



Mediastinal Pancreatic Pseudocyst: A Dilemma in Diagnosis

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Abstract

Introduction: Pseudocyst is a common complication after attack of acute and chronic pancreatitis. Cysts which are >6 cm in size and are persistent after period of 6 weeks don't resolve usually and may require surgical management whereas smaller cysts may be managed with conservative management. However a mediastinal pseudocyst is known but rare complication after pancreatitis^{[1][10]}

Case Description: We describe case report of a 38 years old male presenting with abdominal pain and weakness and intermittent breathlessness. Patient had history of multiple hospital admissions for pancreatitis when he was managed conservatively. Detailed clinical evaluation and after CXR, HRCT Thorax patient was diagnosed to have mediastinal pseudocyst.

Conclusion: Mediastinal pseudocyst is a rare complication of acute/chronic pancreatitis. A differential diagnosis of mediastinal pseudocyst should be kept in mind in patient with mediastinal mass with history of pancreatitis.

Keywords: Mediastinal pseudocyst, pancreatitis, mediastinal mass.

Introduction

Case Description

A 38 years old male patient presented with pain in abdomen and generalized weakness since 7 days. Patient had multiple hospital admission in past in view of alcoholic pancreatitis after bouts of alcohol intake. This time patient did not give history of alcohol intake and was admitted 6 weeks after initial attack.

Blood investigations were done which were remarkable. Serum Amylase and Lipase levels were within normal limits. USG A+P showed atrophic pancreas with prominent pancreatic duct (4mm), two pseudocysts of 280 and 420 cc noted in pancreatic head.

Based on haematological and radiological investigations diagnosis of chronic pancreatitis with pseudocyst was made.

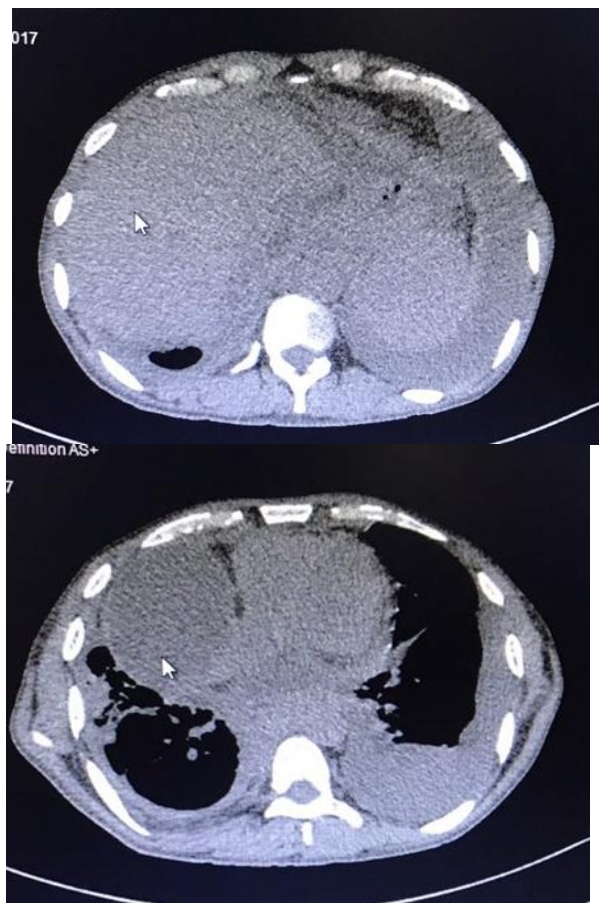
Initial few days after admission patient felt symptomatically better on IV analgesic and pancreatic enzymes supplements. However 2 weeks post admission patient started complaining of breathlessness and generalised weakness and pain in epigastric region which won't subside on IV analgesics. On examination, patient was tachycardiac and tachypnic and air entry was found to be reduced on right lower zone but patient was maintaining saturation on room air. CXR showed haziness in right lung field with shift of mediastinum to left.

CECT A+P+T [Figure 1] showed a well defined thin walled (2 mm) peripherally enhancing hypo

dense collection (3.5x2.9x1.4 cm) in lesser sac arising from neck of pancreas extending in sub-diaphragmatic-supra-hepatic region which is extending through IVC hiatus to retro cardiac (6.2x5.2x1.6 cm), para cardiac (9.5x6.3x7.2 cm) and pre vascular region in sub-diaphragmatic location. Cyst is communicating with MPD at neck. Right lung volume loss with shift of mediastinum to right.



CECT Thorax showing cyst extending into right mediastinum causing right lung volume loss. Shown by arrow.



Considering the communication between cyst and pancreatic duct decision for ERCP guided stenting was taken. Patient underwent ERCP guided stenting which resulted in resolution of symptoms.

Discussion

Pancreatic pseudocyst develops in 10-20% patients of acute pancreatitis and 20-40% patients of chronic pancreatitis and communicate with pancreatic duct system in 80% cases.^[2] It is a chronic collection of fluid lined by non epithelized granulation tissue and fibrosis. Acute pseudocyst resolve spontaneously in up to 50% cases however those which persist after 6 weeks and are >6 cm in size may require intervention in form either open or endoscopic internal drainage.

Most commonly it present in lesser sac or right anterior pararenal space. But at some times it may present anywhere from mediastinum to scrotum. Mediastinal pseudocyst was first described in 1951^[3] and remains a rare complication. Exact incidence is unknown.^[4] In most cases pseudocyst enters mediastinum through esophageal or aortic hiatus in contrary to our case where it was found entering through IVC hiatus.^[5] Mediastinal pseudocyst may lead to pleural/pericardial effusion/cardiac compression which could be fatal at times.^{[6][7][8]}

In present case patient developed symptoms of chest pain and breathlessness 2 weeks after admission. Often pleural effusion which is commoner complication after pancreatitis is considered as cause of breathlessness and most patient with mediastinal pseudocyst will have pleural effusion as well^[9] which makes it difficult to diagnose on CXR or with USG. HRCT thorax showed presence of pancreatic pseudocyst in lesser sac extending from IVC hiatus into retrocardiac space. As pseudocyst was communicating with pancreatic duct at neck region endoscopic internal drainage of cyst could be done.

Conclusion

For patients presenting with symptoms of chest pain, breathlessness in known case of chronic pancreatitis differential of mediastinal diagnosis should be kept in mind. Ultrasonography may not be sufficient in defining extent of pseudocyst. Hence careful patient selection to undergo CECT based on symptoms and selection of appropriate treatment modality based on site, size, wall thickness and communication with pancreatic duct is important.

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