Isolated Pancreatic Transection in a Case of Blunt Abdominal Trauma

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Abstract A 20-year-old male patient presented with complaint of epigastric pain and vomiting, 1 day after an episode of bike handle injury. Ultrasound showed only mild free fluid in the abdomen. The patient gradually developed tachycardia, hypotension and guarding in the abdomen. CT scan revealed complete pancreatic transection between the neck and the body with segmental separation about an inch. Serum lipase was raised. Exploratory laparotomy revealed acute pseudocyst formation and necrotic slough on the transected ends. Distal pancreatectomy without splenectomy was performed. The patient recovered uneventfully.

Keywords Pancreatic transection · Isolated pancreatic injury · Acute pseudocyst

Introduction

Isolated pancreatic injury because of blunt abdominal trauma is rare (<1% of all abdominal injuries). Patients usually present late and have minimal symptoms and signs initially. CT scan is the gold standard investigation and should always be performed to accurately grade the injury and look for other injuries. Treatment is surgical, although recently non-operative management of low-grade injuries is being carried out. We present a case of isolated pancreatic

transection which was detected on CT scan and successfully treated surgically without complications.

Case report

A 20-year-old male patient presented with a history of skidding of bike, and bike handle injury to epigastrium (1 day prior to presentation). The patient had pain in the epigastrium and 6–7 episodes of vomiting. On examination, the patient was afebrile with pulse 86/min. On abdominal examination, he had only mild tenderness in the epigastrium. Ultrasound examination was suggestive of only mild free fluid in the abdomen. The patient gradually developed fever, tachycardia and tenderness with guarding (on day 3). Hence, CT scan of the abdomen was performed, and it revealed complete parenchymal discontinuity between the neck and the body of the pancreas separated by 1 inch (grade IV pancreatic injury) with mild retroperitoneal haemorrhage and collection in the lesser sac. No other organ injury was apparent. Serum lipase was 1540 U/L.

The patient started deteriorating with guarding and distension. He began developing hypotension and needed inotropic support (dopamine injection). Hence, exploratory laparotomy was performed, and it revealed acute pseudocyst between the lesser sac and the supracolic compartment. There was no apparent vascular/bowel/other solid organ injury. On opening the pseudocyst, there was a necrotic slough on the transected ends of the pancreatic tissue. The pancreatic duct could not be visualised in the proximal segment. Spleen-sparing distal pancreatectomy was per-

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Fig. 1 CT scan of the abdomen: Showing pancreatic transection

formed. Approximation of the proximal pancreatic capsule with intermittent 4–0 prolene sutures was carried out, with jejunal serosal patch sutured over the cut surface. Subhepatic and pancreatic bed drainage was done.

Fig. 2 Operative photograph: Pseudocyst opened, revealing necrotic slough on the transected ends

Postoperatively, the patient was started on octreotide injection and higher antibiotics. Oral feeding was resumed on the fifth post-op day. The patient recovered uneventfully. (Figs. 1 and 2)