CLINICAL IMAGE

Primary Peritoneal Hydatid Cyst in a Middle Aged Immigrant Woman

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ABSTRACT

Middle aged immigrant lady presented with abdominal distension and discomfort for the last few months. Clinical examination showed a soft tissue mass occupying the epigastrium and left hypochondrium. Contrast enhanced abdominal CT scan showed a giant cystic lesion in the upper abdomen. Enzyme linked immunosorbent assay was ordered for confirmation of echinococcosis, which came positive. *J Microbiol Infect Dis 2020; 10(2):108-109*.

Keywords: Hydatid Cyst, Abdominal CT, Primary, Peritoneal

CASE SUMMARY

A 40 years old Afghani immigrant lady presented to the outpatient department with the complaint of abdominal distension, discomfort and fullness since last few months. On clinical examination a soft tissue mass could be felt in the epigastrium and left hypochondrium which was dull on percussion. The woman on inquiry revealed that she used to shepherd animals in Afghanistan. Contrast enhanced abdominal CT showed a giant cystic lesion measuring approximately 15 x 11 x 11 cm (Figures 1 and 2) with internal enhancing soft tissue component (daughter cyst, Figure 2) measuring about 1.7 x 1.7cm in the left sub-diaphragmatic region crossing the midline.



Figure 1. A large thin walled cystic lesion measuring approximately 15x11x11 cm is seen in the left subdiaphragmatic region crossing the mid-line. Findings were consistent with the diagnosis of hydatid cyst. Enzyme linked immunosorbent assay was positive for echinococcosis serum IgG antibody. All other investigations including chest x-ray, complete blood count, viral serology, liver function tests, renal function tests, coagulation profile and urine routine examination were normal. Patient was admitted for surgery. Patient underwent cystectomy through laparotomy. She was prescribed albendazole for anti-parasitic coverage. Postsurgical period was unremarkable both in the hospital and for the follow up visit one month back. Primary peritoneal hydatid cysts are guite rare and the imaging finding might be challenging if you don't take into account the patient demographics. An informed consent regarding the use of images for research purpose was obtained from the patient.

Hydatid disease or cyst is caused by Echinococcus granulosis, a parasite. Hydatid disease can virtually affect any tissue/organ of the body but the most commonly affected organs are the liver (75%) and lungs (15%) with spleen, kidney, bones and brain, kidney, etc usually being secondarily involved [1,2]. Peritoneal hydatid disease is mostly secondary to primary hepatic or splenic hydatid cyst. Primary hydatid disease is quite rare and represents only 2 % of the abdominal hydatid disease. Patients present late with vague

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abdominal pain, fullness or anorexia. The diagnosis is usually made with the help of ultrasound, abdominal computed tomography complemented with immunological tests [1,2]. Principal treatment is surgical approach and complete removal. This is augmented by preand postoperative courses of albendazole and praziquantel. The idea behind this pharmacological therapy is to sterilize the cyst, decrease the chance of anaphylaxis, and to reduce the recurrence risk postoperatively [3,4].



Figure 2. A large thin walled cystic lesion with internal enhancing soft tissue component $(1.7 \times 1.7 \text{ cm}, \text{daughter cyst})$ is seen in the left sub-diaphragmatic region crossing the mid-line.

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