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Pancreatic Adenocarcinoma Mimicking Pseudocyst

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Abstract:- We report the case of a 41 year old woman who presented with pain abdomen and obscure GI bleed. Radiological imaging was suggestive of a cystic lesion, probably a pseudocyst. Diagnosis could be obtained after exploratory laparotomy and histopathology examination. This case highlights the need to consider pancreatic malignancy as a differential diagnosis for pancreatic cystic lesions mimicking pseudocyst.

Keywords:- *Pancreatitis, WOPN, GI bleed, Ascites.*

I. INTRODUCTION

Pancreatic adenocarcinoma is a lethal condition with poor outcome and the incidence is increasing. Approximately 60%-70% of pancreatic adenocarcinomas arise in the head of the pancreas with the remainderfrom the body (15%) and tail (15%). Despite advances in imaging modalities, there could be a dilemma in diagnosing pancreatic adenocarcinomawhich may masquerade like a cystic lesion,as it happened in this case.

II. CASE REPORT

A 41-year-old woman, known case of primary hypothyroidism for 7 years, presented with complaints of pain in epigastric region & left hypochondrium. It was dull continuous, moderate intensity in the last 20 days. There was abdominal distension and non-bilious vomitings for 10 days. There was no weight loss or steatorrhea. She was a nonsmokerandnon-alcoholic; no significant family history. She A presented to an outside hospital, where USG abdomen showed relatively well defined peripancreatic collection (74 x 57 x 49 mm – Vol – 110 cc), cholelithiasis and moderate ascites. UGI endoscopy showed extrinsic impression on posterior wall of stomach involving body and antrum. Ascitic fluid paracentesis showed hemorrhagic tap with drop in hemoglobin, requiring blood transfusions. She was referred to our hospital for further management.

Physical examination revealed pallor and abdominal distension. Biochemical analysis revealed severe anemia. Serum amylase, lipase &liver function tests were normal. Serum CA 19 9 was 281 U/ml. USG guided ascitic fluid tapping with pigtail insertion into peritoneal cavity was done to relieve the tense abdominal distension. Ascitic fluid was bloody, and analysis showed

WBC – 250 cells, Polymorphs – 90 %, Albumin – 3.2 g/dl, Amylase – 113 gms/dl, ADA – 163 IU/L. Cytology was suggestive of neutrophilic rich effusion. Ascitic Fluid for bacterial cultures was negative. CECT Abdomen and abdominal angiogram showed large peripancreatic walled off collection and displaced splenic artery (Figure 1). There was no obvious pseudoaneurysm. There was persistent drop in hemoglobin, requiring blood transfusions. Tc 99m labelled RBC scan was done which showed faint tracer activity in central abdomen, localizing to small bowel loops s/o low volume Jejunal / proximal ileal bleed. Repeat CT abdominal angiography was done but it did not localize any source of bleed. Surgical Gastroenterology consultation was taken, and laparotomy was performed which showed large friable tumor in lesser sac involving posterior surface of stomach, transverse colon mesenteryand anterior surface of pancreas suggesting pancreatic growth. There were dense adhesionsinvolving splenic flexure, transverse colon andtail of pancreas. Debulking of tumor with intraoperative frozen section & peritoneal lavage was done (Figure 2). Histopathological examination revealed poorly differentiated discohesive cells with pleomorphic nuclei and prominent nucleoli admixed with blood and necrosis. The tumor was positive for CK 19 and PAN CK (Fig 3). Post Operatively patient had persistent bleeding from abdominal drains, required several blood transfusions and succumbed.

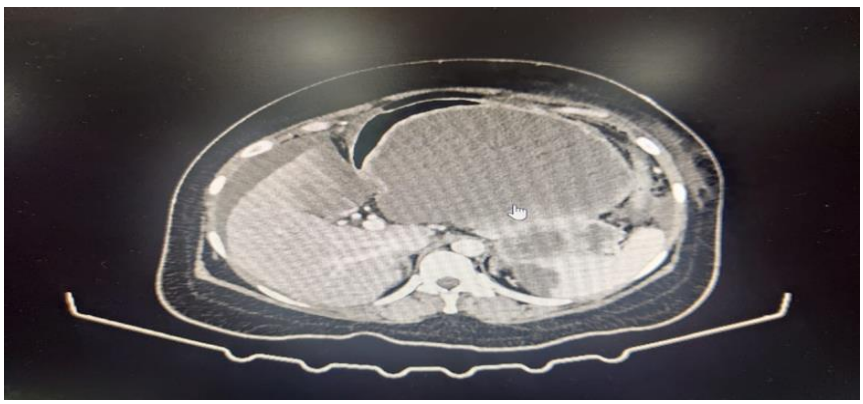

Fig. 1: Tail of pancreas is bulky with a collection and lesser sac collection of size 15×11 cms, compressing the stomach

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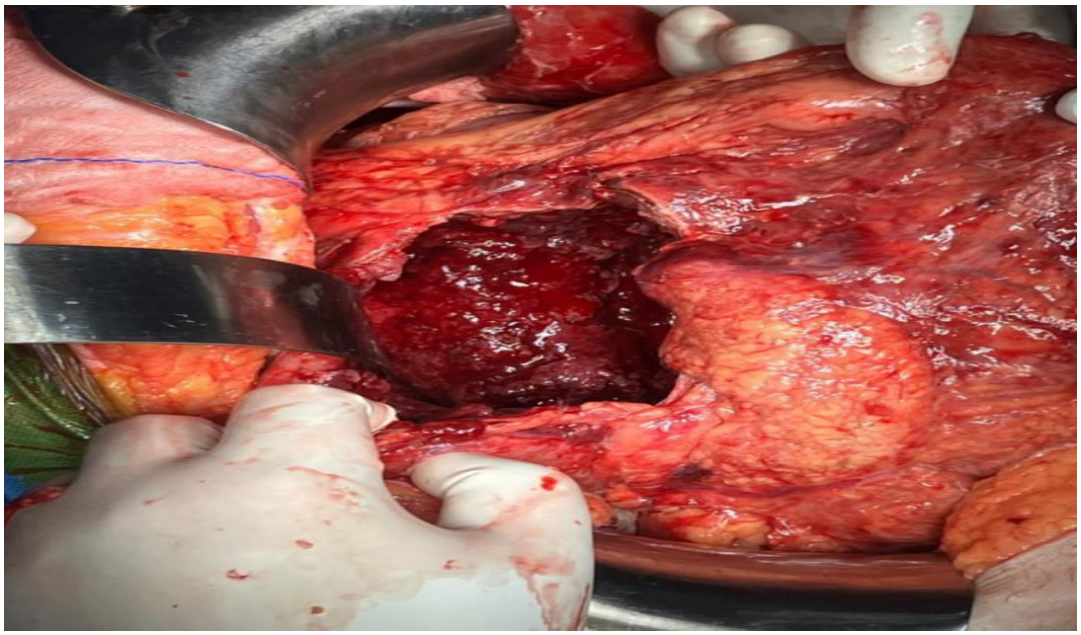

Fig. 2: Intraoperative Imaging - Tumour debulkingfrom lesser sac, anterior surface of pancreas, transverse colon , mesentery and posterior surface of stomach

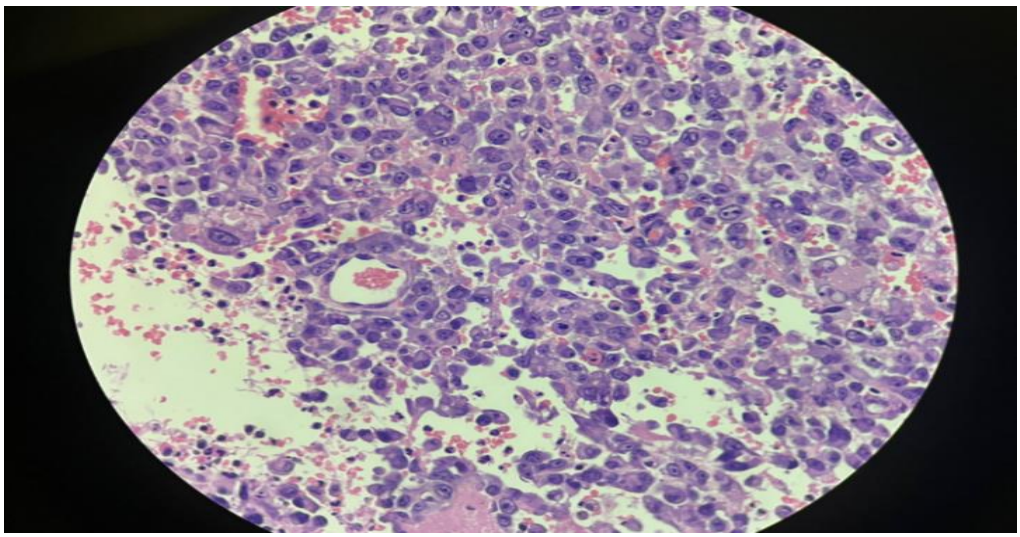

Fig. 3: Histopathology - Poorly differentiated discohesive cells with pleomorphic nuclei and prominent nucleoli admixed with blood and necrosis. Positive for CK 19 and PAN CK

III. DISCUSSION

Chronic pancreatitis is a well established risk factor for pancreatic cancer and early diagnosis of denovo pancreatic cancer in a patient with established chronic pancreatitis can be challenging as symptoms of both diseases often overlap [4]. Small pancreatic tumours appear as poorly reflecting and attenuating pancreatic mass lesions on ultrasonography. Larger tumours are more easily identified appearing heteroechoic with well defined irregular or lobular margins [5]. Contrast enhanced computed tomography images are more suitable to identify pancreatic malignancies and oftens show a solid tumor with heterogeneous density [6,7]. Some reports do describe cystic component and necrotic areas within the solid pancreatic tumours which appear hypodense on CT imaging.

Pancreatic pseudocysts on the other hand are often rounded or oval with homogenous hypodense appearance with a well circumscribed wall on CT imagine. Hyperdense areas within are often suggestive of bleeding within the pseuodcyst. A pancreatic pseudocyst may cause hemorrhage into the gastrointestinal tract, peritoneal cavity, retroperitoneum, or within the cyst itself[1,2,3].

Other common cystic lesions of pancreas that are picked up on radiological imaging include mucinous cystic neoplasms , serous cystadenomas , intrapapillary ductal mucinous neoplasms and solid papillary epithelial neoplasms . Although all these cystic neoplasms have unique identification features on imaging a conclusive diagnosis cannot be made without cystic fluid analysis and histopathology which is often obtained by EUS guidance

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Our case presented a unique diagnostic challenge in that radiologic appearance of pancreatic cystic lesion was mimicking a pseuodcyst with few hyperdense ares within suggestive of haemorrhage .EUS FNA/B was not attempted in our case due to fear of active hemorrhage into the cystic lesion . Hence we had to rely on radiology for diagnosis . In retrospect a FDG -PET scan could have helped us establish the diagnosis of pancreatic malignancy . However the clinical history and rapidity of onset of symptoms did not raise a suspicion of malignancy . Hence we turned to surgical exploration for control of haemorrhage and to establish a diagnosis . Intraop findings and histopathology then confirmed pancreatic adenocarcinoma .Cystic components have been described in CT appearance of pancreatic adenocarcinoma. . However adenocarcinoma appearing as a large cyst on CT is rare.

Hence specific radiological assessment should be directed to imaging solid component of the mass to avoid misdiagnosing the lesions as pseudocysts; EUS –FNA/B can be done wherever possible to confirm the diagnosis with cyst fluid analysis and histopathology [8]. Diagnosing a pancreatic malignancy in a patient who already has a long standing pancreatic pseuodcyst can also be dfficult[9]. Positron emission tomography scans can be a very useful tool in diagnosing tumors with liquefying necrosis that mimic pseudocysts [4, 9].

IV. CONCLUSION

Pancreatic malignancies and tumors such as sarcoma must be considered in the differential diagnosis of all pancreatic lesions including cystic lesions of pancreas and pseudocysts[11,12]. Blood biomarkers, cystic fluid aspiration tumor sampling and accurate radilogical imaging can help in early diagnosis and management.

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