

Mucinous cystic neoplasm masquerading a pseudo pancreatic cyst

RS Bhandari, PJ Lakhey and KP Singh

Department of surgery, T U Teaching Hospital, Kathmandu, Nepal

Corresponding author: Ramesh Singh Bhandari, lecturer, Department of surgery, T U Teaching Hospital, Kathmandu, Nepal;
e-mail: rameshbhandari2000@yahoo.com

ABSTRACT

Owing to recent improvements in pancreatic imaging, an increasing number of cystic lesions have been identified in asymptomatic as well as in patients presenting with jaundice, pancreatitis, or abdominal pain. In spite of many diagnostic modalities, pseudocysts of pancreas still create confusions with pancreatic cystic neoplasms. Here we report a 38 year old lady who presented with abdominal lump and jaundice following an episode of pain abdomen suggesting acute pancreatitis. She was fully investigated and managed for pseudocyst of pancreas. The diagnosis of mucinous cystic neoplasm was evident only after the biopsy from the wall of the cyst.

Keywords: Cystic neoplasm, pancreas, pseudocyst.

Cystic neoplasms of the pancreas are uncommon but confusing diagnostic problems that are being encountered with greater frequency. They account for fewer than 10% of all pancreatic malignancy and they encompass a spectrum of benign, premalignant and malignant lesions.¹ Different diagnostic modalities helped to differentiate cystic neoplasm from benign pseudocyst with increasing accuracy. However, at times the pancreatic pseudocyst creates a diagnostic confusion with cystic neoplasm despite undergoing full evaluation by both radiological, pathological and biochemical investigations. The most of the time the diagnostic difficulty occurs mainly with macro cystic unilocular pattern of cystic neoplasm.² We are presenting the case that was managed in the line of pancreatic pseudocyst after necessary investigations but the histopathological report from cyst wall revealed mucinous cystic neoplasm.

CASE REPORT

A thirty-eight year lady presented with history of progressively increasing jaundice for six months duration which was obstructive in nature. Prior to the development of this symptom she had history of sudden severe pain abdomen mainly in the upper abdomen which was highly suggestive of an attack of acute pancreatitis. For this she was managed elsewhere and got some improvement. After few weeks she started yellowish discoloration of eyes which gradually progressed to involve the whole body. She also noticed fullness over the epigastric region at the same time when she had developed jaundice. There was no history of weight loss and loss of appetite but had early satiety. There was no history of vomiting, melena, bleeding per rectum, hematemesis. She presented without any symptoms of cholangitis. She was an occasional alcohol

consumer. There was no significant past and family history. On examination, she was thin built, markedly icteric. Vitals were stable. Abdominal examination revealed fullness mainly over the epigastric region, non-tender, around 10 x 10cm in size without well defined margins. Other systemic examination revealed no abnormality. With our initial clinical suspicion of pseudo pancreatic cyst, the patient was investigated.

Hematological investigation revealed normal finding. Biochemical examination revealed conjugated hyperbilirubinemia with elevated alkaline phosphatase. Serum amylase level was significantly high. Ultrasonography (USG) of abdomen revealed large retroperitoneal cystic mass overlying the pancreas. There was gross dilation of common bile duct (CBD) and intrahepatic bile duct (IHBDs). Gall bladder was also distended. USG abdomen was suggestive of pseudocyst of pancreas.

CT scan of the abdomen (Fig. 1.) also revealed huge cystic mass most likely suggestive of pseudo pancreatic cyst. As there were some solid component in CT, suspicion of cystic neoplasm was also made. So we did USG guided FNAC from cyst including the solid areas. Tumor markers CA 19-9 and CEA both from cyst aspirate and serum were normal. Because the patient was markedly icteric, symptomatic and there was possibility of some delay before going to definite management we did percutaneous transhepatic cholangiogram and drainage (PTCD).

PTCD (Fig. 2.) showed dilated and grossly deviated CBD. After the drainage procedure patient had some symptomatic improvement. FNAC report didn't show any evidence of malignancy. Evaluating the presenting complains and preceding history suggestive of acute

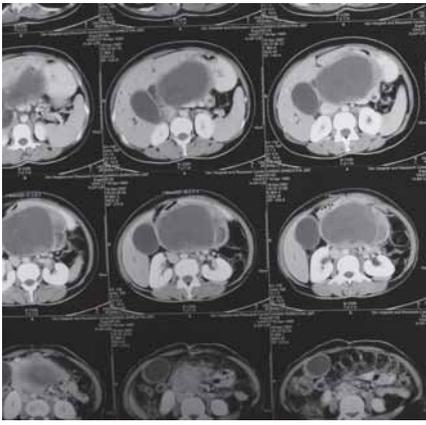


Fig. 1. CT scan of the abdomen showing huge cystic lesion.



Fig. 2. PTCD showing grossly dilated and displaced CBD.

attack of pancreatitis and correlating all the investigative finding our final impression was pseudo pancreatic cyst and operation was planned accordingly.

Patient underwent upper midline laparotomy. Operative finding (Fig. 3.) was huge cyst arising from the lesser sac, well circumscribed, pushing the stomach anteriorly, grossly dilated and deviated CBD and distended gallbladder.

Anterior gastrotomy was made and after confirming by aspiration. The cyst was entered through posterior stomach wall. All the dirty fluid of the cyst was sucked out and necrotic material with in the cyst was also removed. Part of cyst wall was excised and send for biopsy. Then cystogastrostomy (Fig. 4.) was made. Following the procedure the gallbladder and the CBD collapsed. Anterior gastrotomy was closed and the midline closure was done.

On fourth post operative day nasogastric tube was removed and started on orally and gradually resumed to normal diet. Since there was no increase in the jaundice in the postoperative period previously kept PTCD tube was also removed. The patient was discharged on tenth postoperative day. She had been doing well on follow up at one month. But unfortunately histopathological

examination (HPE) of tissues from the wall of pseudo pancreatic cyst revealed features of mucinous cystadenocarcinoma. Thereafter the patient was lost to follow up.

DISCUSSION

Cystic neoplasms of pancreas have long posed diagnostic and treatment dilemmas to surgeons and patients. Many identified lesions may prove to be inflammatory pseudocyst or other benign conditions; the possibility of malignancy with in a cystic lesion necessitates a thorough diagnostic work up.

Clinical manifestations of cystic neoplasm of the pancreas vary. A significant number of patients may have no symptoms at all; with lesions being detected on imaging studies performed for another indication.³ Pain is the most common symptom. A palpable abdominal mass and development of acute pancreatitis are other possible presentations. A cystic neoplasm of the pancreas may produce pancreatitis, the old surgical teaching that a cystic lesion of the pancreas in a patient with history of pancreatitis is no longer true.³ Jaundice, weight loss also may occur, though at far lower frequency than is commonly seen in patients with ductal adenocarcinoma.



Fig. 3. Huge cyst pushing stomach anteriorly and dilated and deviated CBD.



Fig. 4. Cystogastrostomy being done

Our patient was managed under the impression of pseudocyst following an episode of acute pancreatitis due to typical nature of pain, history of abdominal lump following pain, raised amylase level. The impression was also supported by the unilocular appearance of cyst on abdominal CT scan, raised amylase level of cystic fluid and normal cystic fluid level of Ca 19-9, CEA. So patient was managed with cystogastrostomy. The diagnosis of mucinous cystic neoplasm was evident only after the HPE report from the wall of the cyst. After surgery patient didn't come for follow up.

Among cystic neoplasm, serous cyst adenoma 32- 39%, mucinous cystic neoplasm 10- 45%, and intraductal papillary mucinous neoplasm 21- 33% represent the majority of cases encountered in practice⁴. Solid pseudo papillary neoplasms represent less than 10%. However these neoplasms, which occur predominantly in young woman, are important, because they are characterized by a low grade potential for the development of cancer and when limited to the pancreas, have a high cure rate.⁵

True cystic lesions of the pancreas may be confused with pseudocyst owing to similarities in the clinical presentation and in the characteristics visualized in the imaging studies. Pseudocyst may arise after an episode of pancreatitis. They are frequently, but not invariably, associated with pain. Large pseudocyst can compress the stomach, duodenum and bile duct, resulting in early satiety, vomiting and jaundice.³

The diagnosis of pancreatic pseudocyst depends on the clinical history and the associated finding within the pancreas, such as gland atrophy, duct dilation, calcification of the parenchyma, and calculi in the pancreatic duct. On CT the appearance of a pseudocyst is that of a low attenuation, unilocular cyst with accompanying signs of acute or chronic pancreatitis. The density of a fluid in a complex pseudocyst may be higher than that of an uncomplicated pseudocyst, owing to a presence of hemorrhage or gas that develops as a result of bacterial infection.³ When cross sectional imaging does not provide a definitive diagnosis, additional

information may be sought by means of aspiration of the contents of the cyst.⁶ Cytological examination of the cystic fluid and the analysis of variety of biochemical and tumor markers may aid in establishing diagnosis. However cytological analysis of cystic fluid has identified cells that indicate the presence of malignant disease or benign mucinous cystic lesions in perhaps only half the aspirates obtained. Only inflammatory cells should be present in the fluid aspirated from pseudocyst. Pseudo cyst make the diagnosis difficult mainly with macro cystic unilocular pattern,² incases if the clinical picture is unremarkable and silent, mucinous cystic tumor should be sought. Moreover, endoscopic ultrasound with FNA and ERCP are recommended to improve diagnosis especially if nonoperative treatment is planned or in cases with diagnostic dilemma.⁷

So, in conclusion, despite the fact that all cystic neoplasm should be evaluated in detail to rule out possibility of cystic neoplasm, these cystic neoplasm still masquerade a pancreatic pseudocyst at times and make our decision challenging.

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