

Introduction

- Duodenal varices (DVs) are a rare cause of life-threatening bleeding in cirrhotic patients.
- Variety of modalities are available for hemostasis, however no standardized guidelines for their management exist.

Case Description

Case 1

- A 63-year-old male with cirrhosis presented with hematochezia and Hemoglobin (hgb) of 7.1.
- Endoscopy showed small to medium-sized DVs with stigmata of recent bleeding in the second portion of duodenum.
- EVL was done with adequate decompression and no immediate bleeding.
- One week later, he developed recurrent hematochezia. Full GI work up including upper endoscopy, small bowel capsule and colonoscopy showed previously noted non-bleeding ulcers in the duodenum with no new active bleeding sites. (Figure 1)

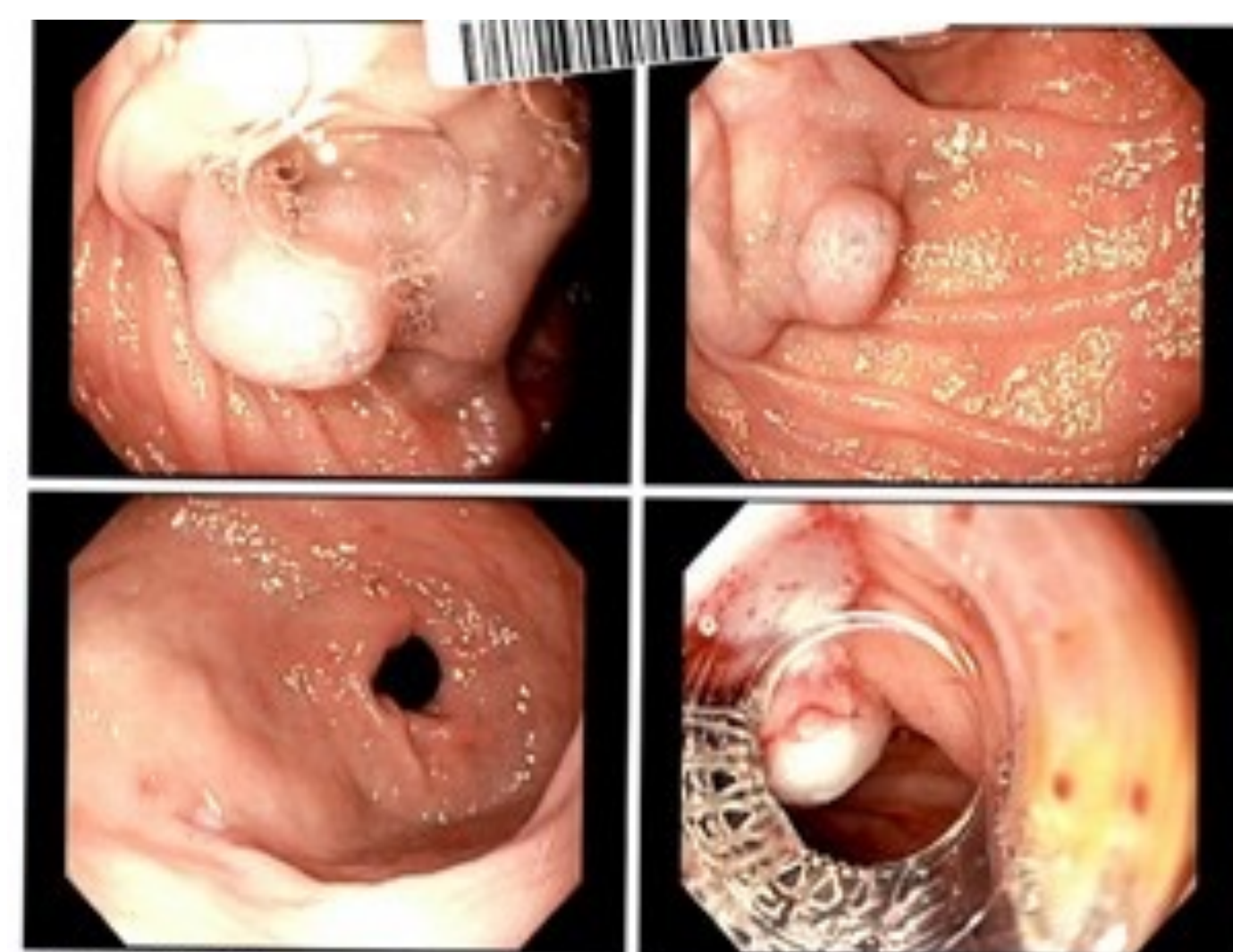


Figure 1. Small to medium sized duodenal varices, successfully treated with endoscopic variceal ligation.

Case 2

- A 68-year-old male with cryptogenic cirrhosis complicated by large hepatocellular carcinoma causing portal vein obstruction was admitted for GI bleeding and hgb of 4.3.
- Endoscopy showed multiple large DVs with active bleeding.
- Successful hemostasis was achieved using three hemostatic clips but without adequate decompression.
- Given the size of the varix, the patient then underwent successful percutaneous transsplenic porto-venous variceal coil embolization by interventional radiology (IR).

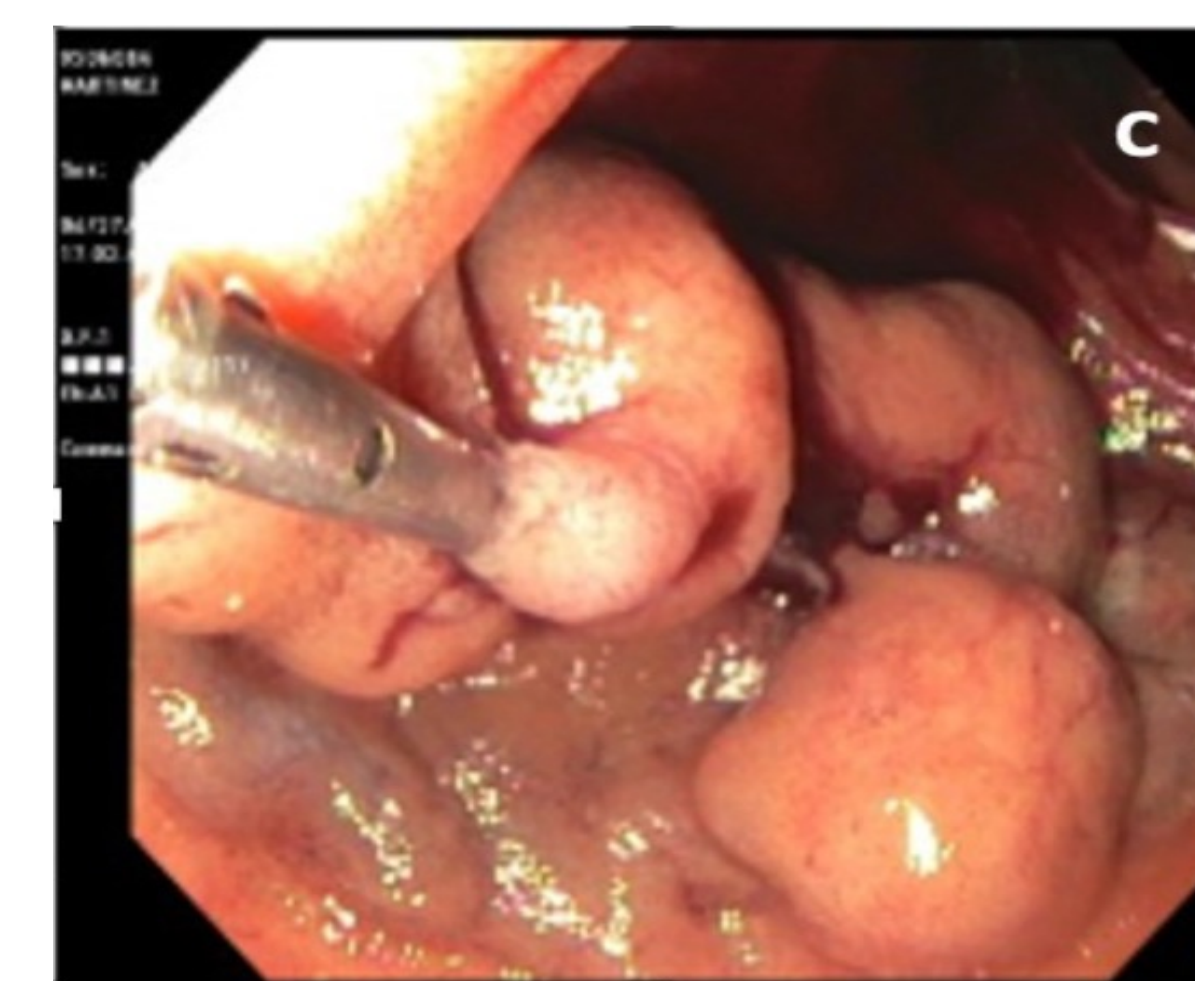
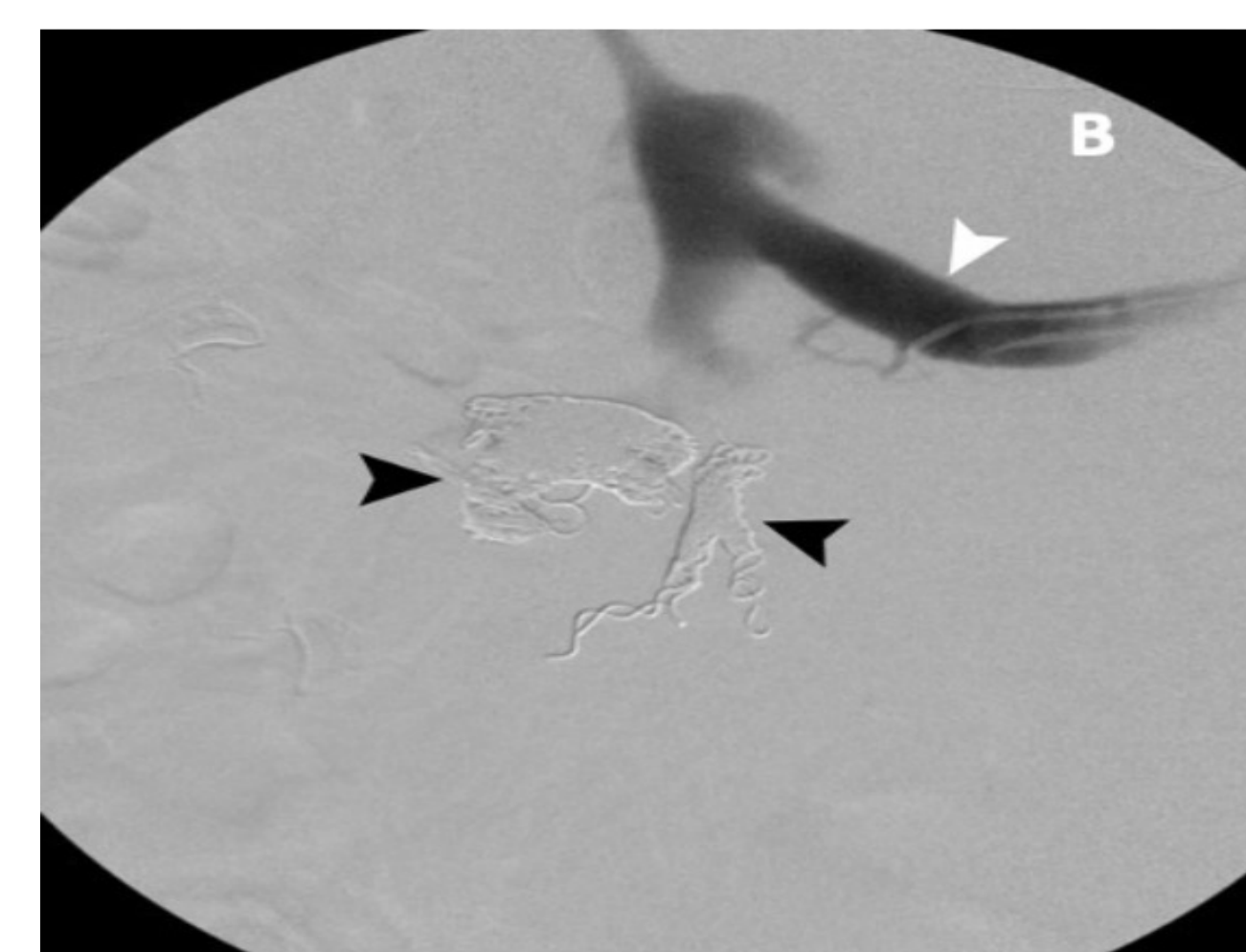
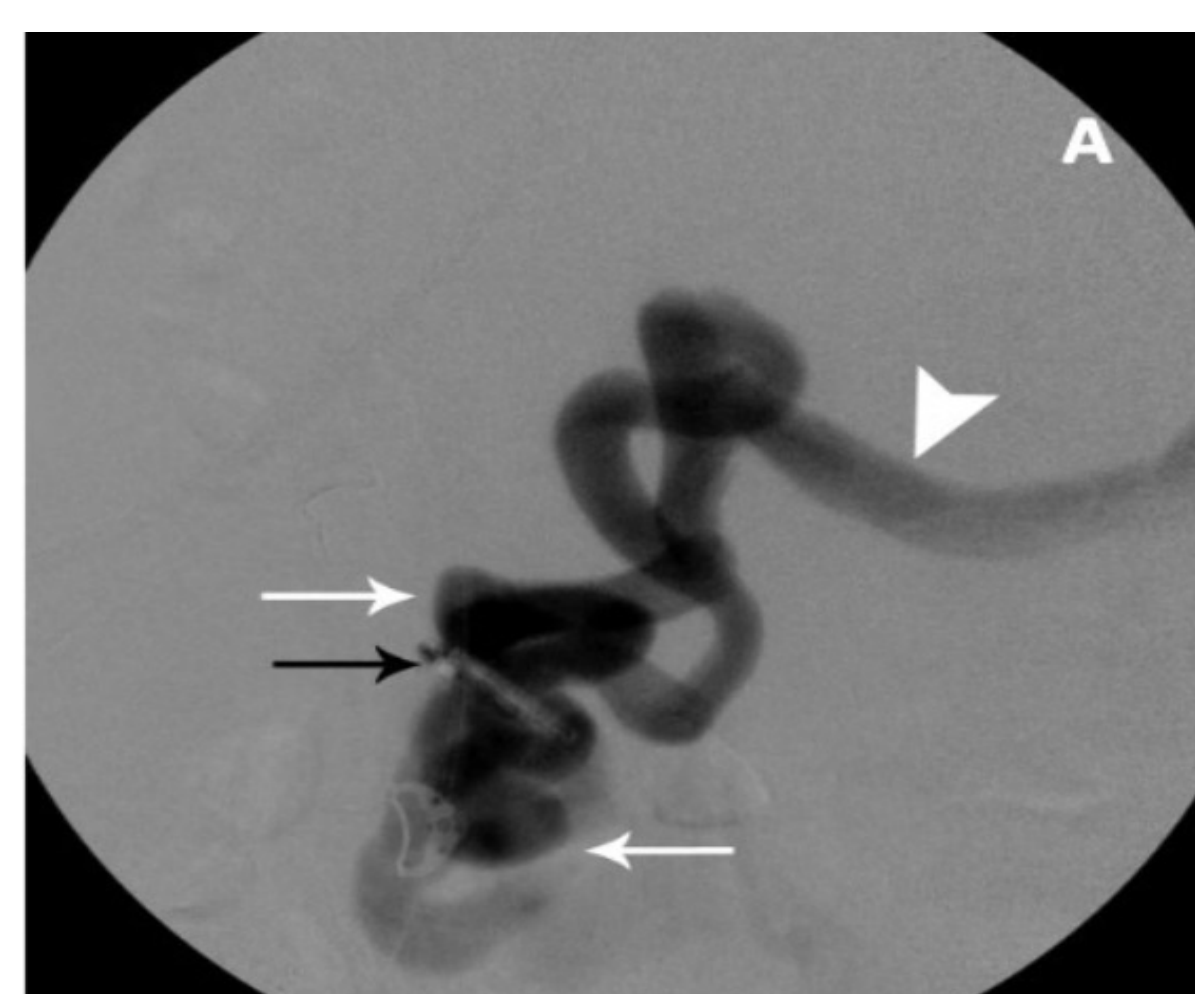


Figure 2. A: Percutaneous transsplenic splenic venogram demonstrating large duodenal varix (white arrows) with linear endoscopically placed clip corresponding with site of hemorrhage in the vertical segment of the duodenum (black arrow). The splenic vein (white arrowhead) drains via the large varix as the main portal vein is occluded secondary to hepatic tumor; B: Percutaneous transsplenic splenic venogram demonstrating successful coil embolization of the varix (black arrowheads); C: Endoscopic view of large varices in second portion of duodenum, post hemostatic clip placement.

Discussion

- DVs are an uncommon occurrence but can cause massive hemorrhage with a high mortality up to 40%, due to challenges with treatment.
- Management options include EVL, sclerotherapy, clipping or IR guided Trans Jugular Intrahepatic Portosystemic Shunt (TIPS), Balloon-Occluded or Coil Assisted Retrograde Transvenous obliteration.
- Small – medium duodenal varices (case 1) were adequately managed by EVL, however endoscopic decompression could not be completely achieved in large varices (case 2) and eventually required IR guided coil embolization.
- Therefore, the size, location and accessibility of the duodenal varices are important factors to be considered in choosing the appropriate management modality for DVs.