

Case Report

Gastric variceal haemorrhage successfully managed by splenectomy – a case report and literature review

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INTRODUCTION

Isolated gastric varices secondary to left-sided portal hypertension are a rare but important cause of upper gastrointestinal blood loss. Diagnosis is a challenging problem; however appropriate treatment should prevent further bleeding. A case is reported and the recent literature reviewed.

CASE REPORT A 57 year old lady presented following upper gastrointestinal bleeding. She had a past medical history of retroperitoneal fibrosis and had incidentally been noted to have a cyst at the splenic hilum associated with splenomegaly. Gastroscopy revealed altered blood in the lumen of the stomach but no bleeding source. Following a rebleed the lady underwent

laparotomy. Prominent veins around the gastric fundus and splenomegaly were noted. An anterior gastrotomy revealed two large bleeding gastric varices which were oversewn. A total of 30 units of blood had been transfused to this point. On the tenth post operative day she had a further significant bleed and was transferred to our unit for further management. A second laparotomy was performed and the previously noted gastric fundal venous dilatation and splenomegaly were confirmed. A cystic inflammatory mass was identified in the tail of the pancreas while the liver appeared grossly normal. The pancreatic cyst was deroofed and a splenectomy performed. Histology of the cyst revealed chronic inflammation and no evidence of tumour. She has remained well without further bleeding.

DISCUSSION

Sinistral or left-sided portal hypertension is a localised form of extrahepatic portal hypertension that develops after splenic vein thrombosis and may result in gastric varices. Anatomically the splenic vein is vulnerable to disease affecting the pancreas. Conditions associated with splenic vein thrombosis therefore include acute or chronic pancreatitis, pancreatic pseudocysts and pancreatic neoplasms.¹⁻⁴ It is felt that this lady had a pancreatic pseudocyst secondary to subclinical pancreatitis. However retroperitoneal disease is also an aetiological factor.

Following splenic vein thrombosis collateral circulation develops via the short gastric,

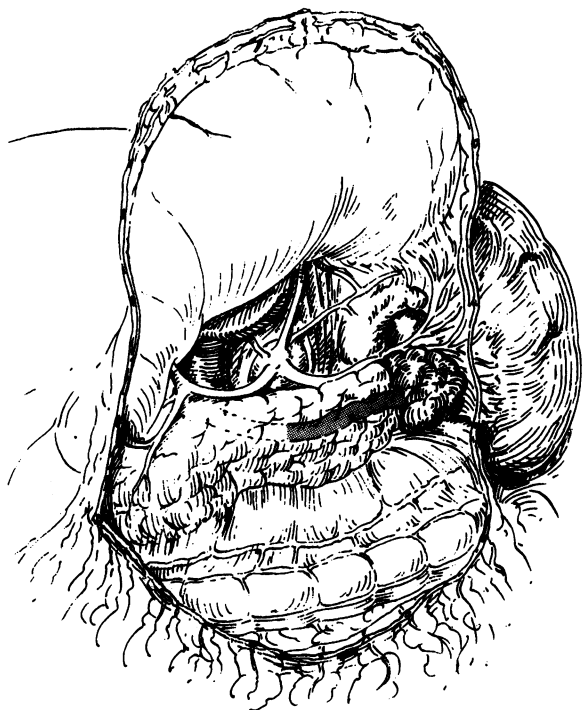


Figure Diagrammatic representation of operative findings demonstrating a 6 cm inflammatory mass in the pancreatic tail with gastric vein dilatation.

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gastroepiploic and left gastric veins (see figure). The resulting venous hypertension leads to the formation of gastric varices along the greater curvature and fundus of the stomach.⁵

Presentation is typically with G.I. blood loss either as anaemia or haematemesis and melaena. Abdominal pain is also common with splenomegaly documented in 60-70% of cases.^{1,2,6} Isolated gastric varices with splenomegaly, a history of pancreatic disease and absence of liver disease is almost pathognomic of sinistral portal hypertension. The incidence of haemorrhage from gastric varices ranges from 10-70%.⁷ In general, gastric varices bleed less frequently than oesophageal varices, however haemorrhage is often of a more life-threatening nature.⁸⁻¹⁰

Diagnosis of gastric varices at gastroscopy or on barium studies is often difficult with a reported accuracy of 14-74%. The gold standard for identifying the thrombosed splenic vein is mesenteric angiography with venous phase imaging but ultrasound and CT may also be useful.¹¹

Treatment of gastric varices is difficult as they are poorly controlled by balloon tamponade and there is a high incidence of complications with injection sclerotherapy. The treatment of choice is splenectomy as first described by Greenwald in 1939.¹²

This procedure decompresses the short gastric vessels by halting inflow from the splenic circulation. In the emergency situation gastric varices may also be oversewn.^{13,14} It is now advocated that patients without prior haemorrhage or significant bleeding should initially be observed, as splenectomy may be associated with significant morbidity and mortality.¹⁵ Additionally there are a number of cases of spontaneous resolution probably due to recanalization of the vein.⁹

In summary, sinistral portal hypertension and isolated splenic vein thrombosis are a rare but important cause of gastric variceal bleeding. This can be very successfully treated by splenectomy.

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