

An unusual case of gastrointestinal bleeding

S. Vinojan¹, C.N. Wijesurendre¹, A.S.K. Banagala¹, S. Lavanya²

¹ National Hospital of Sri Lanka

² Teaching Hospital Jaffna, Sri Lanka

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Case report

A 40 year old man with a longstanding history of chronic pancreatitis was admitted to the surgical emergency with massive rectal bleeding. He has had several episodes of haematemesis and melaena during the preceding 6 months. On admission the patient was pale, but stable haemodynamically. There was epigastric tenderness and fresh blood was found in the rectum on digital examination.

Colonoscopy revealed fresh and altered blood throughout the colon and in the terminal ileum, whilst Upper GI endoscopy revealed fresh blood spurting from the Ampulla of Vater. CT angiogram demonstrated a fusiform dilatation of the distal segment of the Gastroduodenal artery before its division into branches. Selective catheterisation of the coeliac axis followed by the gastroduodenal artery showed a pseudoaneurysm formation of the gastroduodenal artery and evidence of active bleeding into the main pancreatic duct (Figure 1).



Figure 1. Fusiform aneurysm of GDA.

A microcatheter was guided to the pseudoaneurysm and embolization of the pseudoaneurysm was performed radiologically. Post-embolization angiogram confirmed full

embolization of the pseudoaneurysm (Figure 2). The patient was kept under observation for two days and discharged symptom free.



Figure 2. GDA occlusion after embolization.

Discussion

Bleeding from pseudo aneurysms of the pancreatic vessels in to the pancreatic ducts has been termed “Haemosuccus Pancreaticus”, “Pseudohaemobilia” or “Wirsungorrhagia”. It was first described by Lower and Farrel in 1931. Pseudo aneurysms occur in 3.5-10% of cases with pancreatitis [1]. Causes of aneurysm formation are acute pancreatitis, chronic pancreatitis, vascular malformations, pancreatic tumours, pancreatic divisum, iatrogenic and accidental trauma. The arteries involved are the splenic (40%), gastroduodenal (30%), pancreaticoduodenal (20%), gastric (5%), and hepatic (2%) [1]. Mortality of untreated cases of rupture approaches 90% whilst treatment can reduce the mortality down to 25-37% [2].

Clinical features include abdominal pain, intermittent gastrointestinal haemorrhage and high serum amylase levels [3]. It is thought that the intermittent nature of the haemorrhage is due the formation and dissolution of a clot in the main pancreatic duct whilst the elevated amylase level is due to increased intraductal pressure. A definitive diagnosis can only be established with angiography.

Interventional radiology is considered as the first line therapy

Correspondence: S. Vinojan

E-mail: vinojanfm@gmail.com

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due to its' combined diagnostic and therapeutic potential [4]. Selective embolization often stabilizes and cures an unstable patient. However, surgery is required in patients with unstable haemodynamics, recurrent bleeding or failed embolization [5].

References

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Key Points:

- Haemosuccus pancreaticus is one of the rare causes for per rectal bleeding.
- Embolization of the bleeding aneurysm is the first line of management.
- Surgery still has a role in failed embolization and in recurrent bleeding.