IMAGING OF ABDOMINAL HYDATIDOSIS: A RARE PRESENTATION OF A COMMON CONDITION

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ABSTRACT

A 76 year old male patient with history of progressive abdominal distension was referred for ultrasound (US) examination to look for the cause of distension. US examination followed by the CT scan abdomen and pelvis revealed multiple unilocular and multilocular cysts along with daughter cysts and cystic ascites. On the bases of imaging the case was diagnosed as abdominal hydatidosis. Imaging plays a pivotal role in the diagnosis of hydatidosis.

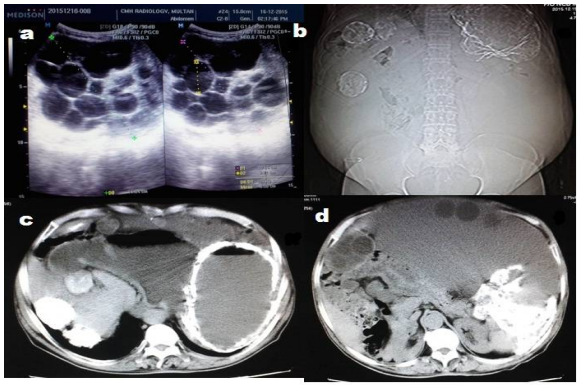
Keywords: Hydatid, Hydatidosis, Imaging.

INTRODUCTION

Hydatid disease is caused by cestode tape worm *Echinococcus granulosus* and rarely by *Echinococcus multilocularis*. In humans it commonly involves the liver (75%) and lungs (15%). Rest of the (10-15%) cases are seen to involve other organs. Abdominal and peritoneal hydatidosis is only seen in 2% cases[1-3]. Here we present a case of a 76 year old man who was referred for US examination to look for the cause of abdominal distension; later on he was diagnosed as extensive abdominal hydatidosis on the bases of imaging findings.

CASE REPORT

A 76 year old male patient presented with progressive abdominal distension over last five years. There was no significant past medical and surgical history or history of trauma. Examination of abdomen revealed positive fluid thrill test suggesting abdominal ascites. He was referred for US (ultrasound) abdomen examination. His US examination demonstrated the presence of overwhelmingly echogenic free fluid. Multiple unilocular and honeycomb like cluster of multilocular cystic masses were noted within the peritoneal cavity, particularly around the liver causing scalloping of hepatic borders. Cystic masses were also seen in the pelvis and few cysts were also demonstrated in the liver. Most of the multi cystic masses showed coarse calcification in their wall. CT (Computed Tomography) study reaffirmed the US findings and demonstrated the daughter cysts with cystic spoke wheel pattern, densely calcified wall and an air fluid level in the largest cyst in the left



Figure–1: (a) Multiple well defined round cysts of variable sizes are noted clustered together on USG images, few of them demonstrating internal undulating membranes, (b) Multiple round cysts with calcified walls in hypochondrial regions on scanogram, (c) CT demonstrates the largest cyst in the left hypochondrium with coarsely calcified walls and a small air fluid level exerting mass effect on adjacent structures, (d) Gross ascites of increased attenuation (34 HU) containing honey comb like clusters of cysts and free floating peritoneal cysts.

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hypochondrium (fig-1). On the base of characteristic US and CT findings the case was diagnosed as extensive abdominal hydatidosis.

DISCUSSION

Hydatid disease is a worldwide problem particularly in cattle grazing areas. It is difficult to diagnose extra hepatic hydatid disease as it is not usually suspected. Its diagnosis prior to the surgery is very important so that the surgeon must be aware of the exact diagnosis as to avoid the spillage during surgery[2,4].

Imaging plays on essential role in the diagnosis and evaluation of this disease. US, CT scan and MRI examination can diagnose hydatid disease. Choice of imaging method depends on the involved organ, and radiologic findings range from purely cystic lesion to completely solid appearance. US is the imaging method of choice but CT has a high sensitivity of 94%. MRI is the best choice to demonstrate cystic component. It also helps to determine vascular or biliary tree involvement[2,5]. The purpose of presenting these case is to share a rare presentation of hydatid disease which otherwise commonly involves liver and lungs.

CONFLICT OF INTEREST

This study has no conflict of interest to declare by any author.

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