

Hydatid Cyst in Rectovesical Pouch

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Abstract

A 23 year old man presented with pain abdomen & burning micturation. Ultrasound & CT scan of abdomen showed hydatid cyst in rectovesical pouch. Surgery was performed and pathology of the excised mass confirmed the diagnosis. This case of primary hydatid cyst in rectovesical pouch is being presented because of its rarity.

Key Words

Hydatid cyst, Echinococcus granulosus, Rectovesical pouch.

Introduction

Hydatid disease is caused most commonly by Echinococcus granulosus and may occur in any organ or tissue. Primary hydatid cyst in rectovesical pouch is a extremely rare condition.

Case Report

A 23 year old man presented with pain in lower abdomen. Pain was dull, intermittent, non-radiating with no relation to food or any other specific activity. Patient also complained of burning micturation. Bowel habits were normal. There was no history of trauma or surgery in the past. There was no relevant past or family history. He did not have anemia, icterus or lymphadenopathy. His vitals were normal and weight was 56 kg. Liver and spleen were not palpable & there was no ascitis. There was a well defined palpable lump in hypogastrium, cystic in feel, immobile, non tender with normal local temperature. Routine biochemical & haematological investigations were normal except differential leucocyte count & routine examination of urine showed eosinophilia and urinary tract infection respectively. Chest X-ray was normal. Ultrasound of abdomen showed a multiloculated cystic mass measuring 87 mm x 80mm x 104 mm in rectovesical pouch. The wall & the septa were hyper echoic giving the appearance of cysts (daughter) with in a cyst, which is pathognomic of

hydatid cyst. No such cystic mass was seen in liver, spleen, kidneys or any other abdominal organ.

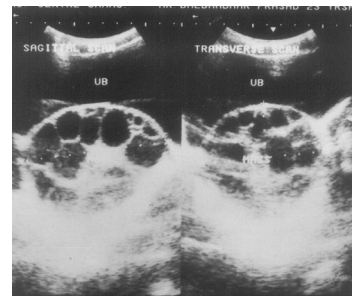


Fig. 1. Ultrasound of abdomen showing multiloculated hydatid cyst.

CT scan of abdomen revealed a well demarcated multiloculated low density mass of fluid attenuation (3-30 HU) with high attenuation of cyst wall & internal septa in the pelvis. The mass was in midline, anterior to rectum and posterior to urinary bladder and was located in rectovesical pouch. It was pushing the posterior bladder wall anteriorly. All other abdominal organs were normal. Surgery was performed to excise the mass. Although Pericyst was involving the posterior wall of urinary bladder, yet meticulous dissection was done to separate the cyst wall & take out the mass intact, there by preventing the spilling of contents. Some of the pericyst was left behind in order to preserve the wall of urinary bladder. Postoperatively patient

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was given albendazole for one month. On macroscopic examination the mass was cystic, pearly white in colour with opaque wall. The wall of the cyst was cut open and it revealed multiple small cysts (daughter cysts). The small cysts contained hydatid fluid with hydatid sand, which represented the scolices. The microscopic examination revealed laminated membrane & scolices.



Fig. 2. CT scan of abdomen showing multiloculated hydatid cyst.



Fig. 3. Showing multiple daughter cysts inside the hydatid cyst.

Discussion

Dog is the definite host of *Echinococcus granulosus* and man can become the intermediate host through contact with infected dogs or by ingesting contaminated food. As liver and lungs act as first and second filter respectively for the embryos, which are released after ingestion of ova, therefore very few embryos enter the systemic circulation. At the site of deposition, the embryo develops into bladder or cyst filled with fluid and is called hydatid cyst (Greek *hydatis*-a drop of water).

Although liver is the most common site of echinococcal involvement, yet cystic echinococcosis infestation can occur in any part of the body and should be considered in the differential diagnosis of cystic masses (1). Peritoneal hydatidosis occurs in 12% of cases and is usually the result of traumatic or surgical rupture of a hepatic or splenic cyst (2). Primary peritoneal hydatid cyst is rare and the mechanism of primary peritoneal infection by the parasite

is still unclear (3, 4). Implantation of the hydatid larva in such cases could be haematogenous. In our case the hydatid cyst found in rectovesical pouch was primary as there was no such cyst in any other organ, thereby making it an extremely rare condition. No specific reference was found in literature about primary hydatid cyst in rectovesical pouch although there are few references of primary hydatid cysts which were retrovesical (5-8).

Ultrasound & CT scan are helpful in diagnosis besides clinical presentation (9-10). The multiloculated appearance of the cyst along with density of the cyst contents indicated that the cyst was alive & viable in our case.

Symptomatic large hydatid cysts should be treated surgically and cystopericystectomy remains the gold standard procedure (11). The surgical approach used in our case was conservative (partial pericystectomy) because of the site and the anatomopathologic characters of the cyst.

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