Indian J Surg (September–October 2009) 71:282–283
DOI: 10.1007/s12262-009-0070-z

IMAGES IN SURGERY

A rare case of 'Spontaneous rupture of partially thrombosed pseudoaneurysm of gastroduodenal artery associated with chronic pancreatitis'

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Received: 9 July 2008 / Accepted: 20 March 2009

A 35-year-old man presented with complaints of chronic epigastric pain and occasional blood stained vomiting, which had recently increased in severity and frequency. There was history of relapsing pancreatitis in past 10 years. CT scan made diagnosis of partially thrombosed pseudoaneurysm of gastroduodenal artery (PGDA) alongwith chronic pancreatitis (Fig. 1a,b). On second day of admission, all of sudden, patient vomited one litre of fresh blood and went into shock. After resuscitation, urgent UGI-endoscopy was performed. Fresh blood coming into the antrum, through pylorus was seen. Because of lack of facilities of interventional radiology at our institute, patient was taken for emergency laparotomy and a PGDA found ruptured into duodenum. After ligating GDA, eroded medial wall of second part of duodenum was repaired. Patient made uneventful recovery and pseudoaneurysm was not seen on post op CT (Fig. 2).

Pseudoaneurysms do not contain any of the vessel walls. PGDA are rare [1, 2] and spontaneous thrombosis of these occurs only under certain conditions [3]. These usually occur secondary to pancreatitis or postoperative or as a complication of some procedure for e.g. pancreatic biopsy and vascular interventions [1, 2]. Abdominal pain and gastrointestinal bleeding are the most common symptoms. Once diagnosed, these require immediate treatment because these have a potential to rupture, which is associated with a high rate of mortality [2]. Bleeding due to pseudoaneurysm is most commonly reported in bowel, followed by the peritoneal cavity, pancreatic duct or biliary tree [4]. Contrast-enhanced CT scan and Doppler sonography are widely used as non-invasive techniques in the diagnosis and monitoring of the lesion [5]. Angiography is the definitive

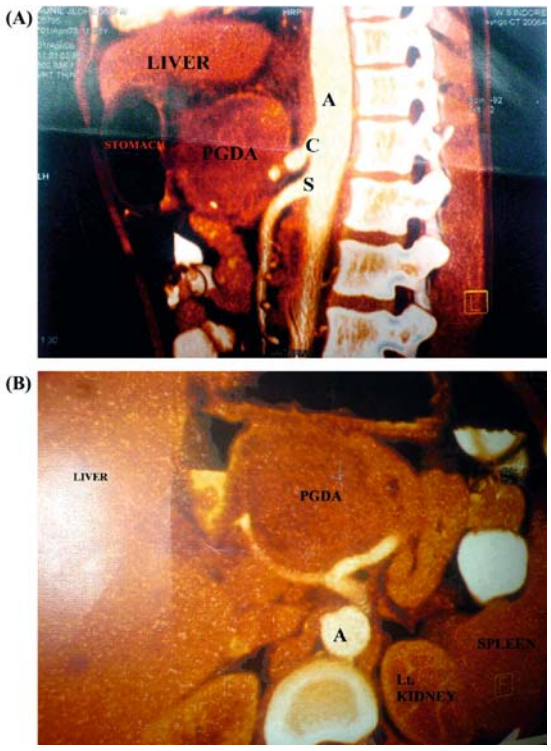

Fig. 1 **(A & B)** Computerised tomography scan showing a large pseudoaneurysm of gastroduodenal artery. (A-Aorta, C-origin of coeliac trunk, S-origin of supp. Mesenteric artery)

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Fig. 2 Computerised tomography scan of same patient after successful surgical treatment

modality for precise planning of the interventional or surgical procedure on PGDA [2]. Treatment of PGDAs include surgery, endovascular techniques or observation [2]. Transcatheter selective arterial embolotherapy is now considered as the procedure of choice for this clinical entity [6]. Minimal invasiveness, fast performing, and necessity of local anaesthesia only, are the main advantages of endovascular interventional procedures, opposite to complex, long-lasting surgical procedures in pancreaticoduodenal region in high-risk patients [2]. In case of rupture, emergency surgical intervention becomes necessary.

Conflict of interest The authors do not have any disclosable interest

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