

Recurrent Gastric Variceal Hemorrhage from Eroding Endovascular Coil

Michelle Baliss, DO¹; Tim Brotherton, MD¹; David Westrich, MD¹; Samuel Burton, MD¹; Laith Numan, MD¹; Zarir Ahmed, DO¹; Soumojit Ghosh, MD¹; Justin Lendermon, MD²; Ali Malik, MD²;

Kamran Qureshi, MD¹

Department of Gastroenterology & Hepatology, Saint Louis University Hospital¹
Department of Vascular & Interventional Radiology, Saint Louis University Hospital²



BACKGROUND

- Coil and plug-assisted transvenous obliteration of gastric varices (GVs) is a variation of balloon-occluded retrograde transvenous obliteration (BRTO) that alleviates complications related to prolonged indwelling balloon time and the use of sclerosing agents.
- Few reported cases of coil migration.
- We report a case of recurrent gastric variceal hemorrhage from endovascular coil erosion after coil and plug-assisted variceal obliteration.

CASE DESCRIPTION

- 32-year-old female with cirrhosis, portal and splenic vein thrombus presented with hematemesis and hypotension.
- EGD: small non-bleeding Evs and large GV's with stigmata of recent bleeding.
- Given unfavorable anatomy for TIPS, transhepatic coil and plug assisted obliteration of multiple GV's and angioplasty of partially thrombosed portal and splenic veins was performed.
- Asymptomatic on 4-month follow-up with improved liver function.
- Readmitted for hematemesis. EGD showed large amount of clotted blood in stomach (Fig 1A) and cardiofundal varices with protruding coils and minimal active oozing from the varices above the coil (Fig 1 B).
- Underwent plug assisted retrograde obliteration (PARTO) through gastroduodenal shunt. Remained stable and discharged with plans for possible TIPS in the future.

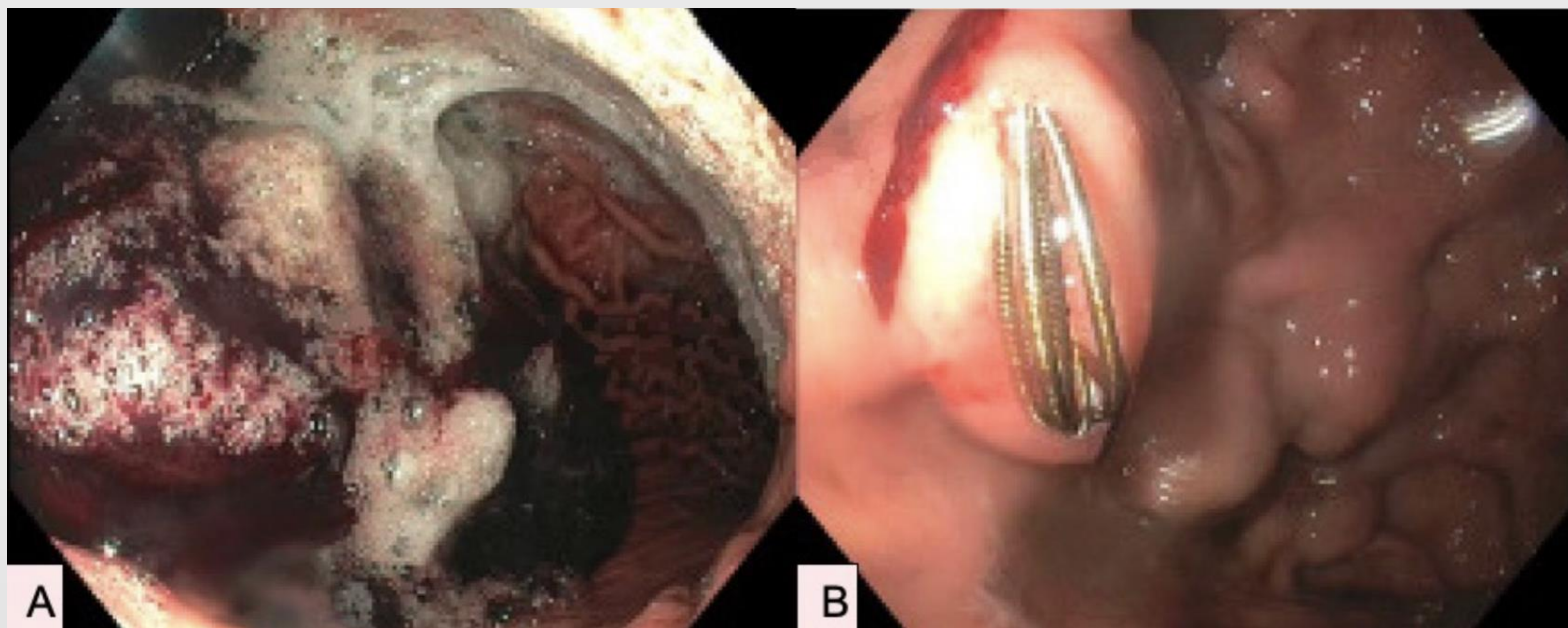


Figure 1: A) Large amount of clotted blood in the stomach on EGD; B) Coil erosion and active oozing

DISCUSSION

- Optimal management of GV hemorrhage – multidisciplinary.
- BRTO is a well-accepted procedure for treatment of isolated gastric varices associated with large gastroduodenal shunts.
- BRTO involves prolonged use of balloon catheter and retrograde injection of sclerosing agent via shunt outflow.
- BRTO associated life-threatening complications include PE, PVT, anaphylaxis.
- Use of vascular coils and plugs or coils to achieve variceal occlusion has become popular due to safety, decreased procedure time, comparable efficacy.
- Attempts to deploy coils proximally away from the mucosa can prevent erosion through varices and overlying mucosa.
- This case highlights a rare but important complication of coil-assisted variceal obliteration.