

Case Report

Excision of a giant pseudo-pancreatic cyst masquerading as ascites in young patient: a case report

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ABSTRACT

Pancreatic pseudocysts are diagnosed more frequently due to increased usage of imaging techniques. A pseudocyst with diameter of 10 cm is defined as giant cyst. Larger and symptomatic pseudocysts require intervention while cysts upto 6 cm can be managed conservatively. A 16 year old young patient presented with abdominal pain, progressive abdominal distension, and breathlessness for 15 days. On examination, patient had tense distended abdomen with gross ascites. His vitals showed tachycardia, hypotension and tachypnea. After resuscitation, ultrasound showed gross ascites with moving echoes and contrast-enhanced computed tomography (CECT) abdomen showed similar findings. Patient underwent multiple therapeutic tapping of ascitic fluid but no significant improvement. Diagnostic laparoscopy showed giant pseudo pancreatic cyst extending from diaphragm to the pelvis with necrotic material. Patient underwent exploratory laparotomy, drainage of necrotic material with excision of giant pseudocyst and roux-en-y pancreaticojejunostomy. Post operatively patient had an uneventful recovery. Giant pancreatic pseudocysts are unusual and early management is required. Some experts considered external drainage is safer than cystogastrostomy. We suggest early diagnosis and surgical excision is feasible for a giant pancreatic pseudocyst. However, endoscopic drainage can be considered in some instances.

Keywords: Giant pancreatic pseudocyst, Ascites, Pancreaticojejunostomy

INTRODUCTION

Pancreatic cysts are being diagnosed due to increased imaging modalities. Pancreatic pseudocysts contribute around 15-30% of these cysts.¹ A pseudocyst with major diameter of 10 cm is termed as giant cyst.^{2,3} Very few cases of giant cyst were seen nowadays due to modern diagnostic and therapeutic methods. We report a case of giant pancreatic pseudocyst masquerading as gross ascites in a young patient.

CASE REPORT

A 16 year old young patient presented to emergency department with abdominal pain, progressive abdominal distension, and breathlessness for 15 days. No history of

fever, vomiting or altered bowel habits. On examination, patient had tense distended abdomen with gross ascites. His vitals showed tachycardia, hypotension and tachypnea. Patient was transferred to medicine department after initial resuscitation (Figure 1).

Investigations revealed borderline elevation of amylase levels and low albumin. Ultrasound showed gross ascites with moving echoes, coarse echogenic liver. Chest x-ray revealed bilateral minimal pleural effusion. Contrast enhanced computed tomography (CT) abdomen showed gross ascites with homogenous fluid. No evidence of hemorrhage was seen. Pancreas appeared as a thin line without calcifications or necrosis. No evidence of para aortic or pelvic lymphadenopathy seen. Rest of the findings were normal.

Patient underwent therapeutic tapping of ascitic fluid but no significant improvement even after several times. Diagnostic laparoscopy showed giant pseudo pancreatic cyst extending from diaphragm to the pelvis with necrotic material. Patient underwent exploratory laparotomy, drainage of necrotic material with excision of giant pseudocyst (35×15×14 cm) and roux-en-y pancreaticojejunostomy. Intraoperatively, giant pseudocyst extending from diaphragm up to the pelvis with 5 litres (L) of infected fluid was present (Figure 2). Multiple adhesions between the bowel and cyst wall were noted. Adhesiolysis was done after drainage of necrotic fluid material (Figure 3). Cyst wall was excised in toto from the pancreatic capsule and sent for histopathological examination (Figure 4). After thorough lavage, a conventional roux-en-y pancreaticojejunostomy was performed using 2-0, 3-0 vicryl (Figure 5). Patient was hemodynamically stable throughout the procedure. Drains were placed near the anastomotic site and pelvis. Post operatively patient had an uneventful recovery. Follow up period showed no evidence of recurrence.



Figure 1: Lateral view of the 16 year old young patient with distended abdomen in the emergency department.

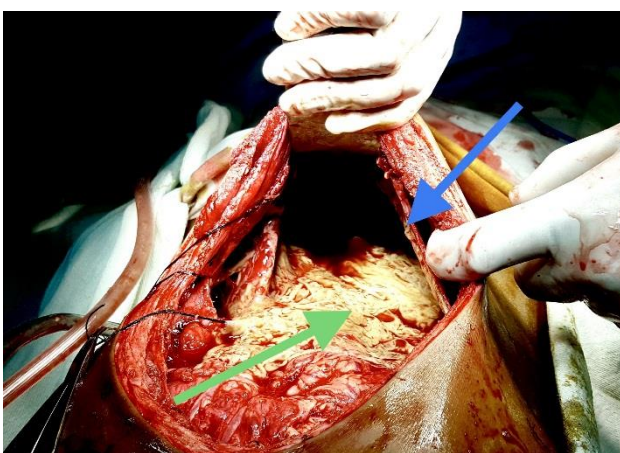


Figure 2: Intra operative picture showing giant pseudocyst wall (blue arrow), infected necrotic material (green arrow).

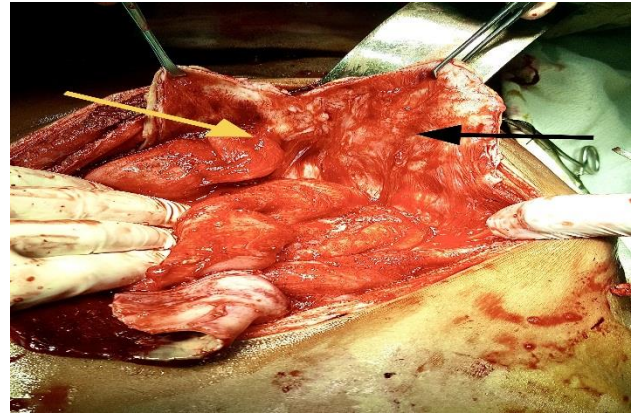


Figure 3: Intra operative picture showing adhesions between bowel wall (yellow arrow) and pseudocyst wall (black arrow).



Figure 4: Excised giant cyst wall for histopathological examination.

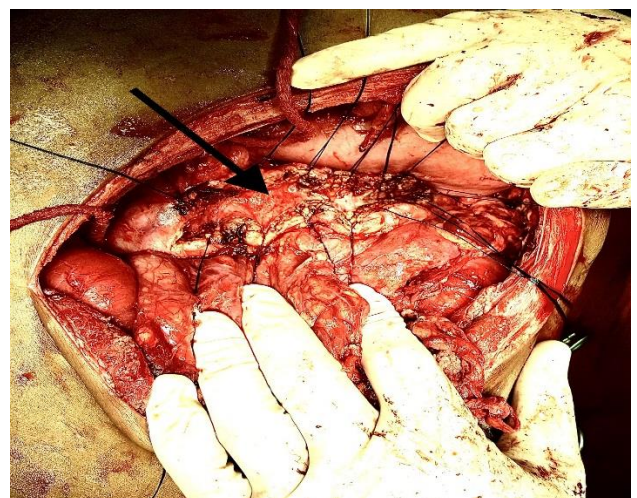


Figure 5: Intra operative picture showing exposed main pancreatic duct for anastomosis (black arrow).

DISCUSSION

Giant pseudo-pancreatic cysts have been reported in very few studies. Bozeman (1882) reported a huge pseudo-pancreatic cyst about 10 kg followed by a giant cyst containing 6 L of fluid.^{4,5} A study from Pakistan reported 25×17 cm sized pseudocyst and another one with the diameter of 25.7×15.3×10.9 cm containing 3 L of fluid.^{6,7} We report a case of much larger pseudocyst measuring 35×15×14 cm in size occupying the entire abdominal cavity.

Patient can be asymptomatic or symptomatic with abdominal pain, distension, nausea, vomiting or with complications such as hemorrhage, infection, fistula formation and compression of adjacent organs.⁸ Our patient presented with abdominal distension, breathlessness and underwent multiple serial therapeutic tapping of ascitic fluid initially. Common causes of pseudocysts are alcoholic chronic pancreatitis, idiopathic pancreatitis and biliary pancreatitis while patients of acute pancreatitis with high Ranson score were at risk of developing giant pseudo-pancreatic cysts.^{9,10} Being young, our patient had no previous history of pancreatitis or prolonged hospitalization.

The mainstays of treatment are percutaneous drainage, endoscopic drainage and open surgery. Among them, surgical procedures either by internal or external drainage or cyst excision are considered most important for pancreatic pseudocysts.⁶ Surgical excision have been suggested by few studies.^{11,12} However, surgical drainage is contraindicated when pseudocyst is not certain.¹³ In our case, surgical excision of giant cyst with roux-en-y pancreaticojejunostomy was a challenging task due to uncertain diagnosis and nature of the cyst, hemorrhage, multiple adhesions between the cyst and bowel wall, chances of anastomotic leak and post-operative pancreatic fistula.

However, surgery was performed with utmost care and patient showed significant improvement without complications. Follow up period of 2 years was uneventful without any recurrence.

CONCLUSION

Giant pseudo-pancreatic cysts can present as gross ascites with a diagnostic dilemma. Surgical excision with pancreaticojejunostomy is feasible and could be achieved even in a huge pancreatic cyst.

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