Splenic artery pseudoaneurysm masquerading as Gastrointestinal bleeding

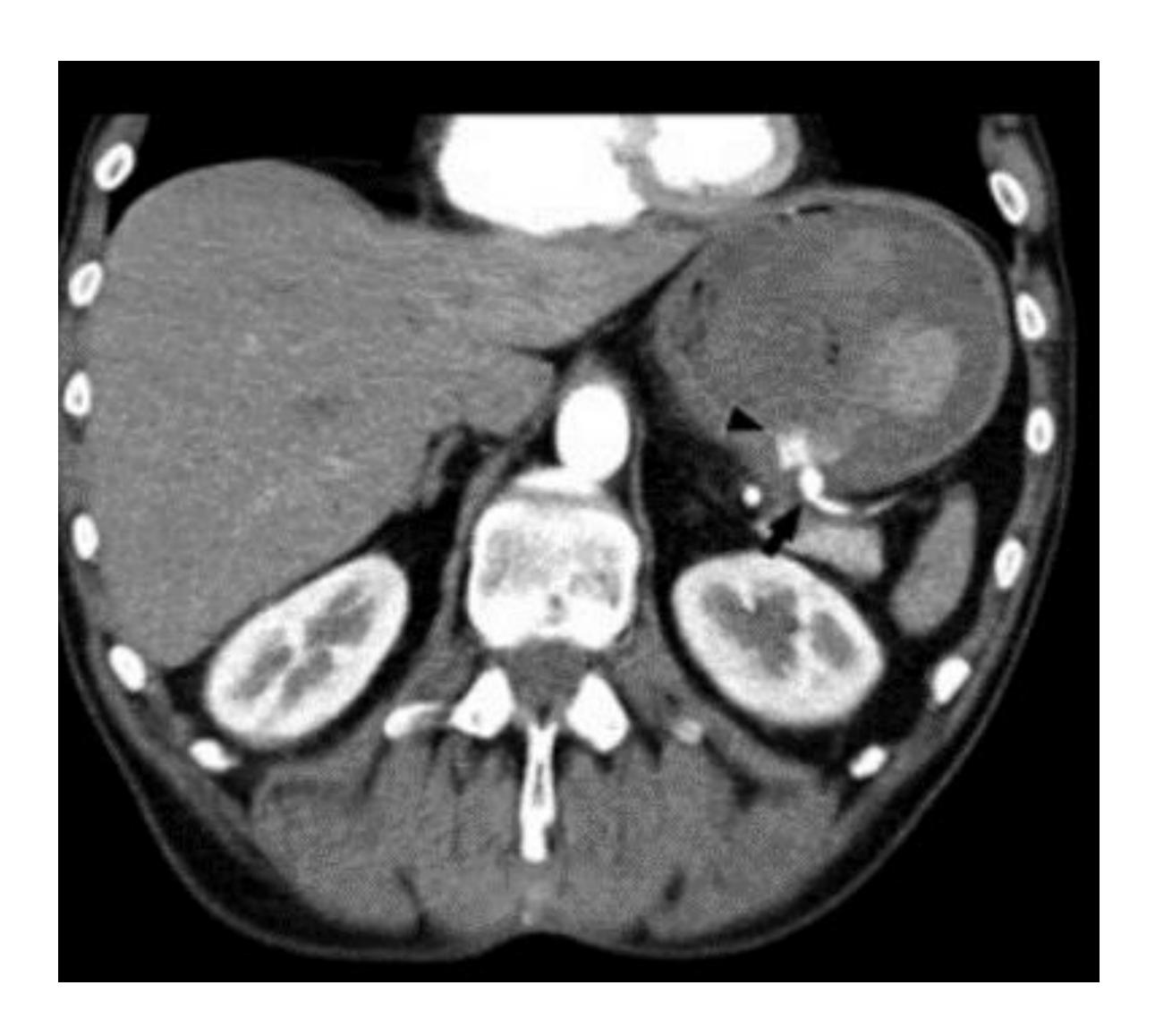
Sohaib Shabih MD, Ayesha Asghar / Robert Packer Hospital

Introduction

Splenic artery aneurysm is a rare clinical entity; however, it accounts for the most diagnosed visceral artery aneurysm. Pseudoaneurysm of the splenic artery (SAP) is even more uncommon, it results from recurrent pancreatitis or trauma. Here we report an interesting clinical scenario of gastrointestinal bleeding resulting from splenic artery pseudoaneurysm

Case Presentation

- 36-year-old female with past medical history of chronic alcoholic use, recurrent pancreatitis presented to the hospital with vague abdominal discomfort and two episodes of hematemesis.
- She had a prior history of similar complaints two months ago. During that course of time, upper gastrointestinal endoscopy was unremarkable for any source of bleeding, varices or ulcers. Colonoscopy and video capsule enteroscopy did not reveal any abnormal findings.
- She did not have any prior history of abdominal trauma or chronic NSAID use.
- On presentation during this visit, patient was vitally stable and did not exhibit any signs and symptoms of impending hemodynamic compromise.
- Hemoglobin at the time of admission was 6 mg/dl, coagulation profile was within reference range.
- CT angiography revealed distal splenic artery pseudoaneurysm with contrast extravasation into the stomach.
- Patient successfully underwent coil embolization during her course of stay.
- There were no further episodes of gastrointestinal bleeding on her subsequent follow up visits.



CT angiogram showing splenic artery aneurysm involving its distal segment and penetrating into gastric mucosa

Discussion

- Splenic artery pseudoaneurysm (SAP) are relatively uncommon, resulting from necrosis of the vascular wall and fragmentation of elastic tissue.
- It can arise from any portion of the splenic artery or its branches. Recurrent pancreatitis and penetrating abdominal trauma are the most common implicated etiologies.
- Other causes include peptic ulcer disease and pancreatic pseudocyst. Unlike true aneurysm, SAP nearly always presents with symptoms including epigastric abdominal pain and hematemesis.
- Majority of the patients are hemodynamically unstable at the time of presentation.
- Diagnosis is established with CT angiography. Upper GI endoscopy is rarely conclusive but may reveal adherent clots within the gastric curvature along the distribution of splenic artery.
- Endovascular technique using coil embolization, thrombin injection or gel foam is the treatment of choice in hemodynamically stable patients.
- Surgery involving splenectomy, with or without distal pancreatectomy or splenic artery ligation is reserved for hemodynamic compromise or failed embolization. However, the success rate with surgery is not very high.

Conclusion

Splenic artery pseudoaneurysm is an unusual and difficult to diagnose etiology of gastrointestinal bleeding, carrying high morbidity and mortality. Prompt diagnosis is required so that definitive interventions can be performed in a timely fashion.

