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Haemosuccus Pancreaticus: A Diagnostic Conundrum

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Learning Objectives

This case demonstrates :

- *an uncommon cause of GI bleeding and to suspect this when a bleeding source remains elusive, despite investigations, in those with symptomatic anaemia.*
- *the appropriate investigations for recurrent gastrointestinal (GI) bleeding; including upper and lower endoscopies, capsule endoscopy and CT angiogram*
- *Optimal management of Haemosuccus Pancreaticus with involvement of the Interventional Radiology team*

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Case Presentation

- 69 year old lady presents with lethargy, breathlessness on exertion and haematochezia.
- 2 units of PRC were administered with a Hb of 67. She was discharged following negative OGD, colonoscopy and CT angiogram.
- 2 Weeks later she re-presented with symptomatic anaemic (64g/dL) with haematochezia.
- Further bloods (including blood film, lactate dehydrogenase, serum immunoglobulins, electrophoresis and serum free light chains) and capsule endoscopy were negative.
- She was discharged to await OGD.

Past medical history:

- Chronic alcohol-related Pancreatitis
- Deep venous thrombosis
- Mixed dyslipidaemia
- Hypertension
- Alcohol excess
- Perforated duodenal ulcer

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Case Presentation

- The patient was admitted for the third time having presented with haematemesis and further haematochezia.
- These episodes of haemorrhage were more profound during this admission, with
- **Hb as low as 51 g/L**.
- 15 units of packed red cells in total were necessitated to maintain Hb greater than 70 g/L.
- OGD, capsule endoscopy and CT angiogram were all repeated due to the severity of the bleeding.
- Capsule endoscopy and push enteroscopy revealed fresh, periampullary blood in D2 (Fig. 1 & 2.)

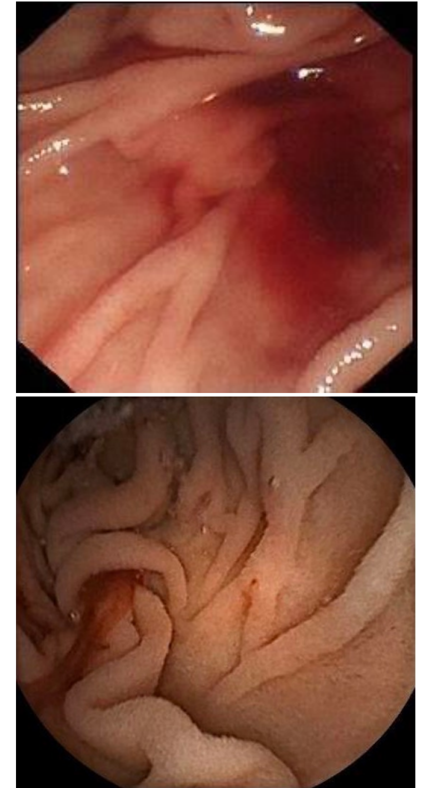
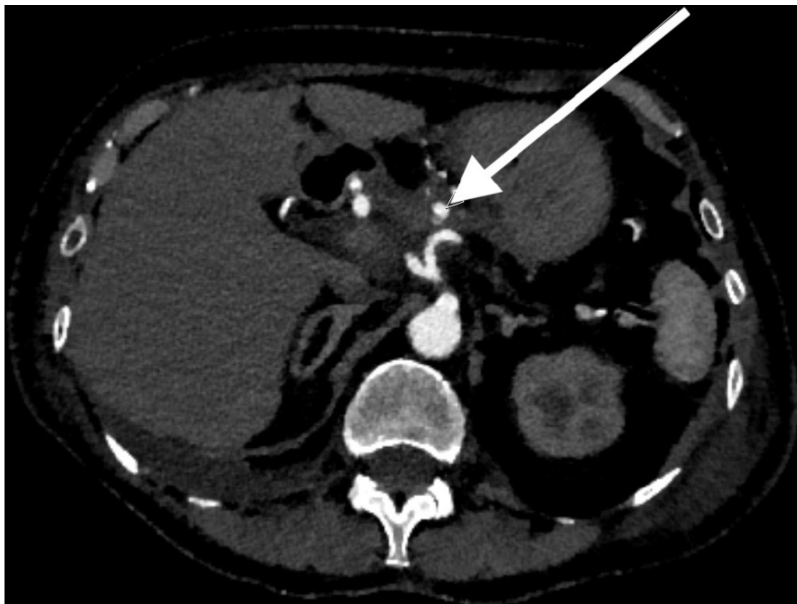


Fig. 1 & 2.
Fresh Periampullary blood

Diagnosis



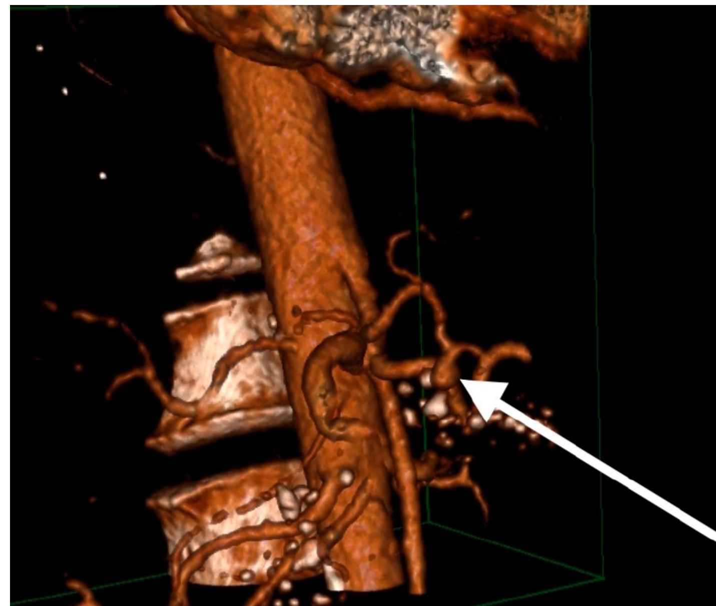
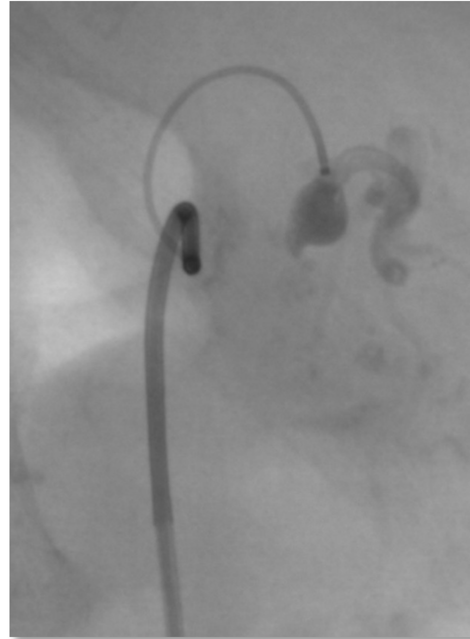


Fig.3 CT Mesenteric Angiogram demonstrating pseudoaneurysm of the left gastric artery

Fig. 4 CT angiogram with 3D reconstruction demonstrating the pseudoaneurysm.

Interventional Radiology

- Invasive mesenteric angiography was subsequently performed.
- The left gastric artery pseudoaneurysm was identified and underwent embolisation using a front and back door approach with concerto detachable coils



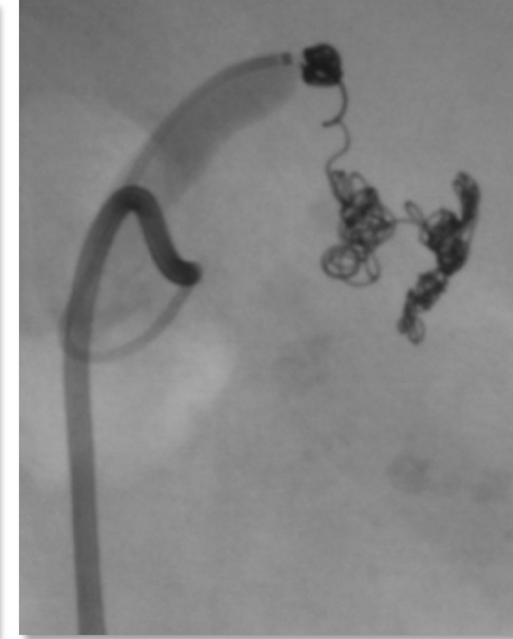


Fig 5. Fluoroscopic angiography of the left gastric artery pseudoaneurysm
Fig 6. Post-coil packing of the left gastric artery pseudoaneurysm. Contrast reflux indicative of adequate embolisation.

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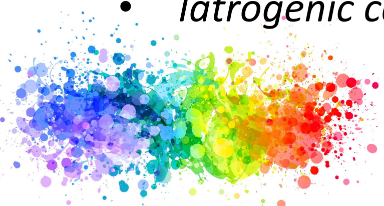
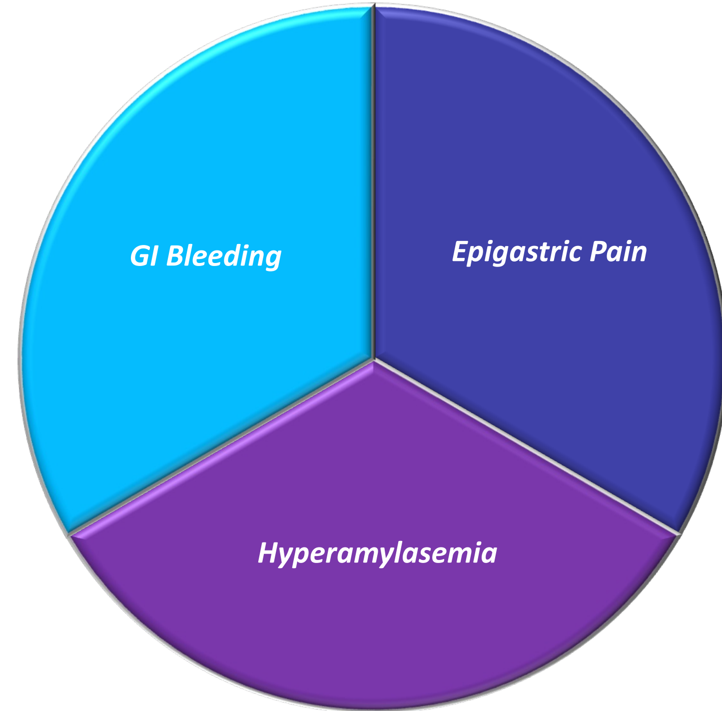
Haemosuccus Pancreaticus

- 1/1500 cases of GI bleeding
- Bleeding tends to occur either from the pancreatic duct or the ampulla via the gastric or splenic artery

- Associations include
  - *Pancreatitis (10% of patients develop a pseudoaneurysm)*
  - *Pancreatic malignancy*
  - *Trauma*
  - *Iatrogenic causes (ERCP)*





Amylase was normal in our case and bleeding was intermittent adding to diagnostic difficulty

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Causes of Haemosuccus Pancreaticus

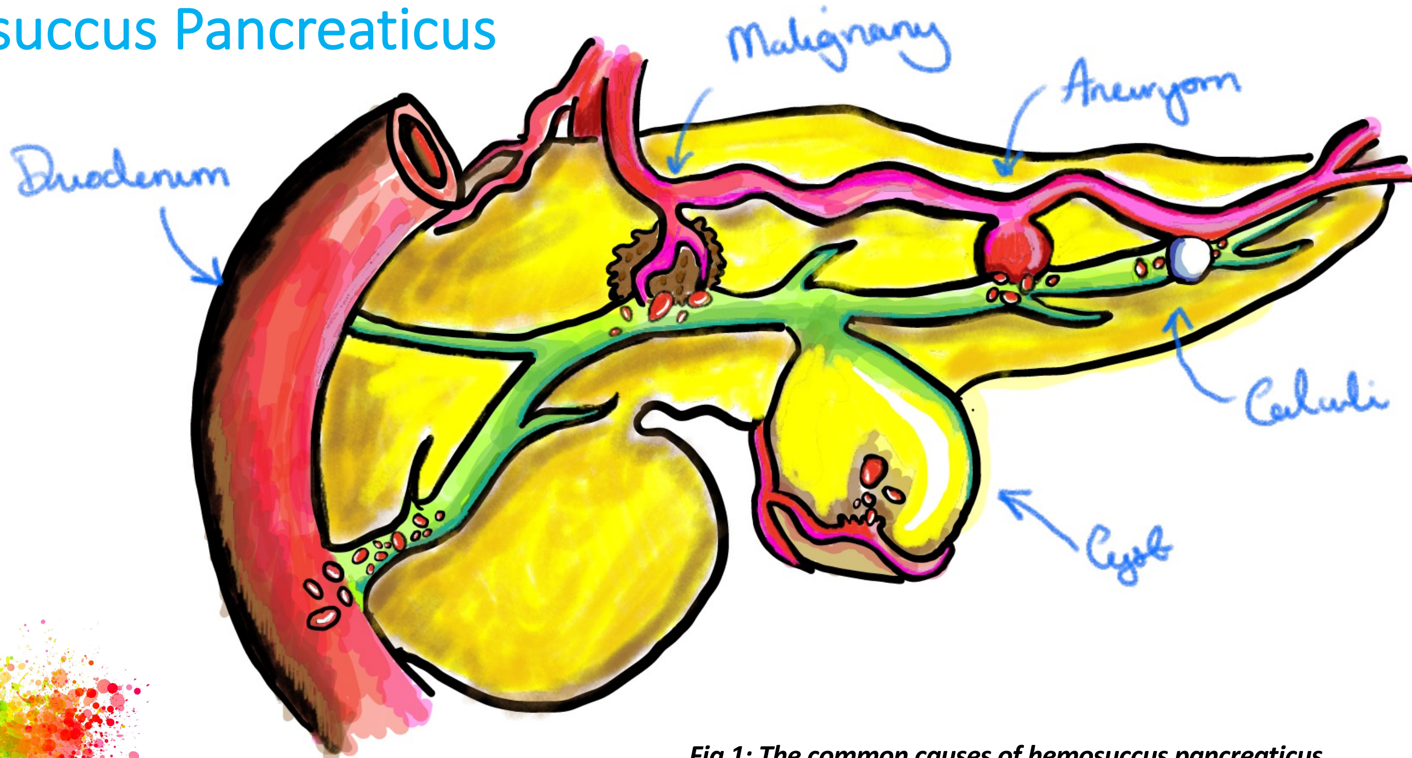

Fig 1: The common causes of hemosuccus pancreaticus.

Adapted from H S Yashavanth et al (2021). Hemosuccus Pancreaticus: A systematic approach . Journal of Gastroenterology and Hepatology, (), –. doi:10.1111/jgh.15404

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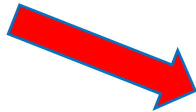
Haemosuccus Pancreaticus

if there is haemodynamic instability or if the embolisation is unsuccessful (pancreatic duct ligation, arterial ligation and pancreatic resection.)



Coil Embolisation

Surgery

Conservative Management

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Conclusion

This case serves to reinforce the importance of having a high clinical suspicion for consideration of this as a diagnosis in a patient with inconclusive investigations for intermittent GI bleeding, especially in the setting of a history of pancreatitis.

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