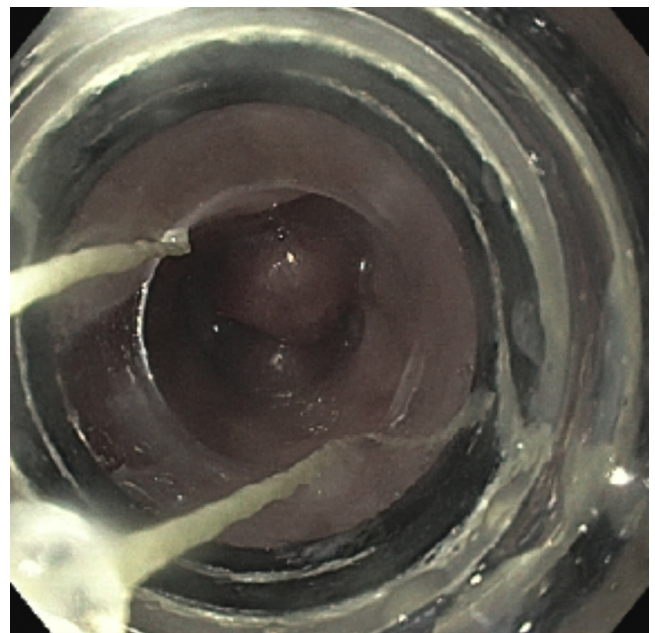


Figure 3. Esophageal endoscopic variceal ligation.

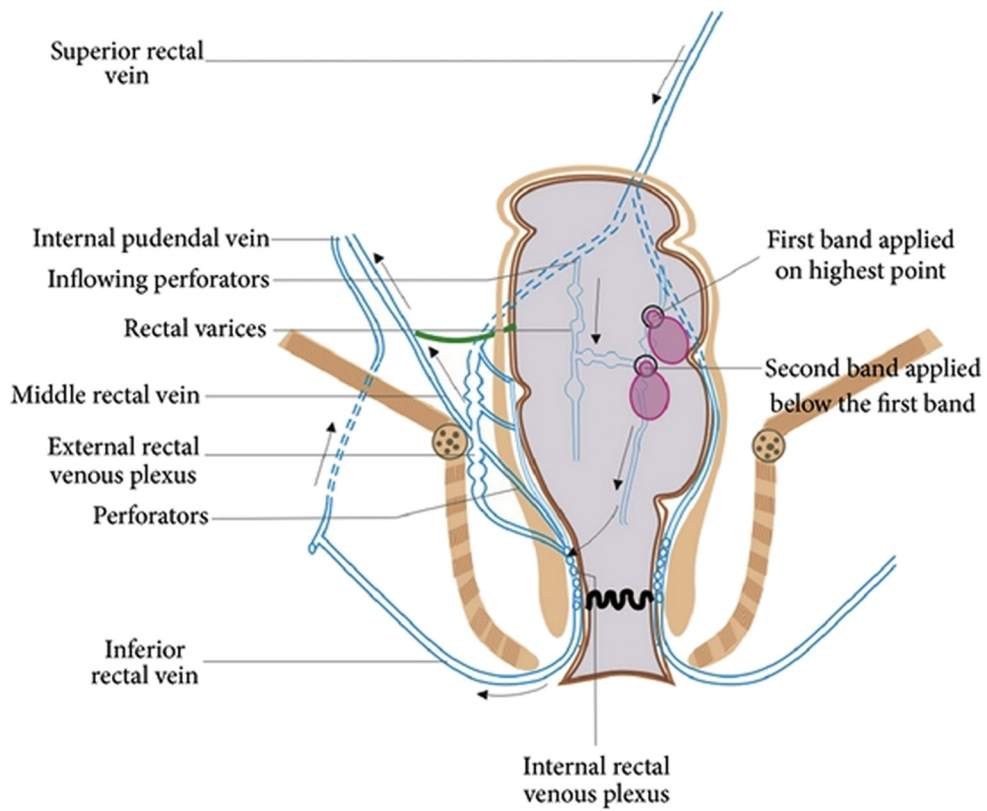


Figure 4. Direction of rectal variceal blood flow.

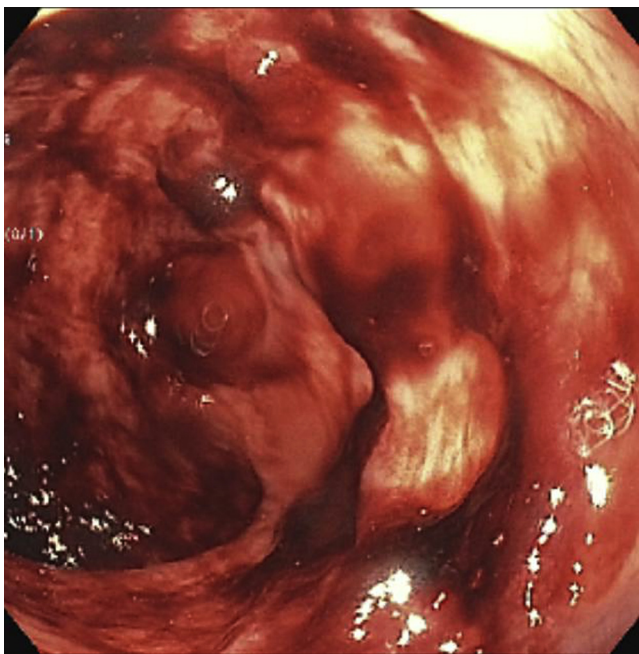


Figure 5. Endoscopic view of the blood-coated rectal mucosa.

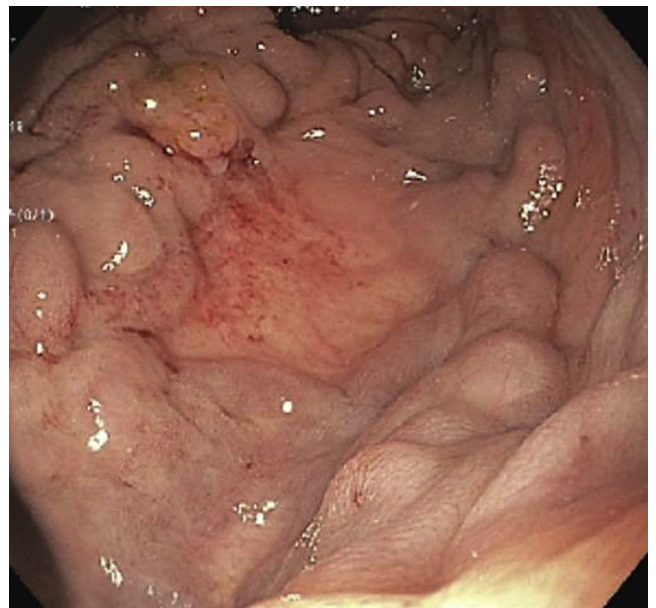


Figure 6. Endoscopic view of rectal varices.

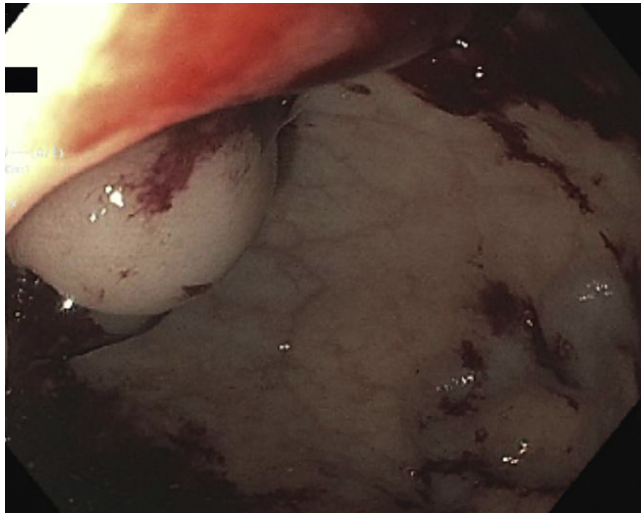


Figure 7. Endoscopic view of oozing rectal varix.

were placed on multiple columns, resulting in significant variceal decompression. She received a total of 3 days of octreotide and 5 days of ceftriaxone. Nadolol (20 mg daily) and spironolactone (100 mg daily) were reintroduced gradually.

The patient had no recurrent bleeding for the remaining 5 days of her admission and was discharged with plans for outpatient transjugular intrahepatic portosystemic shunt (TIPS) placement. She was discharged on a regular diet and no bowel regimen. She underwent successful TIPS placement more than a week after discharge without any significant intermittent recurrent GI bleeding.

DISCUSSION

The prevalence of rectal varices in patients with cirrhosis is between 38% and 56%, whereas the prevalence in extrahepatic portal vein obstruction has been reported to be between 63% and 94%.^{1,2} Multiple treatment strategies currently exist for the management of rectal varices, but there are no established guidelines or algorithms. Treatment options include endoscopic injection sclerotherapy, EVL, cyanoacrylate glue injection, TIPS, embolization, balloon-occluded retrograde transvenous obliteration, and surgical management in the form of simple suture ligation, inferior mesenteric vein occlusion, or portocaval shunt surgery.³

In patients with cirrhosis who present with GI bleeding, assessment for rectal varices should be considered after ruling out esophageal variceal hemorrhage. Although EVL of esophageal varices has been well studied, less is known regarding EVL of rectal varices; however, EVL appears to be a safe and effective therapy for the management of rectal varices, as demonstrated in this case.

In the limited literature on endoscopic rectal variceal ligation, the recurrence rate has been reported to be as high as 55.6%.⁴ Data on the efficacy of endoscopic injection sclerotherapy versus EVL are limited; however, a small study by Sato et al⁴ suggested that endoscopic injection sclerotherapy may have a lower recurrence rate (41.7%) and recurrent bleeding rate. It is important to note, however, that the recurrence rates from the aforementioned study were in the absence of beta-blocker use. Given the significant recurrence rates for endoscopic treatment modalities, we recommend that endoscopic surveillance be performed in less than a year (ie, 3–6 months) and that early consideration be given for more definitive management, such as TIPS placement.

DISCLOSURE

All authors disclosed no financial relationships relevant to this publication.

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