## **Case Report**

# **Lumbar Mass: A Rare Presentation of Pancreatic Pseudocyst**

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#### **ABSTRACT**

**Introduction:** Due to the destructive nature of pancreatic enzymes, a pseudocyst can extend into abdomen, mediastinum more commonly and intrahepatic parts, intercostal space, lumbar region rarely. In literature, only 5-6 case reports of this rare presentation, Pancreatic psudocysts presenting as lumbar mass have been reported.

Case: A forty-five years old gentleman, known chronic alcoholic, presented with a painful swelling over left flank region for 8 days. On examination, A cystic swelling of approximately size 10x8 cm was present over left lumbar region, having no local rise of temperature, cystic in consistency, fluctuant and non-tender. USG (A+P) was suggestive of cystic swelling with purulent collection differential diagnosis being? Infected pancreatic pseudocyst or? infected urinoma. CECT A +P was s/o subacute focal pancreatitis involving tail region with infected multiloculated pseudocyst involving left anterior pararenal, posterior pararenal, perinephric spaces, posterior paraspinal muscles and left kidney. This case was managed by external drainage using USG guided percutaneous Pigtail catheter insertion

**Discussion:** Pancreatic pseudocyst must be differentiated from other cystic retroperitoneal swellings. Ultrasound (USG) is initial diagnostic tool with sensitivity rates for USG in the detection of pancreatic pseudocysts are from 75% to 90%. But, Computerized tomography (CT) is often the imaging method of choice, with 82% to 100% sensitivity and 98% specificity.

**Conclusion:** A differential diagnosis of pancreatic pseudocyst should be considered especially in known chronic alcoholic patients and known patients with previous history of pancreatitis. Percutaneous drainage procedures with pigtail catheter insertion, less invasive than internal drainage with laparotomy or other interventional procedures, hence reduces morbidity due to easy accessibility.

**Key words:** Case, lumbar mass, Pancreatic pseudocyst.

## Introduction

The prevalence of pancreatic pseudocyst in acute pancreatitis is 5% - 16%, while in chronic pancreatitis it is 30% - 40%.[1],[2] Due to the destructive nature of pancreatic enzymes, a pseudocyst can extend into abdomen, mediastinum more commonly and intrahepatic parts,

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intercostal space, lumbar region rarely. Here a case of infected pseudocyst presented as painful swelling in lumbar region, which was managed by percutaneous USG guided pigtail catheter insertion and drainage. As lumbar mass presentation of pseudocyst is very rare and if not investigated thoroughly can be mistaken for urinoma, malignant renal mass, cystic swellings from abdomen. Upto fifty percent of patients with pancreatic pseudocyst develop symptoms. A pseudocyst can extend into abdomen, mediastinum more commonly and intrahepatic parts, intercostal space, lumbar region rarely. Presenting ay lumbar region, pancreatic pseudocysts difficult to distinguish from those of renal origin.[3] In literature, only 5-6 case reports of this rare presentation, Pancreatic psudocysts presenting as lumbar mass have been reported.

#### **CASE REPORT**

A forty-five years old gentleman, known chronic alcoholic, presented with a painful swelling over left flank region for 8 days. The pain was insidious in onset, gradually increased in intensity and was dull, aching in nature associated with intermittent episodes of fever. On examination, A cystic swelling of approximately size 10x8 cm was present over left lumbar region, having no local rise of temperature, cystic in consistency, fluctuant and non-tender.

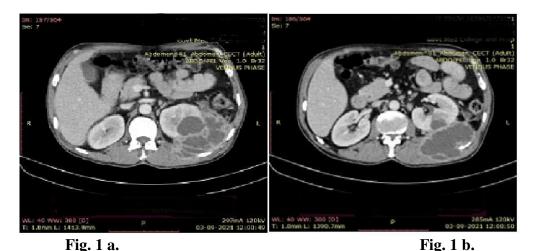


Fig. 1 - CT Scan images of patient showing extent of pseudocyst – Axial view

USG (A+P) was suggestive of cystic swelling with purulent collection differential diagnosis being? Infected pancreatic pseudocyst or? infected urinoma. Serum amylase (151.2IU/L) and lipase (261.4 IU/L) were raised. CECT A +P was s/o subacute focal pancreatitis involving tail region with infected multiloculated pseudocyst involving left anterior pararenal, posterior pararenal, perinephric spaces, posterior paraspinal muscles and left kidney. Operative management discussed with two options available, i) Internal drainage or ii) external drainage. As the collection was easily accessible (Fig.1 & Fig.2), It was decided to manage this case by external drainage using USG guided percutaneous Pigtail catheter insertion. There was 700ml purulent output, for initial 3-4 days. Pus culture and sensitivity was s/o Acinetobacter Baumannii sensitive to piperacillin/tazobactam, which was continued. Then over the 10 days output from drain decreased and gradually nature of the drain output changed from purulent to seropurulent to serous. After 10 days, Review USG was s/o No residual collection (Fig. 3) noted thus Pigtail removed. On Follow up patient was not having recurrence, asymptomatic without any complication.



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Fig. 2 a Fig. 2 b
Fig 2 - CT Scan images of patient showing extent of pseudocyst – a

Fig 2 - CT Scan images of patient showing extent of pseudocyst - a) Coronal and b)
Sagittal view

#### **Discussion:**

Due to the destructive nature of pancreatic enzymes, a pseudocyst can extend into abdomen, mediastinum more commonly and intrahepatic parts, intercostal space, lumbar region rarely. As the lumbar triangle is a weakness, due to defect in the lumbar musculature or aponeurosis, these structural defects predispose to transmission of extravasated pancreatic enzymes in the subcutaneous tissue of the flank with resultant pseudocyst formation. Pancreatic pseudocyst must be differentiated from other cystic retroperitoneal swellings including renal cyst, pseudoaneurysms, urinomas, mesenteric cysts, lymphatic collections, echinococcal cysts, massive adrenal cysts, large retroperitoneal collections, pancreatic malignancies. [3]

Ultrasound (USG) is initial diagnostic tool with sensitivity rates for USG in the detection of pancreatic pseudocysts are from 75% to 90%. But, Computerized tomography (CT) is often the imaging method of choice, with 82% to 100% sensitivity and 98% specificity. [4]



Fig. 3

Fig.3 - Ultrasonography picture showing infected pseudocyst with pigtail catheter in situ

Most pseudocysts resolve spontaneously [5] [6] with supportive medical care. Large-sized and long-standing cysts are likely to require surgical intervention. Intervention options are

either endoscopically, radiologically, laparoscopically, or open/direct. [4] [7] Asymptomatic large-sized cyst should be intervened after six weeks while symptomatic and complicated cyst may require intervention before six weeks. Cyst of any size should be intervened once it becomes symptomatic or if complications develop irrespective of duration, size, or site. [9] External drainage can be achieved radiologically by using CT or USG guidance. In this technique, a drainage pigtail catheter is placed percutaneously into the fluid cavity, and the fluid is drained. When the drainage output becomes minimal, the catheter is removed. Percutaneous catheter drainage is contraindicated in those with strictures of the main pancreatic duct and in patients with cysts containing bloody or solid material, in patients who are poorly compliant. [4]

Most of the times, location of pancreatic pseudocyst is posterior abdominal organs or retroperitoneal, thus requires laparotomy or endoscopic Internal drainage. But in rare presentations as in this case, pseudocyst site is accessible easily in lumbar region. Such cases can be managed by external drainage using USG guided or CT guided pigtail catheter insertion and thus avoiding major operative intervention, laparotomy and associated patient morbidity.

Complications of percutaneous drainage includes haematoma, catheter migration, intraperitoneal leak and infection in non-infected cases. [10] However, during follow up, no complications were seen in this patient.

### Conclusion

Pancreatic pseudocyst may rarely present as lumbar mass which may mimic like other more common lumbar swellings such as lumbar hernia, urinoma, renal swellings. A differential diagnosis of pancreatic pseudocyst should be considered especially in known chronic alcoholic patients and known patients with previous history of pancreatitis. Percutaneous drainage procedures with pigtail catheter insertion, less invasive than internal drainage with laparotomy or other interventional procedures, hence reduces morbidity due to easy accessibility.

#### References

- 1. Khaladkar SM, Waghmode AM. Unusual Locations of Pancreatic Pseudocysts in Lumbar Triangle, Psoas Muscle and Intercostal Space, and Obturator Externus. J Clin Imaging Sci 2018; 8:33.
- 2. Cantasdemir M, Kara B, Kantarci F, Mihmanli I, Numan F, Erguney S. Percutaneous drainage for treatment of infected pancreatic pseudocysts. South Med J. 2003 Feb;96(2):136-40.
- 3. Munkelwitz R, Krasnokutsky S, Eugene M, Lie J, Shah SM, Khan SA. Unusual Presentation of a Pancreatic Pseudocyst A Case Report and Review of Literature. International journal of pancreatology: official journal of the International Association of Pancreatology. March 1997; 21(1):91-4.
- 4. Khanna AK, Tiwary SK, Kumar P. Pancreatic Pseudocyst: Therapeutic Dilemma. International Journal of Inflammation; 2012:1-7. Article ID 279476.
- 5. Gedam BS, Dubey S, Sadriwala QS, Gujela A. Pancreatic pseudocysts at unusual sites: A case report. Indian J Case Reports. May Jun 2018.4(3):211-213.
- 6. Christensen NM, Demling R, Mathewson C Jr. Unusual manifestations of pancreatic pseudocysts and their surgical management. Am J Surg. 1975 Aug;130(2):199-205.
- 7. Juneja A, Jhamb R. An unusual clinical presentation of pancreatic pseudocyst. Niger J Surg Sci 2018; 28:42-3.

8. Les I, Córdoba J, Vargas V, Guarner L, Boyé R, Pineda V. Pancreatic pseudocyst located in the liver. Rev Esp Enferm Dig. 2006 Aug;98(8):616-20.

- 9. Udeshika WAE, Herath HMMTB, Dassanayake SUB, Pahalagamage SP, Kulatunga A. A case report of giant pancreatic pseudocyst following acute pancreatitis: experience with endoscopic internal drainage. BMC Res Notes. 2018 Apr 27;11(1):262.
- 10. Saeeda OMA, Casillasb J, Sheikha M. Percutaneous Catheter Drainage of Pancreatic Pseudocysts: Five Years' Experience. Med Principles Pract 2001; 10:89–92.