JIHS The Journal of Integrated Health Sciences

Available online at www.jihs.in

Case Report

A curious case of pancreatic pseudo cyst masquerading as hydratid cyst: A case report

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ABSTRACT

We report a curious case of pseudo pancreatic cyst with retro peritonial pancreatico pleural fistula, with masquerading giant hydratid cyst. A 24 year old man, known alcoholic with history of recurrent pleural effusion was referred to our hospital with complaints of cough, breathless, right sided chest pain , fever and weight loss. Abdomino thoracic computed tomography showed thick walled fluid cyst in right hemithorax with multiple pseudo cysts of pancreas and calcified hydratid cyst in right lobe of liver. Patient had history of resection of hydratid cyst (20 x20cm) from liver 15 years ago. For present symptoms, patient had undergone multiple pleural fluid aspirations, which were inconclusive. The computer tomography scan could not confirm any pancreatico pleural fistula. The diagnosis was masked in view of no history of pancreatitis, history of hydratid cyst, and the computer tomography finding of thick walled fluid collection in right hemithorax.

Keywords: pseudo cyst, Pancreatico bronchial fistula pleural cyst, pleural effusion, hydratid cyst, pancreatitis

INTRODUCTION

A pancreatico-pleural fistula is a rare complication of chronic or acute pancreatitis. The communication between the thoracic structures and pancreatic duct can be through pseudocysts which may be incompletely formed or ruptured or through thin linear fistulous tracts through the esophageal or aortic diaphragmatic orifice or less commonly transdiaphragmatically. The result is large pleural effusions, unilateral or bilateral, mediastinal fluid collections or pseudocysts.[1] Conservative and expectant management while catering to fluid collections in the chest and abdomen have been advocated with surgery being reserved for cases in whom these measures have failed to relieve the symptoms.[2]

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CASE REPORT

A 24 year old man, known alcoholic with history of recurrent pleural effusion was referred to our hospital with complaints of cough, breathlessness and right sided chest pain, fever and weight loss.

On examination patient was bed ridden and cachexic. Vitals were normal. On auscultation, air entry was decreased on right side. Abdomen was soft, non tender. There was no hepatomegaly. Patient had been diagnosed with right sided pleural effusion and he had been treated with multiple aspirations of the effusion, since 4 months with no improvements.

Patient had history of fever, and lump in abdomen in October of 2000 for which he was

admitted in Indore. Diagnosis of hydatid cyst of liver was made and underwent excisional surgery. Post op period was uneventful.

Patient had history of alcohol intake, about 100 ml everyday, for 5 years. He stopped taking alcohol one year ago.

He was admitted in outside hospital with complaints of cough and breathlessness in September 2016, where left sided hydropheumothorax was diagnosed. He was managed by repeated pleural fluid aspiration.

Table 1. The pleural fluid analysis at occasion

Sugar	43.34 mg/dl
Proteins	4.09
S.Lipase	175
S.Amylase	332
ADA	19.09
Cells	176/mm3
Gram stain	No organism seen
ZN Stain	No AFB seen
Fluid culture	Negative

Patient was asymptomatic for 2 months following which he again developed cough and breathlessness. He was diagnosed with right pleural effusion in outside hospital and was referred to higher centre for further management.

On admission to our hospital, he had c/o cough, breathlessness. On physical examination, we noted pulse of 88/min, blood pressure of 108/64 mmHg.

Table 2. Laboratory investigations :

Haemoglobin	12.6
Total count	12,900
Serum amylase	173
Serum lipase	84

Chest radiography revealed right hydropneumothorax. Ultrasound abdomen revealed calcified hydratid cyst in right lobe of liver with minimal collection adjacent to it. Pancreas could not be visualized on ultrasound. Large loculated collection with internal echoes and thick wall was noted in right hemithorax.

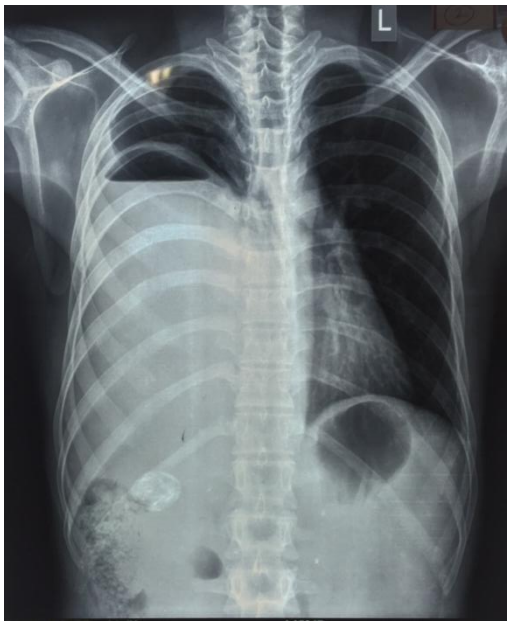

Figure 1. Chest xray showing right sided pleural effusion and calcified mass in right liver.

Computer tomography revealed

- Changes of pancreatitis with dilated pancreatic duct.
- Multiple thick walled multiple peudopancreatic cyst in peripancreatic area , left perinephric and right intrathoracic region suspected hydatid cyst/ pseudocyst of pancreas
- A well defined calcified lesion in segment VIII of right lobe of liver suggestive of calcified hydatid cyst
- Right sided pleural effusion

Patient was first treated with intravenous cefuroxime, tablet paracetamol. The right pleural collection was tapped for analysis. The fluid was brown in colour and free flowing.

Table 3. Pleural fluid analysis after treatment

Sugar	90.8mg/dl
Proteins	4.28
S.Lipase	375
S.Amylase	430
ADA	19.09
Cells	690/mm3
Gram stain	No organism seen
ZN Stain	No AFB seen
Fluid culture	Negative

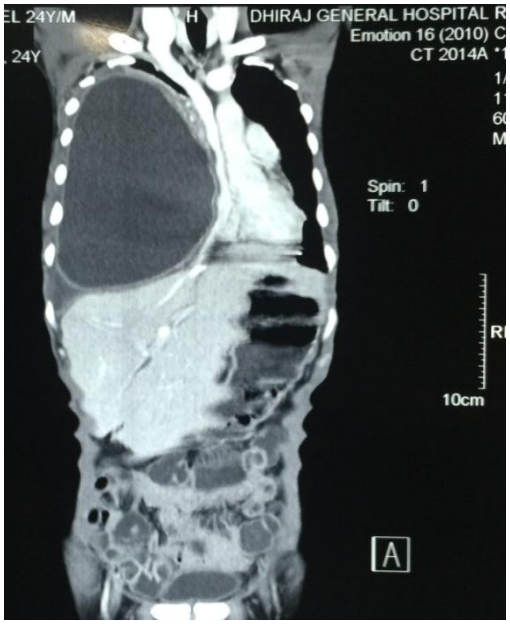

Figure 2. Contrast enhanced CT image showing right hemithorax cystic collection.

In view of non confirmatory pleural fluid findings, thickened cyst wall and complete compression of ipsilateral lung with mediastinal shift and high suspicion of hydatid cyst due to past history, case was taken for exploratory right thoracotomy. Right posterolateral thoracotomy was done through 5th space. Cyst was aspirated initially to decompress and fluid was taken for analysis. Cyst wall was stuck to parietal pleura with severe inflammation. Cyst had to be dissected along with parietal pleura and removed in total. Visceral pleura and cyst wall was common and underlying lung was necrosed due to enzymatic reaction. Partial decortication was done as attempts of decortications led to lung injury at multiple sites as pulmonary tissue was very friable. After complete cyst excision and partial decortication, left lung was inflated. Injured lung was sutured using 4-0 poly propylene with minimum air leak. Pleural cavity was irrigated with warm saline and complete haemostasis maintained. Two ICD were inserted and thoracotomy closed in layers.

Patient was extubated on table and shifted to recovery.

Post operatively, lung took prolonged time to expand with active physiotherapy.

ICD drains were removed after nil drainage. Patient was symptom free on discharge.

DISCUSSION

The typical epidemiological profile of a patient with pancreaticopleural fistula is that of a young male, alcoholic, with symptoms typical of chronic pancreatitis.[3] In our patient, the diagnosis was masked by absence of abdominal symptoms. Further, normal amylase and lipase levels in the tapped pleural fluid pointed away from pancreaticopleural fistula. As patient had history of hydratid cyst, the thick walled pleural cyst like structure was differentially diagnosed as hydratid cyst.

On computer tomography, the tract of pancreaticoplerual fistula was not visualised. This led to further questioning of diagnosis. Hence the management of our patient was with thoracotomy.

In early case, ICD insertion and octreotide would be sufficent to handle the condition but in late cases once fibrosis of peel forms on lung parenchyma, thoracotomy and decortications would be the only option left to treat such patient. Decortication is different from decortications in emphysema, as this peel is tougher, fibrosed and stuck to under lying pulmonary parenchyma due to severe enzymatic reaction of pancreatic fluid. Minimal selective

decortication would be sufficient with ICD in situ for prolonged time leading to complete expansion of lung. We did not use octreatide as post op drainage was not significant.

CONCLUSION

Patient, who is a known alcoholic, coming with sudden non infective pleural effusion, should raise suspicion of pancreatic pseudo cyst. Early conservative management would reduce morbidity of chronic disease and thoractomy.

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