DOUBLE BYPASS IN A PATIENT WITH PANCREATIC PSEUDOCYST COMPLICATED WITH OBSTRUCTIVE JAUNDICE AND DUODENAL STENOSIS

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Keywords: *pancreatic pseudocyst, surgery, diagnostic, therapeutic strategy*

Abstract: *Pancreatic pseudocysts are a well-known complication of acute or chronic pancreatitis, with a higher incidence in the latter. There are different therapeutic strategies: endoscopic transpapillary or transmural drainage, percutaneous catheter drainage, laparoscopic or open surgery. We present a 47-year old patient presented with progressive dysphagia, abdominal pain, early satiety, and nausea during the previous 3 months. In the last month jaundice occurred. Presence of pancreatic pseudocyst in the head of the pancreas of 62 mm was demonstrated by computed tomography. Jaundice caused by the pseudocyst in which compressed the distal common bile duct is presented. A precolic Roux-en Y cystojejunostomy was performed. The same jejunal limb was used for the choledocojejunostomy.*

INTRODUCTION

Pancreatic pseudocysts belong to a large and heterogeneous group of cystic pancreatic lesions and represent a complication of acute or chronic pancreatitis. Due to progress in sensitivity and more widespread availability of diagnostic imaging techniques, the incidence of pancreatic pseudocysts seems to be increasing steadily. The development of new interventional options for the diagnosis and treatment of pancreatic pseudocysts allows for different approaches to the disease.(1)

D'Egidio and Shein developed pancreatic pseudocyst following classification:

- Type I - acute postnecrotic - occurs after an episode of acute pancreatitis and rarely communicate with Wirsung channel (which is morphologically normal). Its location is usually extrapancreatic; wall can be matured or not.
- Type II - post necrotic - occurs after a recurrent chronic pancreatitis and communicates frequently with Wirsung channel (which shows lesions but is not stenosing). Localisation it is extrapancreatic.
- Type III - retention - occurs in patients with chronic pancreatitis and communicates constantly with Wirsung channel (which is stenosed, with strictures). Localization is intrapancreatic and the wall is matured.(2)

CASE REPORT

We present a 47-year old patient presented with progressive dysphagia, abdominal pain, early satiety, and nausea during the previous 3 months. Meanwhile the patient was complaining of intermittent post prandial vomiting and jaundice. Presence of pancreatic pseudocysts of 62 mm in the head of pancreas was demonstrated by computed tomography and multiple cysts till 1.0 cm displayed in the whole area of the pancreas with dilated Wirsung. Intra and extrahepatic cholestasis with dilated choledoc 1,6 cm, was demonstrated on computed tomography On admission, hemoglobin was 13.5 g/dl, total bilirubin 5.2 mg/dl with 4,3mg/dl direct bilirubin, alkaline phosphatase 279 units/liter, TGO- 211 U/l,TGP-165U/l, gama GT-406U/l and amylase 218 units/liter.

Figure no. 1. Abdominal CT: a round well contoured tumour in the pancreatic head, with compressive effect on duodenal wall

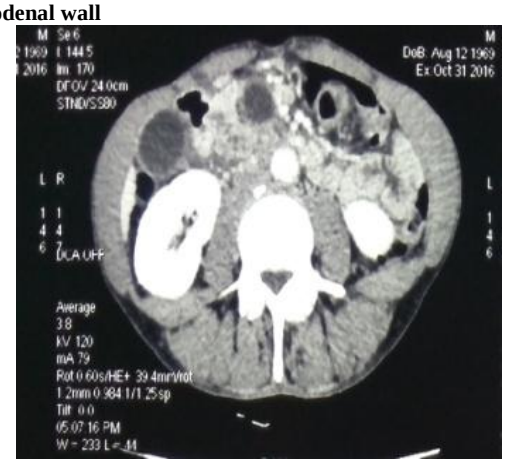
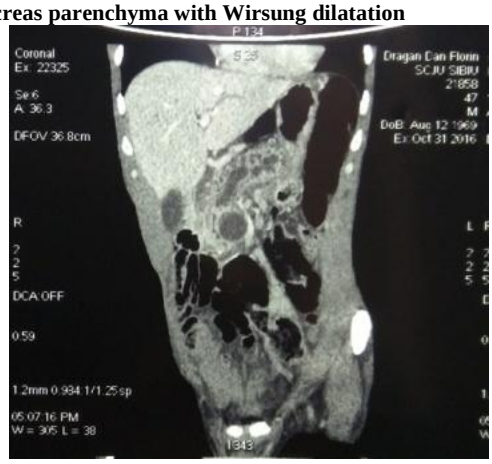


Figure no. 2. Abdominal CT: coronal view- multiple cysts on pancreas parenchyma with Wirsung dilatation



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Article received on 12.03.2017 and accepted for publication on 30.05.2017
ACTA MEDICA TRANSILVANICA June 2017;22(2):46-47

The preoperative elevations of serum alkaline phosphatase and serum bilirubin levels returned to normal limits after operative decompression of the pseudocyst. The surgical approach was a median supraumbilical incision. First, the cystic content is punctured then it is completed by an incision of 4 cm.

Figure no. 3 Intraoperative aspect of the pseudocyst

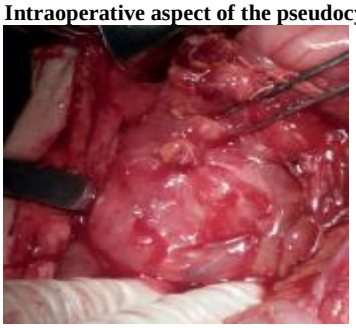
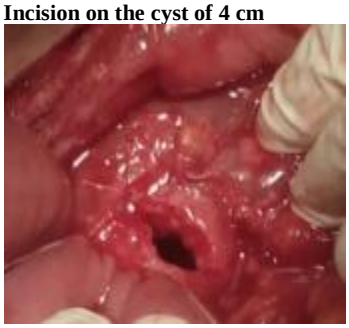
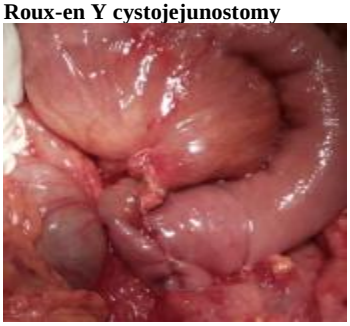


Figure no. 4 Incision on the cyst of 4 cm



A precolic Roux-en Y cystojejunostomy was performed and the cyst wall confirmed to be thick and firm enough to hold sutures. The choledoc was dilated 1.5 cm. The same jejunal limb was used for the choledocojejunostomy.

Figure no. 5 Roux-en Y cystojejunostomy



In the postoperative course, the patient developed a biliary fistula with low output, which closed under conservative therapy 10 days after the operation. Pathology of the cyst wall revealed the lack of an epithelial lining and fibrosis. 3 lymph nodes proved to be inflammatory response.

DISCUSSIONS

The aetiology of the pancreatic pseudocyst is directly associated with the cause of the pancreatitis; the consumption of alcohol is the cause in 65% of cases, followed by vesicular lithiasis in 15%. Due to improved imaging techniques, the current prevalence is 10-20% in patients after acute pancreatitis and 20-40% in patients with chronic pancreatitis.(3)

The prevalence of pseudocysts is higher in males, between the fourth and fifth decades of life,1,3,4 and both of these results are compatible with our study. Diagnosis is made based on clinical, biochemical and radiological findings. The clinical presentation is variable, from asymptomatic patients to symptoms of abdominal emergency due to complications.

The predominant symptoms reported in the literature are abdominal pain, which presents in up to 90% of patients, early satiety, nausea and vomiting (50-70%), weight loss (20-50%), jaundice (10%) and fever (10%). On physical examination, only 25-50% presented a palpable abdominal mass.(4)

According to Warshaw and Rattner, a pseudocyst is unlikely to resolve spontaneously if: a)it persists for more than 6 weeks, b) chronic pancreatitis is evident, c) there is a pancreatic duct anomaly(except for a communication with the pseudocyst) or d) the pseudocyst is surrounded by a thick wall.(5) Studying 92 patients with chronic alcoholic pancreatitis, Gouyon and co-workers reported a spontaneous regression rate of 25,7%. However, pseudocyst>4cm and those localized extrapancreatically were found to represent predictive factors for persistent symptoms and/or complications.(6)

At present management includes percutaneous, endo-scopic or surgical drainage, each of which has its different advantages and disadvantages. The treatment of choice in our case was surgery. This is still considered the gold standard, and is divided between internal, external drainage and resection. Internal drainage can be performed by communication between the pseudocyst and the stomach (cystogastroanastomosis), jejunum (cystojejunoanastomosis) or duodenum (cystoduodenoanastomosis). The choice of any of these techniques will depend on the location of the pseudocyst, the adjacent structures and surgeon's preference. If resection is chosen, this will depend on the location of the pseudocyst, and a distal pancreatectomy or even pancreaticoduodenectomy can be performed. In our case we performed a double by pass with cystojejunoanastomosis and choledocojejunoanastomosis with the same Roux en Y jejunal limb.

CONCLUSIONS

Establishing the best diagnostic and therapeutic strategy in pancreatic pseudocyst depends on cyst topography and subsequently the type of surgery needed; patient's terrain, clinical sufferings, cyst diameter play also a major role.

An efficient method of surgical approach of complicated pancreatic pseudocyst with duodenal stenosis and obstructive jaundice is double by-pass with cystojejunoanastomosis and choledocojejunoanastomosis with the same Roux en Y jejunal limb.

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