LETTER

Pancreatic hydatid cyst as an incidental finding

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To the Editor,

Hydatidosis is a zoonosis caused by Echinococcus granulosus. Characteristically hydatid disease is seen as a solitary cyst in the liver or lungs spreading via portal bloodstream after the intestinal invasion. Pancreatic involvement is a bizarre location of hydatidosis (1).

A 35-year-old woman suffering from dull, constant lower abdominal pain for last two months, admitted through gynecology outpatient clinics. Laboratory findings indicated a mild leukocytosis with neutrophilia (Total WBC: 14/µl, neutrophil: %72) and increased serum C-reactive protein level (7,7 mg/dL) with slightly increased serum lipase (107U/L) and alkaline phosphatase levels (218U/L). During sonographic assessment; an approximately 6x5.5 cm adnexal mass was detected. An abdominal magnetic resonance imaging (MRI) scan was performed to evaluate the ovarian lump. MRI showed a right adnexal mass, estimated as a cystic teratoma, and eventually, initial diagnosis was pathologically confirmed. There was also another cystic lesion, 5x5.5 cm in diameter, confined to the pancreatic tail, discovered incidentally. This pancreatic cyst had a round shape with a smooth surface, multiple septations, and markedly enhanced thick walls and not communicated with the Wirsung duct. Preoperatively, indirect hemagluttination (IHA) test for hydatid cyst and ^{18}F -FDG PET/CT was scheduled. IHA results for hydatid cyst were negative. Physiological tracer uptake was seen on PET/CT (Figure 1). During the removal of the right adnexal mass, a distal pancreatectomy procedure was performed. Gross appearance of the circumscribed cyst, removed surgically, was encapsulated, multiloculated and mucin containing. Histomorphologic findings, such as acellular eosinophilic material, scolexes, and outer cuticular membrane, corroborate the diagnosis of hydatid disease of the pancreas (Figure 2).Postoperatively, ELISA tests from cyst fluid also verified hydatidosis.

In conclusion; pancreatic hydatid cyst may mimic cystic tumors of the pancreas. The clinician should consider hydatid cyst as a differential diagnosis, particularly, in hydatidosis-endemic areas (1). Preoperatively serological tests could lead accurate diagnosis, however, as seen in our case; the false negativity always should be taken into consideration. Dissemination, anaphylaxis and even death due to cyst rupture major risks of the operation without a definitive diagnosis (2)

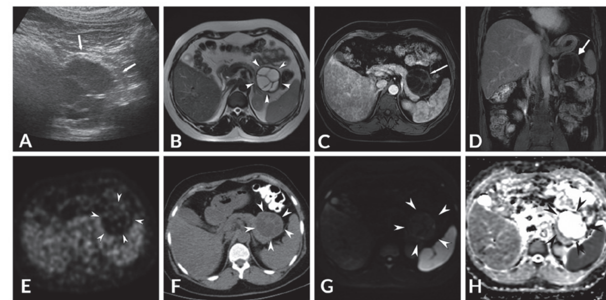

Figure 1.— The transabdominal ultrasonography shows a multiseptated cystic structure on pancreatic body and tail (arrows) (A). Axial T2- weighted MRI scan demonstrates "spoke wheel" appearance of hydatid cyst (arrowheads) (B). After intravenous contrast medium administration, mild enhancement of the walls and septa is seen on both axial and coronal T1-weighted MRI (arrow) (C, D). Axial PET CT scans depict non 18F-FDG avid pancreatic cystic lesion (arrowheads) (E,F).There is no significant diffusion restriction detected on diffusion-weighted MRI and ADC map (arrowheads) (G, H).

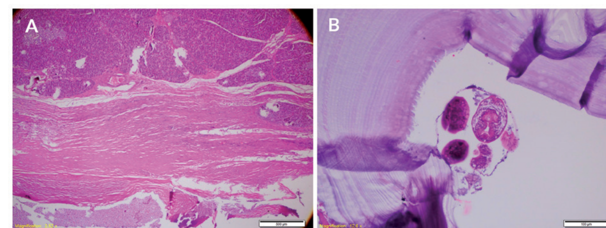

Figure 2. — Hematoxylin-Eosin stain 40x; Image demonstrates pancreatic tissue with the wall of hydatid cyst (A). Hematoxylin-Eosin stain 200x; Germinative membrane and scolexes are clearly seen in the micrograph (B).

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