

Hydatid Cyst of Pancreatic Head Mimicking As Choledochal Cyst: A Rare Case Report

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I. Introduction

Hydatid Cyst is a zoonotic disease caused by the larval stages of *Echinococcus granulosus*, which is endemic in the Mediterranean region, Africa, Australia, South America, the Middle East, and India¹. Hydatid cyst can occur most commonly in Liver 50%- 77%, lung 15%- 47%, spleen 0.5%-0.8% and Kidney 2%-4%. But Hydatid Cyst in Pancreatic head is a rare presentation of 0.14%-2%, with only 20 cases reported so far in India¹.

II. Case Report

A 26- year -old female presented to OPD with chief complaints of swelling and pain in the right upper abdomen for four months, mainly in the epigastric and umbilical region, partly in the right hypochondrium, and right lumbar region. The pain is insidious in onset, dull aching, continuous, and not radiating. Pain aggravated by taking food and relieved with medication. Also complained of vomiting, loss of appetite for the last ten days. The swelling is a horizontally ovoid of size 10x8cm, seen mainly in the epigastric and umbilical region, partly in the right hypochondrium and right lumbar region, which move both in horizontal and vertical directions. In the knee-elbow position, the swelling falls freely and less prominent on head rising and leg rising tests.

III. Investigations

Complete hemogram, liver function tests were within normal limits. The Chest X-ray was within normal limits. Ultrasonography of the abdomen revealed dilated CBD with mild central IHBRD and a well defined cystic lesion measuring 7.9x6.3cms at the level of head of the pancreas suggestive of Choledochal cyst. Contrast-Enhanced CT abdomen noted well defined thin-walled cystic lesion in the region of the head of the pancreas with dilatation of CBD proximal to the injury and with moderate central IHBR dilatation suggestive of Choledochal cyst (Type 2)/ Cystic lesion in the head of the pancreas with mass effect over CBD.

The patient was taken for a diagnostic laparoscopy and noticed a cystic swelling of size 10x 10cms at the head of the pancreas and adherent to the first part of the duodenum. Then abdomen was explored through midline vertical incision. Intraoperatively noticed a cystic swelling of 10x10cm at the head of the pancreas, which is adherent to the first part of the duodenum. The cyst opened, and 200ml of crystal clear fluid was aspirated and found white-colored membranes. Membranes are separated from the cyst wall and sent for histopathological examination. Cystoduodenostomy was done and drain placed in the anastomotic site. Drain output was minimal and removed on the tenth postoperative day. Histopathological sections studied show thick avascular lamellated eosinophilic refractile chitinous layer and an inner germinal layer, features consistent with HYDATID CYST. The patient was discharged home on oral Albendazole tablets for FOUR weeks.

IV. Discussion

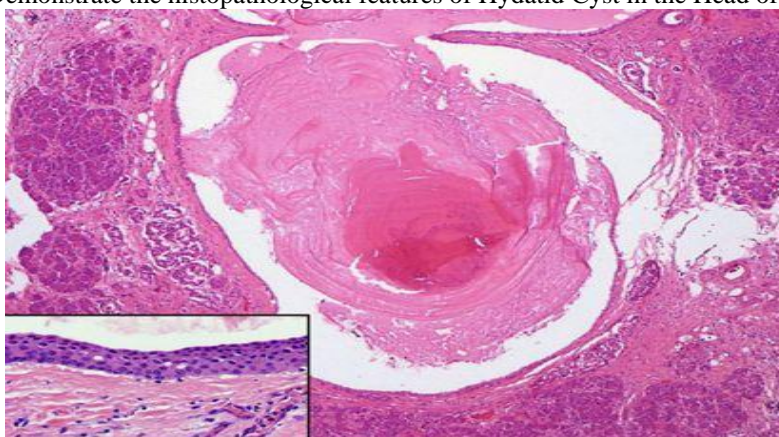
Hydatid cyst of the pancreas is very rare in presentation with incidence ranging from 0.14% to 2%² and is mostly solitary (90%–91%). The pattern of distribution is; in the head (50%–58%), body (24%–34%), and tail (16%–19%)¹. The most common mode of transmission is by the hematogenous route to the pancreas and also through the biliary route, lymphatic route, direct passage via the pancreatic veins, and retroperitoneal dissemination is also possible^{1,2}. The cyst location within the pancreas plays an important role in its clinical presentation. Obstructive jaundice, epigastric pain, vomiting, loss of weight, and loss of appetite are the most common symptoms^{3,4}. Patients are asymptomatic when the Cysts located in the body and tail of the pancreas and may present as an abdominal lump^{1,2}. In some cases, Splenomegaly and portal hypertension are reported

with cysts located in the pancreatic tail. The imaging techniques used are Ultrasonography (USG), Computed Tomography (CT) and Magnetic Resonance Imaging (MRI). USG abdomen shows floating membranes, hydatid sand, and daughter cysts and is a sensitive tool in diagnosing Hydatid cysts. In contrast, the sensitivity is decreased due to the retroperitoneal location of the pancreatic hydatid cyst⁵. Endoscopic ultrasound-guided FNAC also plays a role in diagnosing Hydatid Cyst. CT and MRI always demonstrate undulating membrane and multiple daughter cysts within a mother cyst^{2, 6}. Magnetic Resonance Cholangio-Pancreatography (MRCP) helps delineate the biliary tree and pancreatic duct when the pancreatic cyst is located in the head of the pancreas and/or causing ductal compression⁷. Indirect hemagglutination assay, immune electrophoresis, enzyme-linked immunosorbent assay, complement fixation test, and immune fluorescence assay help demonstrate antibodies and circulate antigens and follow up monitoring¹.

Picture1- Demonstrate the pearly white Hydatid membranes from the Pancreatic Head .



Picture 2: Demonstrate the histopathological features of Hydatid Cyst in the Head of the Pancreas.



V. Conclusion

Surgical removal is the treatment of choice^{1,2}. 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 contents⁸. The cyst should be irrigated with scolicidal agents. A high level of suspicion needed in suspecting the Hydatid cyst of pancreas preoperatively, and the patients should receive prophylactic anti-helminthic agents (Albendazole 10 mg/kg/day) for 2–4 weeks which should be continued postoperatively for at least four weeks. This prevents the anaphylactic reactions and recurrences postoperatively¹.

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