



PSUEDOPANCREATIC CYST INVASION INTO PSOAS MUSCLE: CASE REPORT OF UNUSUAL LOCATION OF PSEUDO- PANCREATIC CYST

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KEYWORDS :

CLINICAL HISTORY

A 53 year old female patient presented in emergency with heaviness and pain in left hypogastrium and lumbar region. On detailed history, patient revealed getting admitted for acute abdomen approximately 3 months back where she was diagnosed with gall stone induced pancreatitis. She was managed conservatively.

Presently the patient complained of vague heaviness in left hypogastrium and lumbar region.

On examination, there was tenderness in left hypogastrium radiating to left lumbar region. Total leucocyte count was normal. Serum amylase and lipase levels were within normal limits. A clinical diagnosis of left renal calculus was made and patient was sent for imaging.

On initial sonogram, a lobulated cystic lesion measuring approximately 8 x 5 cm was found in retroperitoneum with its superior pole reaching the splenic hilum, inferior pole reaching the left renal hilum and medially the lesion was found displacing/extending to proximal left psoas muscle. The lesion was causing grade II hydro-ureteronephrosis. The fluid within this lesion was clear with no debris. Wall thickness measured about 4 to 5 mm with no wall calcification/mural nodules.

Additionally, there was a solitary gall stone. Since bowel preparation was poor, pancreas couldn't be visualized on sonogram. So a provisional diagnosis of retroperitoneal cyst was made on sonogram and CT/MRI was advised.

CT scan (Fig 1) revealed atrophic pancreas with dilated main pancreatic duct in tail region and a pancreatic pseudocyst in tail which was extending inferiorly and invading proximal left psoas muscle, at this level the cyst was also seen externally compressing left upper ureter with consequent mild backpressure changes in left kidney. No features of acute pancreatitis or any other complications of pancreatitis were seen.

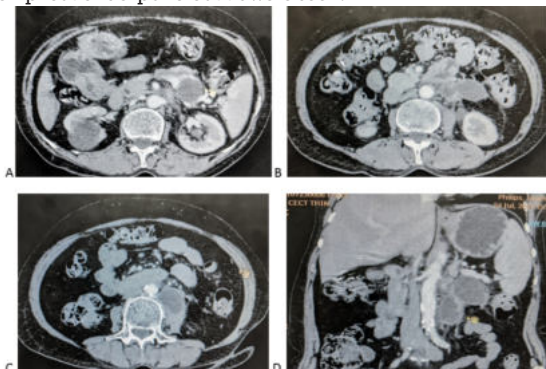


Figure 1 (CECT abdomen selected axial and coronal sections) A shows atrophic pancreas with dilated MPD and a cystic lesion in tail of pancreas which in further images (B,C,D,E) can be seen invading left psoas muscle

MRI (Fig 2 and 3) was advised to check status of hepato-biliary system and main pancreatic duct, in order to plan further management. MR confirmed the CT findings. Moreover, a solitary gall stone was noted with normal intra and extra-hepatic biliary tree. There were no calculi in main pancreatic duct and the duct was seen reaching upto the pseudocyst wall, however definite communication couldn't be established.

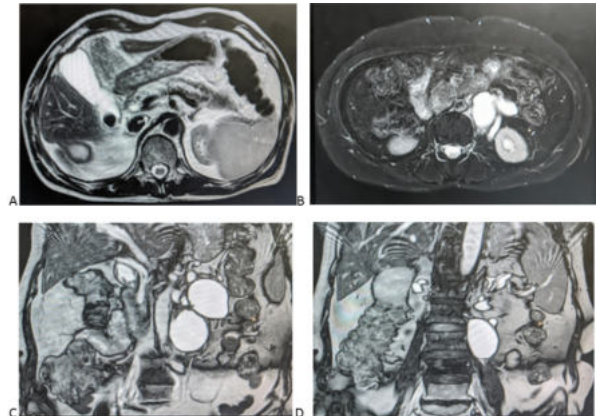


Figure 2

A (selected T2 w non fat sat axial sections): Note atrophic pancreas with dilated MPD and solitary gall bladder calculus

B (selected T2 w fat sat axial sections) demonstrates lobulated cystic lesion in pancreatic tail which can be seen extending and invading left psoas muscle in C and D (selected T2 coronal non fat sat sections)



Figure 3 (3D reformatted MR image) shows a bilobed cystic

lesion causing left sided hydronephrosis

Patient underwent open cholecystectomy with cystectomy. The amylase level in the cystic fluid was 1820 IU/l, Post-operative period was uneventful. She has been asked to follow-up on a regular basis.

DISCUSSION

Pancreatic pseudocysts are fluid collections developing after 4 weeks of pancreatic insult and are enclosed by fibrous pseudowall. They can develop following acute or chronic pancreatitis, pancreatic trauma or pancreatic duct obstruction[1,2]

The estimated prevalence of pancreatic pseudocyst in acute pancreatitis is 5%–16%, while in chronic pancreatitis, it is 30%–40%.[3]The most common location for pancreatic pseudocyst is lesser sac, however extension to unusual locations like liver, spleen, mesentery, retroperitoneum, inguinal region, mediastinum, pleura and lung have been variably reported. On review of literature handful of isolated cases reports were found reporting retroperitoneal extension of pseudopancreatic cyst to psoas muscle.[3,4,5,7,8,9,10]

The lesion there can cause local mass effect, as in our case the lesion was externally compressing left upper ureter with consequent backpressure changes in left kidney.

Since initial sonogram of abdomen was masqueraded, it is worth discussing differential causes of retroperitoneal cystic masses in our discussion. The common non-neoplastic retroperitoneal cystic masses are pancreatic pseudocyst, non-pancreatic pseudocyst, lymphocele, urinoma and hematoma. And common neoplastic causes are cystic lymphangioma, cystic teratoma, mucinous cystadenoma, cystic mesothelioma, mullerian cyst, tailgut cyst, epidermoid cyst, tailgut cyst, perianal mucinous carcinoma, pseudomyxoma retroperitonei and cystic changes in solid neoplasms [11]

Indications for surgical intervention are presence of symptoms, enlargement of cyst, complications (infection, hemorrhage, rupture, and obstruction), and suspicion of malignancy

The choice of surgical intervention (percutaneous drainage/transendoscopic approach/laparotomy) depends upon locoregional & patient related factors and ofcourse on expertise of radiologist and endoscopist.

Percutaneous catheter drainage is safe and first treatment of choice in poor risk patients, immature cysts/infected cysts.

Contraindications include intracystic hemorrhage and presence of pancreatic ascites. Endoscopic drainage is preferred in uncomplicated mature cysts with better outcomes in smaller pseudocysts and pancreatic head pseudocysts. However due to limited endoscopic expertise, traditional surgical approach is still preferred in many institutes where indicated or when percutaneous drainage fails. Surgical approach is best suited for multiple pseudocysts, giant pseudocysts, presence of other complications related to chronic pancreatitis in addition to pseudocyst, and suspected malignancy [2]

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