Primary Hydatid Disease of Pancreas Mimicking Cystic Pancreatic Neoplasm: Report of Two Cases

Kistik Pankreatik Neoplazmı Taklit Eden Primer Pankreatik Kist Hidatik: İki Olgu Sunumu

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ABSTRACT Liver and lungs are the most common locations for hydatid disease. Primary pancreatic hydatid cyst is a rarely seen form and accounts for about 0.19% to 2% of the cases. It usually mimicks the cystic neoplasm of pancreas. The aim of this case report is to focus on the diagnosis and management of pancreatic hydatid disease in endemic areas. We hereby present the medical records of two patients mimicking the cystic pancreatic neoplasm treated with distal subtotal pancreatectomy and splenectomy. During the two year follow-up period, there was no reccurence or other organ involvement. Pancreatic hydatid disease, although a very rare entity, should be considered in endemic areas, and in order to prevent reccurrences it, should be treated with complete resection without any contamination.

Key Words: Echinococcus granulosus; pancreatic neoplasms

ÖZET Hidatik kist hastalığında en yaygın tutulum yerleri karaciğer ve akciğerlerdir. Primer pankreatik hidatik kist hastalığın çok nadir bir türü olup, olguların %0.19 ila %2'sini temsil etmektedir. Bu antite genelde pankreasın kistik neoplazmını taklit etmektedir. Bu makalede, endemik alanlarda pankreatik hidatik kistin tanısı ve tedavisinin ele alınması amaçlanmıştır. Buna ek olarak kistik pankreatik neoplazm kliniğini taklit eden ve distal subtotal pankreatektomi-splenektomi ile tedavi edilen iki hastaya ait tıbbi kayıtlar sunulmaktadır. İki yıllık takip sürecinde tekrarlama veya diğer organların tutulumu gözlenmemiştir. Primer pankreatik hidatik kist, çok nadir bir antite olmasına karşın endemik olarak karşılaşılabileceği göz önünde bulundurulmalıdır. Hastalığın tekrarlamasının önlenmesi için artık bırakılmaksızın total rezeksiyon yapılmalıdır.

Anahtar Kelimeler: Ekinokokus granülozus; pankreas tümörleri

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Hydatid cyst is an endemic disease in Turkey. Liver (70%), lung (10%), muscles (4.7%), spleen (2.1%) and brain (1.4%) are most frequently affected organs. Primary hydatid cyst of the pancreas is a rarely seen entity accounting for 0.2% to 2% of cases in endemic areas.[1-4] Preoperative evaluation is usually focused on pancreatic cystadenoma or cystadenocarcinoma. Due to the rarity of pancreatic hydatid disease, preoperative diagnosis is always difficult. Herein we report two cases of primary hydatid disease of pancreas located in the body and tail of the gland and treated with distal pancreatectomy and splenectomy.

CASE REPORTS

CASE-1

A 26-year-old-male was admitted to hospital with a seven-month history of abdominal and low back pain, fatigue and vomiting. He had no previous history of jaundice, abdominal trauma or surgery. On physical examination, there was a fullness and mild tenderness without rigidity and a suspicious palpable mass between the epigastrium and left hypochondrium. Routine blood tests and tumor markers were all in normal range. Abdominal ultrasound (USG) revealed a septated cystic mass with dimensions of 113 x 94 x 71 mm located in distal pancreas. Splenic vein was obstructed by this mass. Abdominopelvic computorized tomography (CT) showed a round hypodense cytic lesion with internal septa and dimensions of 115 x 95 x 70 mm in the distal pancreas.The cystic mass was bulging to the splenic vein. At the laparotomy, nearly the same findings with USG and CT were found. After mobilizitation of spleen and pancreas, abdominal packing was done to prevent the contamination of the hydatid cysts and then distal subtotal pancreatectomy and splenectomy were performed (Figure 1). When the specimen was cut in the operating room, the hydatid cyst and multiple daughter cysts were seen. The patient was discharged with recovery seven days after the operation. Histological examination revealed a germinative membrane, daughter cysts and scolices in the cyst fluid. Albendazole treatment was given for six months at a dose of 10 mg/kg/day. The patient has been followed in our outpatient clinic without any reccurence for 24 months.

FIGURE 1: Macroscopic appereance of hydatid cyst after distal pancreatectomy with splenectomy.

CASE-2

A 57-year-old female was admitted to hospital with a one year history of abdominal pain located in epigastrium and radiating to the back. Five kg weight loss during the last six months and fatigue were the other symptoms. She had no previous history of jaundice, abdominal trauma or surgery, but had hypertension. Fullness in the epigastric region was detected in the physical examination. Routine blood tests and tumor markers were all in normal range.

Abdominal USG revealed a suspicious mass located in the distal pancreas. A CT scan of the abdomen showed a round hypodense cytic lesion with dimensions of 35 x 45 x 25 mm located in the distal pancreas. At the laparotomy a cystic mass of 5.0 x 4.0 cm was found located in the tail of the pancreas and surrounded by spleen and transverse colon. There were no other findings at the laparotomy. After abdominal packing to prevent the contamination of hydatid cysts , distal pancreatectomy with splenectomy was performed. The patient was discharged with recovery seven days after the operation. Histologic examination revealed a germinative membrane, daughter cysts and scolices in the cyst fluid (Figure 2, 3). Albendazole treatment was given for a six months period at a dose of 10 mg/kg/day. She has been followed up for 24 months without any reccurence.

DISCUSSION

Involvement of pancreas by hydatid disease is very rare and accounts for 0.19% to 2% of all hydatid diseases.[1-3] Although the hematogenous dissemination is the most common form of spread, retroperitoneal or local invasion from liver can also be seen.[5]

The clinical findings of a pancreatic hydatid cyst depends on the size and the anatomic location of the lesion. Compression of or fistulization into the bile duct and obstructive jaundice are the most

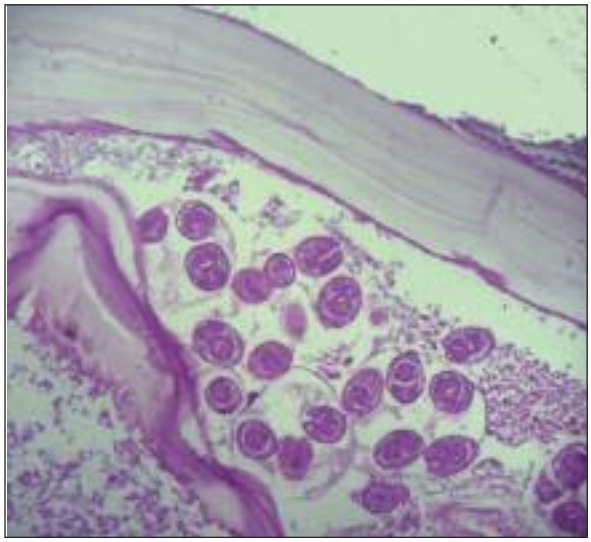

FIGURE 2: Histopathologic appereance of hydatid disease (Hematoxylin-eosin, x40).

common findings if pancreatic head is the localization.[3,5] There is no spesific presentation of the pancreatic body and tail hydatid cysts.[5,6] Asymptomatic abdominal mass, with or without pain and discomfort are the most common findings as seen in our patients.[6]

Curvilinear calcification in the wall of the cyst, daughter cysts, debris-so-called hydatid sand, septae and membrane deattachment are the characteristic radiologic findings of hydatid disease in usual locations.[7] Sometimes it is difficult to detect these findings in unusual locations such as pancreas. Differantial diagnosis of pancreatic hydatid disease from benign or malignant pancreatic cystic neoplasms is always complex in the endemic areas.[3,7] Due to the nature of the pancreatic cystic neoplasms, especially considering the risk of pancreatic cystic adenocarcinomas, the pancreatic hydatid disease is usually ignored in preoperative diagnosis.

Although there are some conservative and medical treatment methods in the management of hydatid disease, surgical procedures are the main and appropriate way of treatment for pancreatic involvement.[1-3,5,6] Partial or total cystectomy, cystoenteric anastomoses, marsupialization and external drainage have been recommened by different authors.[2,3,8] The goal of surgery is to remove all hydatid content without any spillage and to have no reccurent disease.[5] Distal pancreatectomy with splenectomy is the most ideal treatment method in pancreatic hydatid cyst disease located in the body or tail of the pancreas when pancreatic neoplasm is also suspected.[3,6]

CONCLUSION

Pancreatic hydatid disease which is a very rare entity should be considered in endemic areas and treated with complete resection to prevent the reccurence.

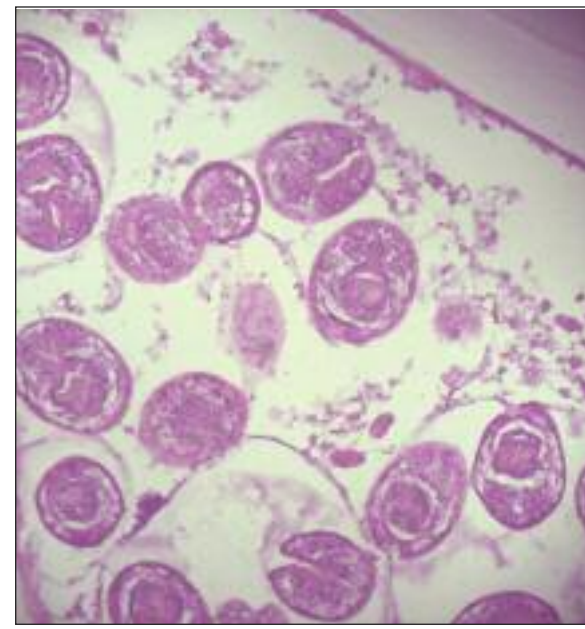

FIGURE 3: Histopathologic appereance of hydatid disease (Hematoxylin-eosin, x40).

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