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Case Report

Hydatid cyst of ovary: an unusual site

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ABSTRACT

Discovering a hydatid cyst in pelvic region, especially as primary localization, is a rare event; as a matter of fact according to data provided by literature the incidence is between 0.2 and 2.25%. The ovarian involvement is often secondary to a cyst's dissemination localized in a different site. When possible the optimal treatment is represented by radical laparotomic cystectomy. We report a case of an old postmenopausal woman presented with intermittent dull aching pain with 16 weeks cystic pelvic mass which mimicked the ovarian malignancy even after imaging techniques. We treated the case with laprotomic cystectomy

Keywords: Ovarian hydatid, Albendazole, Cytectomy

INTRODUCTION

Hydatid disease is an important public health problem influenced by socioeconomic status & population migration.[1] Human echinococcosis is cause by larval stage of echinococcus granulosus and echinococcus multilocularis.[2] The life cycle involves two hosts – definitive carnivore host (dogs and cats) and intermediate herbivore host (sheep and goat). Humans are infected as an accidental intermediate hosts. Following primary infection hydatid cyst can inhabit at any anatomic site from head to toe. Here we are presenting the case of secondary ovarian hydatid cyst.

CASE REPORT

55 years old multiparous, postmenopausal lady presented with intermittent dull aching lower abdomen pain since 4-5 months. On examination mild hepatomegaly and 16 weeks size cystic pelvic mass was present. On ultrasonography a 8.8x5.7x4.5cm hepatic parenchymal cyst along with a 12.4x12.7x4.5cm thin walled left ovarian cyst was seen. These findings were confirmed on CECT (Figure 1). Tumor markers (AFP, CEA) were normal however CA 125 was mildly raised (52 u/ml). Based on imaging findings immunological studies were done, Echinococcus IgG values were raised 5.4 (normal < 0.9). In retrospective patient gave history of prior surgery for hydatid cyst of liver.

Patient was explored through midline laparotomy. Omental adhesions with pelvic mass were present (Figure 2). Adhesiolysis was done, a thick walled cystic ovarian mass (12 x 11cm) was seen, cystic mass was unroofed after tasking adequate precautions to prevent spillage with mops soaked in hypertonic saline placed all around the mass. Cyst contents were aspirated and then cyst was opened. Daughter cyst were seen and removed. Left ovary with entire cyst was removed and sent for histopathological examination. A calcified cyst was also present in right lobe of liver. Cyst contents were aspirated and marsupialisation of hepatic cyst was done.

Histopathology confirmed diagnosis of hepatic and ovarian hydatid cyst.

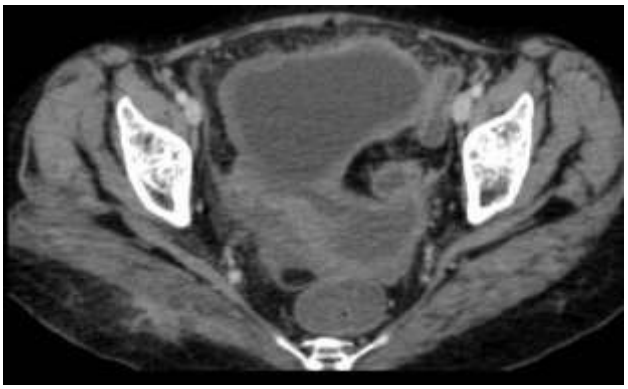

Figure 1 (a): CECT scan image.

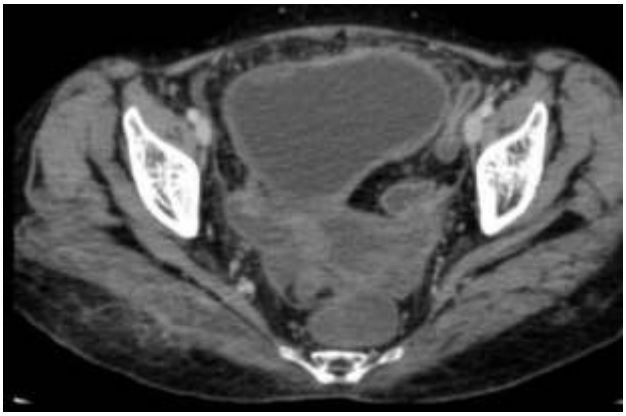

Figure 1 (b): CECT scan image.

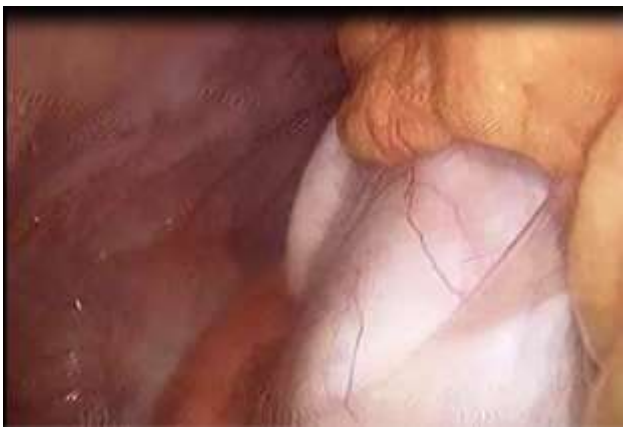

Figure 2: Intraoperative finding of omental adhesions with pelvic mass.

DISCUSSION

Hydatid cyst most frequently occur in the liver (63%) followed by the lungs (25%), muscles (5%) and bones (5%). Other uncommon sites reported are kidney, brain and spleen. Primary hydatid cyst of pelvis is relatively rare,[3] with reported incidence 0.2–2.25%.[4] In 80% cases ovary is affected organ.[5,6] Cases of primary ovarian hydatid cysts are reported, but commonly the affection is secondary to dissemination from another site.[7,9]

In our case also the presentation is most probably due to prior spontaneous or iatrogenic rupture at the time of previous laparotomy. Diagnosis was based on patient's clinical history, biochemical and serological profiles and histopathological diagnosis.

Presentation of pelvic echinococcosis is usually non-specific and can include abdominal pain, menstruation irregularities, infertility and urinary disturbance. Ovarian echinococcosis can mimick either polycystic disease or malignancy. The diagnostic challenge is due to the non-specific symptomatology, along with atypical ultrasonographic finding of a solid ovarian mass. Daughter cyst may resemble septal structures and mimic complicated ovarian cyst or even ovarian malignancy.

Serological test to differentiate hydatid cyst from nonparasitic cysts or abscess has sensitivity varying from 64% to 87%. Histopathological examination is required for final confirmatory diagnosis. A high grade of suspicion or a preoperative diagnosis of echinococcus cyst makes it possible to avoid an intraoperative iatrogenic rupture, and when available, to administer previously an albendazole-based therapy in order to reduce the risk of dissemination that can lead to recurrences. In our case ultra-sound (US) and CT scan associated with a positive clinical history of a previous hepatic echinococcal cyst raised the preoperative suspicion for hydatid disease, helping us to be better prepared to take the necessary precautions to prevent spillage.

Surgical removal of cyst is the mainstay of treatment. Cyst rupture should be prevented. Chemotherapy with benzidimizole has also been used with some success to sterilize the cyst, reducing chances of anaphylaxis and recurrences. Less radical measures like PAIR (puncture, aspiration, injection and reaspiration) have been described for those who are not surgical candidates.

CONCLUSIONS

Ovarian hydatid cyst is a rare entity. This disease constitutes a serious problem of public health in the endemic countries. In order to interrupt the cycle of transmission of hydatid cyst, public health measures should be implemented to eradicate the disease by the removal of infected animals. High index of suspicion and appropriate intraoperative measures must be taken to prevent spillage and thereby recurrences.

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