

Introduction:

- Endoscopic cyst-gastrostomy and necrosectomy have been shown to be highly effective in the treatment of pancreatic walled of necrosis (WON).
- However, these procedures can be associated with significant complications including bleeding, infection, and perforation.
- Herein, we describe a case of upper GI bleeding secondary to erosion of a cyst-gastrostomy stent array into the splenic vasculature.

Case Description:

- A 45-year-old male with a history of chronic pancreatitis presented to the emergency room with acute-onset hematemesis, melena, and abdominal pain. Two weeks prior, he presented to an outside hospital with abdominal pain and vomiting.
- He was found to have a 6.7 x 3.4 cm WON collection in the pancreatic tail on MRCP. EUS with FNA revealed necrotic debris and was negative for malignancy.
- Due to ongoing pain and poor oral intake, he underwent EUS-guided cyst-gastrostomy and necrosectomy 1 week later. A hot 10 x 15 mm lumen apposing metal stent (LAMS) was placed with balloon-dilation of the LAMS.
- Then, necrosectomy of cyst cavity was done via irrigation and suction with placement of coaxial double pigtail plastic stent.
- On presentation to our institution, he was afebrile and hypotensive, with a hemoglobin of 11.7 g/dL from 16.2 g/dL one week prior.

Splenic Vascular Laceration After Endoscopic Necrosectomy and Cyst-Gastrostomy Placement

Ameya Deshmukh, DO¹, Zarir Ahmed, DO², Michelle Baliss, DO², Jason Taylor, MD², Antonio Cheesman, MD²

¹Department of Internal Medicine, Saint Louis University – School of Medicine

²Division of Gastroenterology and Hepatology, Saint Louis University – School of Medicine

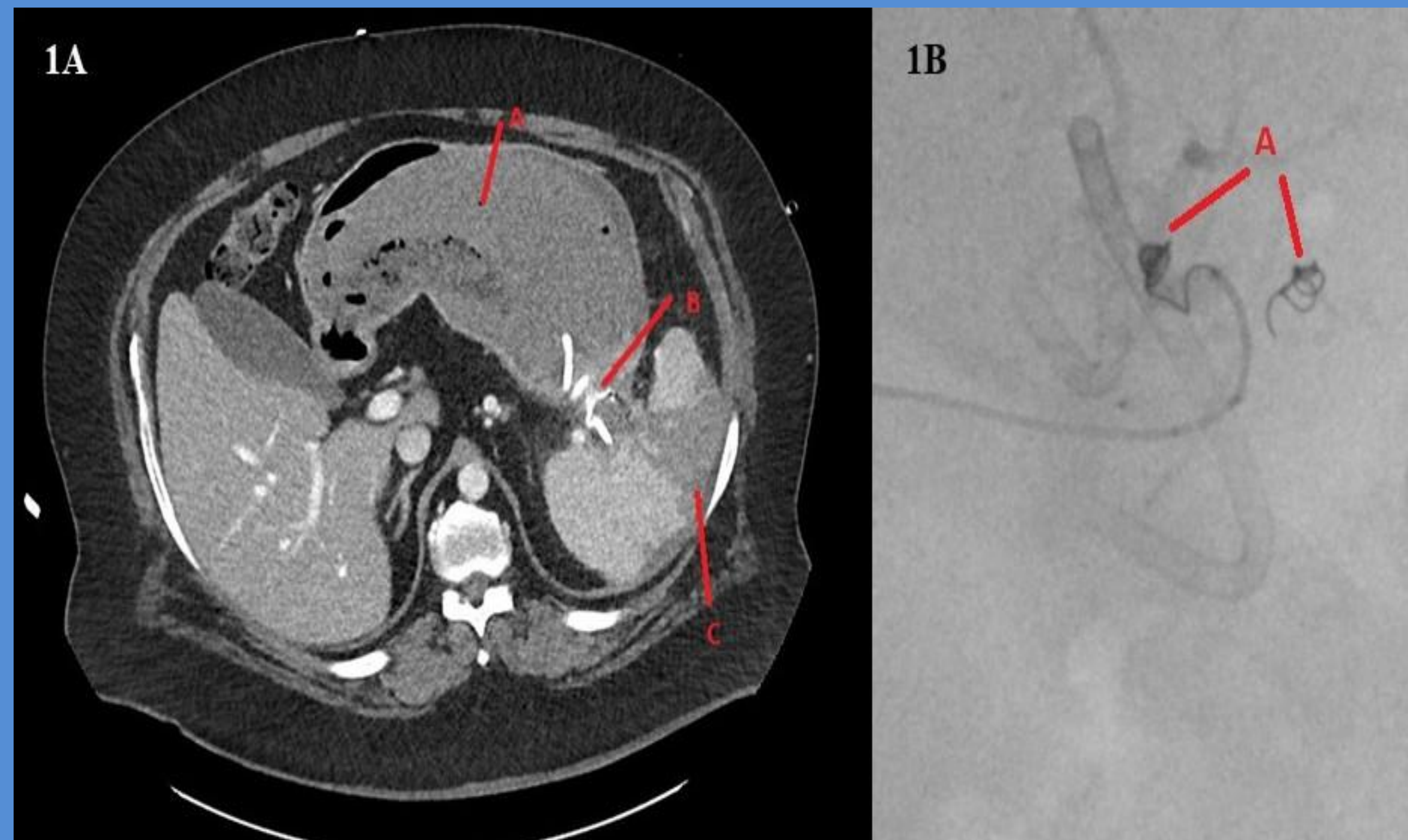


Figure 1A: Gastric lumen with hemorrhagic material (A). Cyst-gastrostomy connecting stomach and pseudocyst (B). Wedge-shaped splenic infarct (C). Figure 1B: Successful embolization of splenic artery branches with multiple coils (A).

Case Description (continued):

- Emergent abdominal CT angiogram revealed pigtail stent migration into the splenic arterial branches at the splenic hilum, causing splenic artery injury and large splenic infarct.
- Interventional radiology performed successful coil embolization of the splenic artery with bleeding cessation.
- The patient progressed well and was discharged home.

Discussion:

- While endoscopic cyst-gastrostomy provides safe and effective treatment of pancreatic WON, it still carries the potential for serious complications.
- Prior literature reveals endoscopic therapy has a 26-33% bleeding rate and a mortality rate of 5.8-11%. Stent migration is a relatively rare complication that occurs in 0.7% of patients.
- In our case, disruption of the splenic vasculature likely resulted from mechanical injury by the cyst-gastrostomy stent.
- CT angiography is the best initial diagnostic test with excellent sensitivity and specificity.
- Treatment usually involves transcatheter embolization or surgery for patients with persistent hemodynamic instability.
- Splenic vascular injury and infarcts, while infrequent, can still occur as immediate and delayed complications and endoscopists should be vigilant of their occurrence post-procedure.



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