

## Pseudopancreatic Cyst of Left Lobe of Liver- A Rare Case Report

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### Abstract

Pseudopancreatic cyst of left lobe of liver is an uncommon presentation of pancreatitis. In our case a 24 years old male presented with pain abdomen, vomiting and lump in right hypochondrium and epigastrium. CECT abdomen showed cystic lesion in the liver and suggested hydatid cyst. On exploration cystic lesion was found in left lobe of liver which was evacuated. Fluid was sent for amylase examination which showed 2000 IU/L. Thus diagnosis of pseudopancreatic cyst of left lobe of liver was made. Patient discharged uneventfully.

**Key words-** Pseudo pancreatic cyst, hydatid cyst, amylase

### Introduction

Pseudopancreatic cysts of pancreas has been recognized as a common complication of acute and chronic pancreatitis. Common sites of occurrence are body, tail, head of pancreas, lesser sac, perisplenic area, retroperitoneum, mediastinum and pararenal area. Extrapancreatic pseudocysts are rare constituting about 20% of the total occurring in pleura, mediastinum, pelvis and spleen. Pseudopancreatic cyst of left lobe of liver is rare with few literature available about the same.

Because of pathophysiology of pseudocyst formation by enzymatic destruction, pathology will not be confined to surrounding anatomical spaces in retroperitoneum(1). Intrahepatic pancreatic pseudocysts are common in left lobe of liver. Pathophysiological mechanisms involving left lobe of liver are either extension of pseudocyst in lesser sac through lesser omentum or gastrohepatic ligament towards the liver forming subcapsular collections or tracking through the hepatoduodenal ligament from head to the porta hepatis resulting in parenchymal collection.<sup>1,2</sup>

### Case summary

A 24 year old male presented with the complaints of pain abdomen, vomiting and lump in abdomen since 4 months. At the time of admission the pulse rate was 98/min, B.P. was 102/76 mm of Hg. The vomiting was bilious in nature and sometimes even contained food particles. The patient was an alcoholic with no history of diabetes, tuberculosis or hypertension. A 5x5 cm lump was felt in right hypochondrium and epigastrium, firm in consistency. CECT abdomen showed cystic lesion in the liver and suggested hydatid cyst.

On exploration a cystic lesion was found in left lobe of liver which was evacuated and closed after giving suction drain in the cavity. The fluid in the drain was sent for amylase evaluation which showed 2000 IU/L. The diagnosis of pseudo pancreatic cyst of liver was made. The patient recovered uneventfully. The patient was given pancreatic enzymes and discharged after 3 weeks.

### Discussion

Intrahepatic pseudocysts are usually multiple and can be single in 40% cases.<sup>3,4,5</sup> Two pathophysiological mechanisms have been described for the intra-hepatic extension of pseudocysts.<sup>1,4</sup> The first mechanism consists of the accumulation of the pancreatic juice in the pre-renal space and thereafter eroding through the posterior

layer of the parietal peritoneum and into the lesser sac. The lesser sac collection then tracks along the lesser omentum or gastrohepatic ligament toward the liver leading to the formation of left lobe sub capsular collections similar to our case.<sup>4</sup> The second mechanism consists of tracking the pancreatic juice along the hepatoduodenal ligament from the head of the pancreas to the porta hepatis resulting in the formation of intraparenchymal collections.<sup>1</sup> An intra-hepatic pseudo cyst which formed as a consequence of both these mechanisms is associated with different imaging findings. Subcapsular pseudocysts formed as a result of the first mechanism are located just beneath the liver capsule and are biconvex in shape. Intraparenchymal pseudocysts formed as a result of the second mechanism are located away from the liver capsule and are located near the porta hepatis branches.<sup>6</sup> Diagnosis of an intra-hepatic pseudocyst is difficult as it is usually not considered in the differential diagnosis of cystic hepatic lesions. Moreover, when an intra-hepatic pseudocyst develops long after an episode of pancreatitis, or when the pancreas appears normal on imaging studies, it is rarely diagnosed.

There are no definitive guidelines on management of pseudo pancreatic cysts of liver. In majority of published literature pancreatic pseudo cysts in liver were treated by percutaneous or surgical drainage.<sup>3</sup> Percutaneous drainage is a commonly used method for treatment because it causes diagnosis confirmation and treatment at the same time.<sup>3</sup> Amylase level in the fluid obtained by puncture is elevated and is considered to be most useful in diagnosis of lesions of pancreatic origin.

### **Conclusion**

Pseudopancreatic cyst of left lobe of liver is an uncommon presentation following acute pancreatitis, which can be diagnosed after biochemical examination of cystic fluid. mostly treated by percutaneous drainage.

### **References**

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Fig 1- Showing suctioning of the pseudo pancreatic cyst of left lobe of liver.