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A CASE REPORT- HYDATID CYST OF PANCREAS

Surgery

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ABSTRACT

Primary pancreatic hydatid cyst is very rare. It may present as acute abdomen with pancreatitis - creating a diagnostic dilemma.Diagnosis of such a case of the pancreatic hydatid can be confirmed only by surgical exploration and histopathology.

KEYWORDS

Hydatid Cyst, Pancreas, Echinococcus granulosus.

INTRODUCTION

Hydatid disease is endemic in developing countries and cattle rearing regions of the world. It may affect wide range of organ or tissue. Here we present a case of hydatid cyst of pancreas which according to contemporary literature is a relatively rare occurrence.

Case Report

A 15 year male patient admitted with history of acute abdominal pain in left side of upper abdomen, abdominal distention and vomiting since one month. Abdominal pain was severe since 3 days. There was no history of trauma, lump in abdomen, fever or any bowel bladder disturbances. Physical examination revealed tenderness in left hypochondrium, No guarding, No rigidity .No any definitive lump palpable in abdomen.

On blood examination the Total Leukocyte Count was 15000 cells ul-1, serum amylase was 794U/L. ELISA antibodies (IgG) for echinococcal antigen was positive. Plain radiograph of Chest was normal and Abdomen shows few dilated small bowel loops. USG was suggestive of gas filled bowel. Computed tomography (CT) scan of abdomen and pelvis showed a 56 X 78 mm cystic lesion with internal floating membrane in tail & body of pancreas & minimal left sided pleural effusion with splenic vein thrombosis. So probable diagnosis of pancreatic hydatid cyst was made.(fig1 and fig2)

On exploration revealed a hydatid cyst in tail of the pancreas with omental fat necrosis which suggest changes of acute pancreatitis.Cyst wall was firmly adherent to pancreatic parenchyma and splenic hilum (figure 3,4). Distal pancreatectomy with splenectomy was performed. Peritoneal cavity thoroughly washed and drained. Immediate post-operative course was uneventful. Three 28 days course of Tab. Albendazole 15mg/kg/day in divided doses separated by two weeks interval was given. The patient was given pneumococcal, meningococcal and haemophilus influenzae vaccinations at the time of Discharge. Histopathological findings confirmed the diagnosis of pancreatic hydatid cyst. Follow-up after 6 months showed patient to be symptom and disease free.

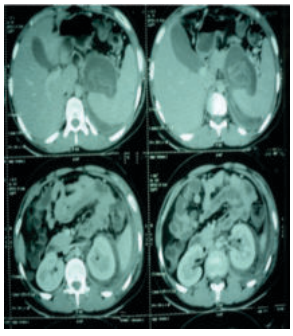

Fig 1

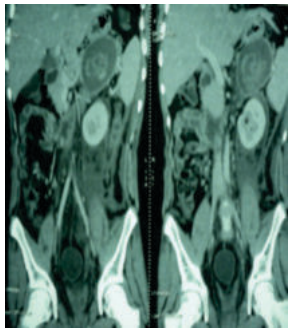

Fig2

Fig1, 2 showing coronal (fig1) and axial (fig2) view of Computed tomography (CT) scan of abdomen and pelvis showing cystic lesion with internal floating membrane in tail & body of pancreas

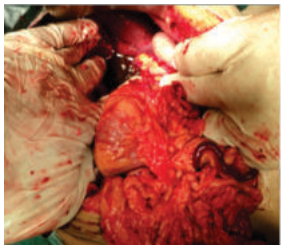

Fig3

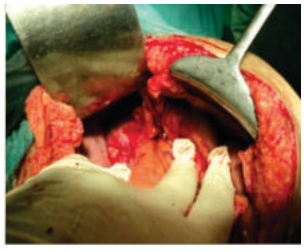

Fig4

(Fig 3,4 showing inta-operative pancreatic tail hydatid cyst)

DISCUSSION

Pancreatic hydatid cysts are rare entities with incidence ranging from 0.14% to 2% [1] Pancreatic hydatid cysts are usually solitary (90%–91%) and distributed unevenly throughout the head (50%–58%),body(24%–34%) and tail(16%–19%)[1] The most accepted mechanism of the pancreatic infestation of hydatid disease is haematogenous dissemination. Other possible mechanisms are the passage of cystic elements to the pancreas through biliary or lymphatic system[2].

Clinical presentation depends on the size of the cyst and anatomical localization. The main clinical symptoms are epigastric pain, weight loss, discomfort, and vomiting[6] . Cysts localized in the head of the pancreas can also cause obstructive jaundice due to external compression of the common bile duct [5,6]. Unusual complications of hydatid cysts involving the head of the pancreas are cholangitis, acute and chronic pancreatitis, duodenal stenosis or fistula, and pancreatic abscess and masquerades as choledochal cyst. Cysts in the pancreatic body and tail are usually asymptomatic and may be detected by the presence of an abdominal lump [1,6]. Rarely, cysts in the pancreatic tail can lead to splenomegaly, portal hypertension, rupture into the peritoneal cavity and gastrointestinal tract (GI) tract, or abscess formation. .

Imaging modalities commonly employed to diagnose a pancreatic cyst are ultrasonography (USG), Computed Tomography (CT) and Magnetic Resonance Imaging (MRI). Abdominal USG is a sensitive tool for diagnosing Hydatid Cyst with characteristic findings like floating membranes, hydatid sand and daughter cysts though the sensitivity is decreased due to retroperitoneal location and bowel gas in case of Pancreatic hydatid cysts[8]. Presence of an undulating membrane and multiple daughter cysts within a mother cyst can suggest the diagnosis on CT and MRI [9]. Endoscopic Ultrasound (EUS) guided aspiration of pancreatic cystic fluid and cytological/ biochemical evaluation can help in excluding pancreatic cystic

neoplasm and pseudo cyst of pancreas[3]. Magnetic Resonance Cholangio-Pancreatography (MRCP) is helpful in delineating the biliary tree and pancreatic duct when the pancreatic cyst is located in the head of pancreas and/or causing ductal compression.

Surgery is the treatment of choice for pancreatic hydatosis[1,7]. The exact procedure depends on the location of the cyst. Care should be taken during the procedure to pack the operative area with sponges soaked in scolicidal agents like 0.5% Cetrimide or 20% Hypertonic saline and avoid spillage of the cyst contents. The cyst should be irrigated with scolicidal agents.[9].Depending upon location of cyst further treatment is decided.

I. Head of the pancreas: the tendency is toward conservative surgery

I. No fistula with pancreatic duct: unroofing procedure with omentoplasty;
ii. If there is a fistula between pancreatic duct and the pancreatic cystic echinococcosis: anastomosis between pancreatic cystic echinococcosis and digestive tract is indicated;
iii. Duodenopancreatectomy should be reserved exceptionally for selective patients.

II. Body of the pancreas: the tendency is toward radical surgery.

I. If presence of fistula between pancreatic duct and the cyst: central pancreatectomy or anastomosis between cyst and digestive tract;
ii. If no fistula: unroofing procedure with omentoplasty.

III. Tail of the pancreas: the tendency is toward radical surgery.

I. If presence of fistula between pancreatic duct and the cyst: distal pancreatectomy;
ii. If no fistula: distal pancreatectomy or unroofing procedure with omentoplasty.[7]

Postoperative medical therapy is albendazole 10-15 mg/kg/day, three courses each of 28 days, with two week gap between the courses.

CONCLUSION

We conclude that pancreatic hydatidosis, though very rare, should be considered in the differential diagnosis of cystic lesions of the pancreas in the appropriate epidemiological setting. Based on its location further management is decided. Distal pancreatectomy should be performed if located on pancreatic tail.

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