Pancreatic pseudoaneurysm presenting as haematemesis

T. Gowribahan, S. Mehan, L. Piyarisi
Surgical unit, Sri Jayewardenepura General Hospital, Nugegoda, Sri Lanka

Keywords: Pancreas; pseudoaneurysm; haematamesis; pseudocyst

Introduction

Pancreatic pseudoaneurysm is a permanent communication of a pancreatic or peri pancreatic artery with a pseudocyst [1]. Diagnosis remains challenging due to the rarity of this condition and non specific symptomatology[2]. Pancreatitis with pseudocyst formation is the most common cause of pancreatic pseudoaneurysm, although they are known to occur following biliopancreatic resection for malignancy, pancreatic transplant and blunt or penetrating abdominal trauma[3].

Case Report

A 34 year old male presented with a history of epigastric pain, episodes of haematemesis and malaena of three months duration. Previously he had been admitted twice for acute on chronic pancreatitis, caused by heavy alcohol intake over 10 years. His other systems revealed no significant complaints. Examination revealed severe pallor, a BMI of 15, and mild epigastric tenderness without any palpable abdominal masses. Investigation revealed a haemoglobin of 4.4 g/dl, ultrasonography showed pancreatic enlargement with pancreatic calcification, and no evidence of pseudocyst or peripancreatic collection. To find out the cause of gastrointestinal tract bleeding both upper and lower gastrointestinal endoscopy were performed after optimizing the patient. In the absence of any evidence of upper gastrointestinal bleeding, CT abdomen with mesenteric angiogram was performed. It revealed a 2cm × 2.5cm aneurysmal filling in the uncinate process of the pancreas. Surgical exploration was planned with all precautions and preparations. At exploration fibrosed pancreas was found with fragile bloods vessels. The aneurysm was indentified in the body of the pancreas and was explored through the aneurysmal cavity, with the feeder artery controlled and ligated. Pancreatic aneurysmal cavity was anastomosed with the posterior wall of the stomach. Patient's post op recovery was uneventful with one day of ICU observation. Following the clinic visit after three months he remains symptom free and his haemoglobin remains in the normal range.

Discussion

Most patients with visceral artery pseudoaneurysm are asymptomatic, but life threatening bleeding can occur. High index of suspicion is needed to diagnose this condition when patients present with non specific symptoms. Competent interventional radiological procedures are required to confirm and plan out the management [4] .The wide range of treatment options available range from minimally invasive endovascular coil embolization[5] to open surgery. Whatever the minimally invasive procedures attempted, preparation for exploration should be made due to the high risk of complications. Haemorrhage is the a main complication, with a mortality of 13%-40%[6]. It is almost always fatal if left unattended. Mortality rate following surgical treatment of pancreatic pseudoaneurysm primarily depends on the anatomical location, with pancreatic head aneurysm mortality being as high as 43% but only 16% in the body or tail of the pancreas [2].

Conclusion

Pancreatic pseudoaneurysm is rare with non specific symptoms, and may lead to fatal complications. High index of suspicion is needed to diagnose the condition especially in patients having a history of pancreatitis. In first world countries these are managed by interventional radiological techniques. In the Sri Lankan context a general surgical unit with experience

Correspondence: T. Gowribahan
E-mail: gowribahan@gmail.com

and team approach can successfully manage the condition.

Reference

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Key points:

- Pancreatic pseudo aneurysm is rare with non specific symptoms and may lead to fatal complications.
- Clinical suspicion should be raised in doubtful cases.
- A surgical team based management is the preferred choice due to resource limitations in Sri Lanka.