

AN UNUSUAL ECHINOCOCCAL CYST

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SUMMARY : *We report an unusual case of Echinococcus granulosus infestation presenting with a cystic mass originating in the retroperitoneum and extending through the femoral canal. An excretory urogram (IVP) showed a nonfunctioning right kidney. Computed tomographic (CT) scanning demonstrated a cystic mass with a clear fluid density. Laparotomy was performed on the presumptive diagnosis of hydatid disease and a large cyst measuring 25x15x10 cm in the retroperitoneal space was found. The serological tests were negative after removal of the hydatid cyst.*

Key Words: *Retroperitoneal Mass, Hydatid Cysts.*

INTRODUCTION

Hydatidosis is a parasitic disease that is caused by the tapeworm *Echinococcus granulosus*. The most common sites of hydatid disease are the liver (75%) and the lungs (15%), but rarely in other sites including the retroperitoneum. We present a case of echinococcal disease which was found in the retroperitoneum and extending through the femoral canal.

CASE REPORT

A 44-year-old man with an 8-year history of pain and edema in the right lower extremity had been treated at the cardiovascular surgery department, just prior to his admission to our clinic. Venous power doppler ultrasound was normal at that time. Physical examination revealed a soft, immobile mass in the right inguinal region and right- abdominal space. The

mass had been present for one month and was gradually enlarging. Routine laboratory tests were within the reference ranges. Indirect haemagglutination test (IHA) for hydatid disease was negative. An excretory urogram (IVP) showed a normal left kidney and a nonfunctioning right kidney (Fig. 1). Computed tomographic (CT) scanning demonstrated a cystic mass with a clear fluid density (Fig. 2). A retroperitoneal cystic mass starting just below the lower pole of the right kidney, closely related to the ileo-psoas muscles, was observed. This cyst extended all the way down to the pelvic floor, pushing the bladder towards the left side.

Laparotomy was performed via a right paramedian incision on the presumptive diagnosis of hydatid disease and a large cyst measuring 25x15x10 cm was found in the retroperitoneal space. The cyst contained approximately three liters of hydatid fluid and



Fig. 1: Intravenous pyelography (IVP): IVP showed a nonfunctioning right kidney and the bladder was pushed towards the left side by the abdomino-pelvic mass.



Fig. 3: This cyst extended all the way down to the pelvic floor, pushing the bladder towards the left side.

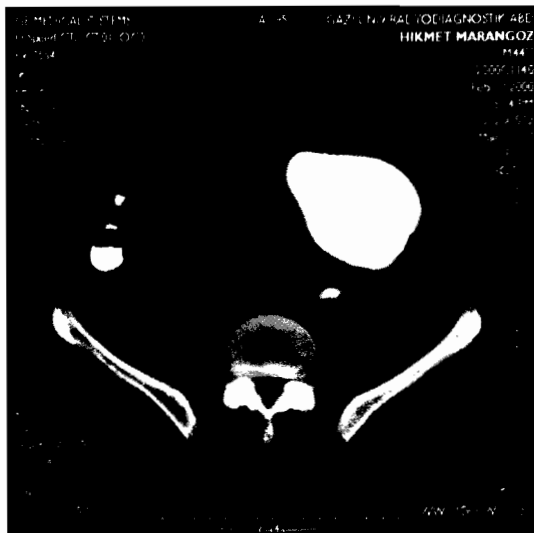


Fig. 2: Computed tomographic (CT) scanning demonstrated a cystic mass with a clear fluid density. A retroperitoneal cystic mass starting just below the lower pole of the right kidney, closely related to the ileo-psoas muscles, was observed.

extended through the femoral canal into the femoral region. The cavity was then sterilised with 15 % hypertonic saline. After irrigation, the cyst wall was excised almost completely, except for a small part that was adherent to the femoral canal. Nephrectomy was performed on the right kidney which was nonfunctional because of cyst mass compression. The abdomen was closed after drainage of the residual cyst and the retroperitoneal space. The postoperative course was uneventful and the patient was discharged on

the 12th postoperative day. Pathological examination of the cyst wall confirmed the diagnosis.

DISCUSSION

Echinococcosis is caused by the tapeworm *E. granulosus*. Although the dog is the primary host, the other principal intermediate hosts are man, sheep and other animals. The embryos of the parasite penetrate the intestinal wall and reach the liver by the portal flow. Echinococcosis has its highest prevalence in countries where the common intermediate hosts are raised, such as the Middle East, Central Europe, Australia and South America (1). The liver and lung are the most frequently involved organs (90%) (2). Primary cysts are found in the kidney in about 2 % of cases (2). The vast majority of abdominal and pelvic cysts are considered to be secondary to prior hepatic localization following spontaneous rupture or surgical inoculation (3). Isolated retroperitoneal hydatid disease is a clinical rarity and probably arises as a result of larval migration through the hepatic and pulmonary barriers (2). The confirmation of hydatid disease is based on serological tests (positive in 70% of cases) (4), ultrasonography and CT (5). The main finding in retroperitoneal echinococcosis is a palpable abdominal mass (5). In our case the main symptom was a palpable abdominal mass and inguinal swelling. Lower extremity pain and edema developed due to cyst compression, while

the right kidney was rendered nonfunctional. Our patient had a primary retroperitoneal hydatid cyst, corroborated by the absence of cysts in the other organs. The serological tests were negative after removal of the hydatid cyst. This case demonstrates that hydatid disease should be considered in the differential diagnosis of every cystic mass in every anatomic location, especially when they occur in areas where the disease is endemic .

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