IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)
e-ISSN: 2279-0853, p-ISSN: 2279-0861.Volume 22, Issue 10 Ser.7 (October. 2023), PP 52-56
www.iosrjournals.org

A Giant Pseudocyst Of The Pancreas : A Case Report.

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Abstract:
Pancreatic pseudocysts are complications of acute or chronic pancreatitis. The size and duration of a pancreatic pseudocyst are not reliable predictors for its potential resolution or complications. Nevertheless, larger cysts tend to be more symptomatic or prone to complications than smaller ones. The primary indications for invasive drainage procedures are persistent patient symptoms and the presence of complications, such as infection, gastric outlet or biliary obstruction, and bleeding. We present case of a 59-year-old female with a large pancreatic pseudocyst wich was not accessible to endoscopic draining.

Keywords *: Pseudocyst , Retropancreatic , Endoscopic ultrasound*

Date of Submission: 17-10-2023 Date of Acceptance: 27-10-2023

I. Introduction:

Pancreatic pseudocysts can occur in both acute and chronic pancreatitis cases, and they may also develop as a result of pancreatic trauma or after pancreatic surgery. The incidence of pancreatic pseudocysts has been on the rise due to the increasing rates of pancreatitis and advancements in radiological techniques, which have led to more accurate diagnoses [1, 2].

These pseudocysts can vary in their presentation, occurring as either single or multiple cysts with a diverse range of clinical manifestations. When a pseudocyst reaches a longest diameter of 10 cm, it is referred to as a giant pseudocyst [3]. However, due to the availability of modern treatment options, giant pseudocysts are becoming increasingly infrequent.

We report a case of a giant pancreatic pseudocyst and we underline the main characteristics of this condition

II. Case presentation:

We present a case of 59-year-old woman with no previous pathological history, who had been suffering from intermittent hepatic colic and steatorrhea for 1 year, and had lost 18 kg of weight.

Clinical examination was normal. Biological tests showed no cytolysis or cholestasis. Blood glucose, lipasemia and CA 19-9 were normal.

An abdominal CT scan showed significant dilatation of the intrahepatic bile ducts, main bile duct and wirsung duct upstream of a lesion of the pancreatic head.

An endoscopic ultrasound found highly suggestive signs of chronic pancreatitis, gallbladder with thickened wall and large stones, dilatation of the main bile duct to 10.5 mm and of the wirsung duct to 8.9 mm, without individualization of a tumor mass or pseudocyst. A cytopunction was performed and the anathompathological examination was in favor of chronic pancreatitis. IgG 4 test was negative. Fecal elastase was consistent with exocrine pancreatic insufficiency.

MRI showed an atrophic pancreas and revealed a retropancreatic cystic formation, in T1 hyposignal, T2 frank hypersignal, without diffusion restriction, with enhanced wall after injection of Gadolinium, without partitions or fleshy bud, measuring:61x100x66mm.

responsible for extrinsic compression of the common bile duct, with dilatation of the upstream bile ducts and multilithiasis gallbladder .

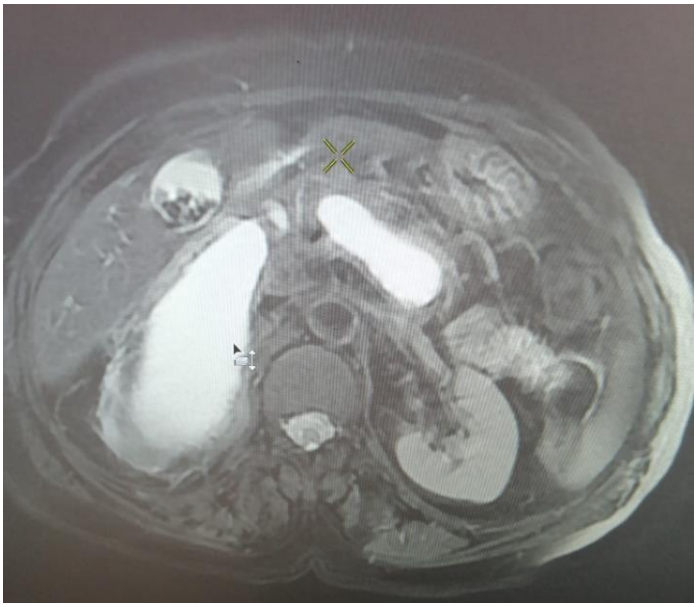

Figure 1 : MRI showing a retropancreatic cystic formation

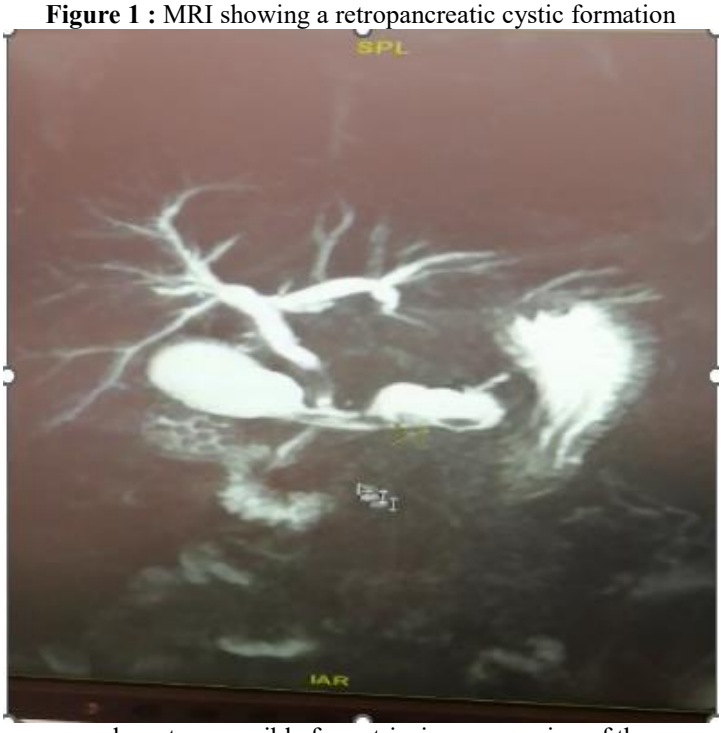

Figure 2 : Large pseudocyst responsible for extrinsic compression of the common bile duct

After 4 months, the patient was asymptomatic , a second MRI showed a clear increase in the size of the retropancreatic pseudocyst 127x 68 x 79mm.

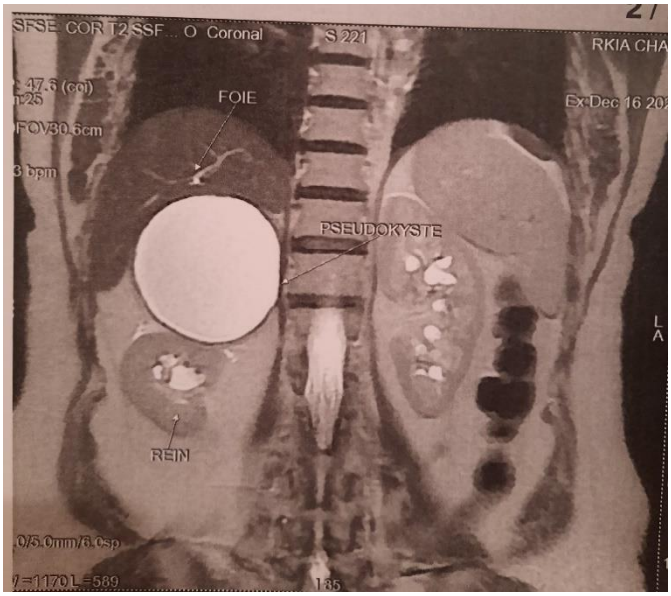

Figure 3: increased size of pseudocyst

A second endoscopic ultrasound was redone, showed an aspect of chronic pancreatitis without visualization of pseudocyst or tumor image.

In view of the inaccessible location for endoscopic drainage, the patient underwent surgical drainage with double bilio-jejunal shunt and cysto-jejunal shunt on Y loop , and cholecystectomy.

The evolution was favourable with disappearance of pain and steatorrhea.

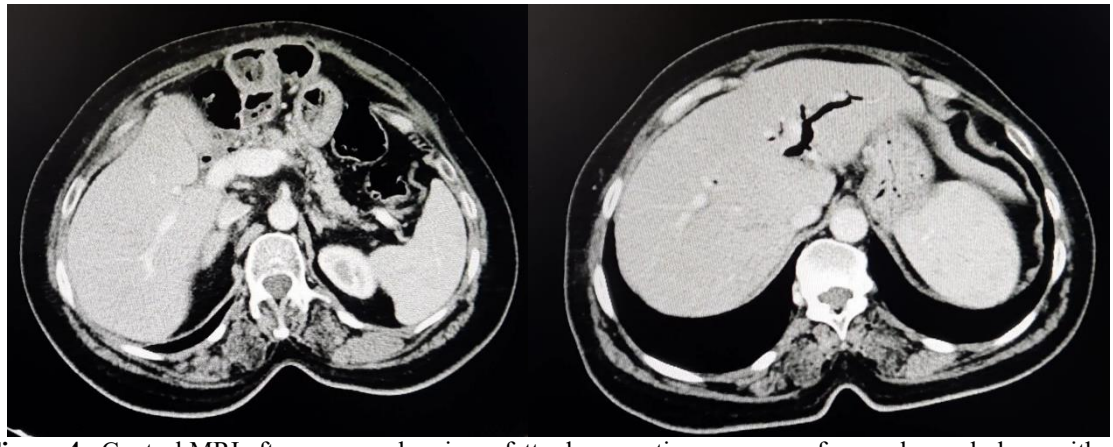

Figure 4 : Control MRI after surgery showing a fatty degenerating pancreas of normal morphology with no scannodecelar lesion.

III. Discussion :

Pancreatic pseudocyst typically arises as a complication of pancreatitis and can be triggered by various underlying causes, such as alcoholism, biliary stones, trauma, or even idiopathic reasons [4]. Chronic pancreatitis related to alcohol abuse is likely responsible for the highest incidence of pancreatic pseudocysts.

The updated ATLANTA classification in 2012 [5] provides a more precise distinction between the various collections that can occur as complications of acute pancreatitis. Post-acute pancreatitis pseudocysts are characterized by the 4-week evolution of an acute peripancreatic fluid collection. On the other hand, acute necrotic collections develop in cases of necrotizing pancreatitis before the 4-week mark, and they may continue to evolve after 4 weeks if they become encapsulated within an area of circumscribed pancreatic necrosis, which is referred to as Walled-Off Necrosis (WON).

The majority of pancreatic cysts, over 70%, are asymptomatic when first detected. However, when they do cause symptoms, patients may experience abdominal or back pain, unexplained weight loss, jaundice, steatorrhea (excessive fat in the stool), or a palpable mass [6]. The most common manifestations of symptomatic pancreatic pseudocysts include duodenal or biliary obstruction, vascular occlusion, fistula formation, or erosion of an adjacent vessel leading to the development of pseudo-anevrysms [7].

Although pancreatic pseudocyst does not lead to malignancies as frequently as other types of pancreatic lesion, there is a specific group of tumors with malignant potential that can occur in the pancreas. These tumors include serous cystadenomas (SCAs), mucinous cystic neoplasms (MCNs), and intraductal papillary mucinous neoplasms (IPMNs) [8].

Distinguishing pancreatic pseudocysts from these potentially malignant lesions is of utmost importance in the diagnostic process. Evaluation of enzymatic and tumor markers from the cystic fluid obtained through fine-needle aspiration (FNA) is a valuable method to aid in accurate differentiation [9,10].

MRI and magnetic resonance cholangiopancreatography are the most sensitive and accurate diagnostic tools for pancreatic pseudocyst. MRI is also sensitive in detecting bleeding and complex fluid collections [11].

Another imaging technique used is endoscopic US (EUS); this technique provides high-quality images due to the close proximity of the transducer and area of interest, providing a sensitivity range of 93-100% and a specificity range of 92-98% for the distinction of pancreatic pseudocyst, making it a better technique than CTscan and Ultrasound (US) [12]. EUS is never used alone to diagnose pseudocyst, and it is mostly used as a secondary test to further evaluate pancreatic cysts detected by other modalities (US, CT or MRI). EUS may also be used to guide ED therapy and FNA to evaluate cyst fluid [13].

Intervention for pancreatic pseudocyst is indicated in those patients who present with symptoms such as nausea, vomiting, early satiety, pain, and upper gastrointestinal bleeding. Intervention is also indicated in case of complicated pancreatic pseudocysts (one criterion sufficient) such as gastric or duodenal obstruction, compression of large vessels, stenosis of the common bile duct due to compression, infected pancreatic pseudocysts, hemorrhage into the pseudocyst, or pancreaticopleural fistula. In addition, intervention is indicated in those patients who may be asymptomatic but with a pseudocysts size greater than 5 cm, with the size and morphology remaining unchanged for at least six weeks [2,14-16].

In the case of an accessible pseudocyst, an endoscopic ultrasound guided transmural drainage is the gold standard modality of treatment because of its comparable efficacy, lower morbidity and lower cost than other techniques.

Surgical drainage is achieved via one of the following three options: cystoduodenostomy, cystojejunostomy or cystogastrostomy .

Cystojejunostomy is the option of choice when the pseudocyst is very large and extends beyond the epigastric region to the umbilical, hypochondriac and lumbar region [17]. This procedure allows for dependent drainage, and is the anastomosis of choice for giant pseudocysts . this was the case for our patient.

IV. Conclusion :

Pancreatic pseudocyst is a significant consequence of pancreatitis, and its occurrence is quite common, with an incidence ranging from 5% to 40% in cases of chronic pancreatitis. It is associated with potentially serious complications. The most prevalent treatment for symptomatic pancreatic pseudocysts is endoscopic drainage, which is considered the gold standard. However, in certain cases, surgical management may become necessary to address the condition effectively. The choice of treatment approach depends on the specific characteristics of the pseudocyst, its size, location, and the presence of any associated complications. In our patient, due to the size and retropancreatic location of the pseudo-cyst , not available for an endoscopic intervention, we opted for a pancreatico-jejunal shunt, with a successful outcome.

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