

# Research Journal of Pharmaceutical, Biological and Chemical Sciences

## An unusual Presentation of Pseudo Pancreatic Cyst.

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### ABSTRACT

Pancreatic pseudocyst is well-recognized complication of non-traumatic pancreatitis. Pancreatic pseudo cysts, at times, may present at unusual sites, leading to difficulties in clinical diagnosis. We present the case of a young male with three weeks of abdominal pain associated with abdominal distension and vomiting. He was evaluated and was found to have a symptomatic pseudo pancreatic cyst tracking along perinephric space and compressing the left kidney. The genesis of the renal sub capsular cysts due to spread of pancreatic pseudo cyst is relatively rare. The patient was treated symptomatically and cystojejunostomy was performed without any intraoperative or postoperative complications. Patient is now symptomatically better. We present this case in view of its rarity.

Key words: Renal sub capsular cyst, pancreatic pseudo cyst

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**CASE REPORT****History:**

A 33 year old male presented with complaints of continuous pain in the right hypochondrium and flank, which was progressively increasing in nature, radiating to back, unrelated to meals and of twenty days duration. Pain decreased by assuming a knee-chest position. He also had non-bilious vomiting for ten days and loose stools for five days. There was a history of loss of weight and appetite over one month. The patient did not have any urinary complaints. He is a chronic alcoholic for 10 years.

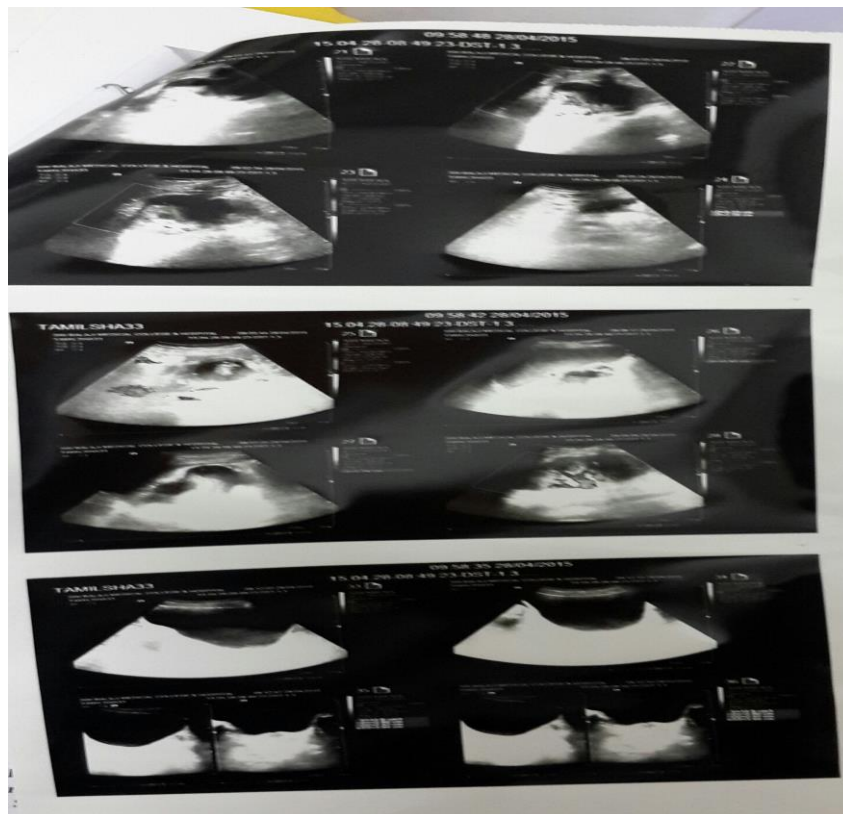
**Examination:**

He was thin built and poorly nourished. Vitals were stable. Per abdomen examination revealed an intra-abdominal, firm, non-tender swelling in the left hypochondrium about 5\*5 cm. It moved minimally with respiration, was bimanually palpable and dull on percussion. A provisional diagnosis of a left renal mass was made.

On investigation, haemogram showed low haemoglobin (10.5 g/dl) with elevated ESR (65 mm/hr) and reduced RBC (4.02 million cells/ cu.mm) count and reduced PCV (31.2 %) and urinalysis showed protein 2+. Urea was 15 mg/dl, creatinine was 0.7 mg/dl and blood sugar level was 84 mg%. The liver function tests showed total bilirubin of 1.4 mg/dl with direct bilirubin of 0.7 mg/dl. SGPT was 58 IU/L and GGT was 182 IU/L. The serum amylase was 433 IU/L and serum lipase was 234 U/L.

Chest X-Ray PA showed minimal left pleural effusion. Plain erect X ray of the abdomen was normal.

Usg abdomen showed body and tail of pancreas being hypo echoic with collection noted about 4.8\*2.2 cm in lesser sac. Left kidney being enlarged about 12.68 cm with irregular contours with multiple heterogeneous collections of varying sizes noted in sub capsular region of left kidney with largest collection measuring about 5.9\*5.0 cm with particulate matter noted in the lower pole of left kidney and increased renal cortical echoes. Spleen appears enlarged about 12.8 cm with minimal ascites. Fig.1,2



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April 28, 2015

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**ULTRASOUND ABDOMEN REPORT**

**Liver:**  
Liver shows increased parenchymal echoes and measures 13.4 cm.  
No focal lesion noted.  
No intrahepatic biliary radicles dilatation.

**Gallbladder:**  
Gall bladder appears normal.  
No calculus / internal echoes seen .  
Gall bladder wall thickness appears normal.

**Spleen:**  
Spleen appears enlarged and measures 12.8 cm. Splenic vein appears normal.

**Pancreas:**  
Pancreas appears normal. body and tail of pancreas appears enlarged and hypoechoic.  
Collection noted measuring 4.8 x 2.2 cm in the lesser sac.

**KUB:**  
Right Kidney measures 10.1 x 5.0 cm. Appears normal in size and echotexture. No evidence of calculus. Pelvicalyceal system appears normal. Corticomedullary differentiation is maintained.  
Left Kidney appears enlarged and measures ~ 12.1 x 6.6 cm with irregular contours. Multiple heterogenous collections of varying sizes noted in the sub capsular region, largest collection measuring ~5.9 x 5.0 cm with particulate matter noted in the lower pole of left kidney. Increased renal cortical echoes.  
No evidence of calculus. Pelvicalyceal system appears normal.  
Corticomedullary differentiation is maintained.

**Bladder** appears distended and shows layering effect and internal debris within.

**Prostate**  
Appears normal and measures 2.7 x 3.9 x 3.2 cm , vol – 18 ml  
No intravesical extension of prostate seen.  
A thin rim of fluid collection noted in the hepatorenal pouch and in the pelvis.

**IMPRESSION:**

- Multiple heterogenous collections of varying sizes in the sub capsular region of left kidney -Possibilities include :
  - Renal injury/ laceration – Perinephric hematoma.
  - Infective pathology with rupture – Perinephric collection.
- Splenomegaly
- Minimal ascites.
- Suggested CECT abdomen for further evaluation.

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CECT abdomen was done which revealed head of the pancreas appearing atrophic with multiple thick-walled cystic hypo dense lesions of varying sizes with loculations noted in the body and tail of pancreas ,measuring 6\*6 cm collection is seen extending to sub capsular space of left kidney compressing it. The sub capsular collection of kidney measures 6.2\*2.6 cm. another large thick-walled hypo dense collection with areas of necrosis measuring 9.5\*5.96 cm in left hypochondriac region. Collections are also seen tracking along greater and lesser curvature of stomach - Suggestive of a pseudo cyst of the pancreas. Fig.3,4,5,6

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**CECT – WHOLE ABDOMEN**

**Helical CT study of the abdomen done after administration of oral and IV contrast**

Liver and spleen appear normal with no focal parenchymal lesions identified.

Gall bladder distended. No obvious evidence of radiodense calculus. Wall thickness appears normal

Head of the pancreas appears atrophic with multiple thick walled cystic hypodense lesions of varying sizes with loculations noted in body and tail of the pancreas measuring ~ 6.0 x 5.9 cm. The collection is seen extending into the perinephric space/ subcapsular region of the left kidney. The collection is seen compressing the left kidney. The subcapsular collection in the left kidney measures ~ 6.2 x 2.6 cm. Another large thick walled hypodense collection with areas of necrosis measuring ~ 9.5 x 5.6 cm in the left hypochondriac region. Collections also seen tracking along the greater and lesser curvature of stomach,

Right kidney measures ~ 10.4 x 5.1 cm, left kidney measures ~ 10.6 x 5.1 cm.  
Both kidneys show normal excretion of IV contrast.

Adrenal glands appear normal bilaterally.

No evidence of gastric wall thickening / antropyloric region obstruction.

No significant small / large bowel wall thickening / dilatation seen.

Urinary bladder distended and appears normal.

Prostate appears normal.

Minimal mesenteric fat stranding seen.

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Abdominal aorta, IVC, portal vein and the superior mesenteric vessels appear normal. No evidence of thrombus seen.

No evidence of pleural effusion seen.

No significant lymph node enlargement identified.

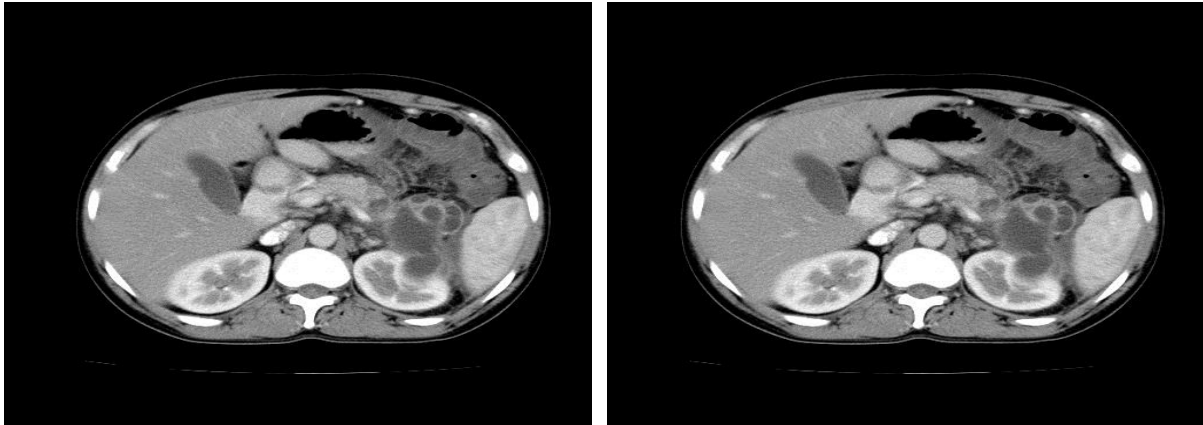
No bony destruction seen.

**IMPRESSION:**

- ❖ Features suggestive of chronic pancreatitis with pseudocysts formation as described above with areas of collection tracking along the perinephric space/ subcapsular region of left kidney; collection with areas of necrosis in the left hypochondrium; areas along the greater and lesser curvature of stomach.
- Possibility Of An Atypical Presentation Of Pancreatic Pseudocyst To Be Considered
- Suggested biochemical / clinical correlation

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Patient was treated symptomatically with supportive medication. Coeliac ganglion block was done by anaesthetist in view of his abdominal pain. Patient was referred to general surgery where cystojejunostomy was done under general anaesthesia. No intraoperative or postoperative complications. Patient is now symptomatically better.

**Case Discussion:-**

Pseudo cysts of the pancreas are extra pancreatic collections of pancreatic fluid containing pancreatic enzymes and a small amount of debris. Pseudo cysts do not have an epithelial lining. The walls consist of necrotic tissue, granulation tissue and fibrous tissue.

Pseudo cysts are preceded by pancreatitis in 90% of cases and by trauma in 10%. Approximately 85% are located in the body or tail of the pancreas and 15% in the head. Some patients have two or more pseudo cysts. Abdominal pain, with or without radiation to the back, is the usual presenting complaint. A palpable, tender mass may be found in the middle or left upper abdomen.

Sonography is reliable in detecting pseudo cysts. CT or MRI complements ultrasonography in the diagnosis of pancreatic pseudo cyst, especially when the pseudo cyst is infected as suggested by the rare finding of gas within the fluid collection.

Pseudo cysts that are more than 5 cm in diameter may persist for more than 6 weeks. A significant number of these pseudo cysts resolve spontaneously in more than 6 weeks after their formation. A large pseudo cyst size is not an absolute indication for interventional therapy and that many peripancreatic fluid collections detected on CT in cases of acute pancreatitis resolve spontaneously.

Rupture of a pancreatic pseudo cyst is a particularly serious complication. In this case, shock almost always supervenes, and mortality rates range from 14% if the rupture is not associated with haemorrhage to more than 60% if haemorrhage has occurred. Rupture and haemorrhage are the prime causes of death from pancreatic pseudo cyst.

A triad of findings—an increase in the size of the mass, a localized bruit over the mass and a sudden decrease in haemoglobin level and haematocrit without obvious external blood loss—should alert one to the possibility of haemorrhage from a pseudo cyst. Thus, in patients who are stable and free of complications and in whom serial ultrasound studies show that the pseudo cyst is shrinking, conservative therapy is indicated. Conversely, if the pseudo cyst is expanding and is complicated by severe pain, haemorrhage, or abscess, the patient should be operated on. Chronic pseudo cysts can be treated safely and drainage can be accomplished by endoscopic, radiologic, or surgical means.

Ranschoff [1] described the first case of a pancreatic pseudo cyst presenting with haematuria. Later on, a few odd reports were published on pancreatic Pseudo cysts [2], [3], [4], [5]. Due to the close proximity of the pancreatic tail with the left renal hilum, pancreatic pseudo cysts in this area and the left renal masses have been confused clinically.

After Ranschoff [1] drew the attention towards the existence of such a confusing picture, many clinical situations were described by various authors. Stone [6] described a case where even on abdominal exploration, the two conditions could not be distinguished and unnecessary left nephrectomy was performed for a case of pancreatic pseudo cyst. Baker et al [7] discussed the diagnostic problems in such a situation and suggested needle aspiration, sonography, CAT scan and radiography as a multimodality approach to accurate diagnosis. By virtue of its close relationship with the perirenal fascia of Gerota, pancreatic lesions can extend into that structure and produce signs, symptoms and investigational evidence of renal disease.

Inflammatory process of the tail of pancreas can give rise to inflammation of the pelvis of the left kidney and may lead to frank or microscopic haematuria. They can also cause renal colic and signs and symptoms of upper urinary tract infection [1]. The case described here are remarkable that it did not give rise to any symptoms referable to the genito-urinary system. However, many renal diseases are known to give rise to gastro-intestinal symptoms by virtue of reno-intestinal reflexes [4].

Abdominal examination usually fails to differentiate between masses of pancreatic and renal origin, particularly if the former extends into the renal angle as happened in our patient. Ballotment and bimanual palpation, the classical signs of renal masses, were present in our case with pancreatic pseudo cysts. Plain skiagram of abdomen was also of little diagnostic help in our case. I.V.P. may show distorted upper pole, displacement of the kidney or ureter or filling defects simulating malignancy [2].

Coeliac angiogram may be of help as is the CAT scan in finding out the organ of origin. A simple, diagnostic, fine needle aspiration of the mass may also be of great help. A raised fluid amylase value almost confirms the diagnosis of a mass to be a pseudo cyst. Baker et al [7] have also emphasized the importance of fine needle aspiration and estimation of its amylase content. There have been some recent notable cases like this [8] [9] [10] [11].

### CONCLUSION

In conclusion, Pancreatic pseudo cysts may present at unusual sites. The genesis of the renal sub capsular cysts due to spread of pancreatic pseudo cyst is relatively rare. In patients presenting with swelling in the abdomen with or without history of acute/ chronic pain abdomen and alcohol intake, pancreatic etiology should be included in the differential diagnosis.

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