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RESEARCH ARTICLE

PRIMARY HYDATID CYST OF THE SPLEEN

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ABSTRACT

Primary hydatid disease of spleen is rare. We report here is a case of 40 year old male presenting with pain in the left hypochondrium at JARASH Hospital on 4/9/2014. The patient gave history of long standing splenic cyst. Then CT Scan was done & revealed cystic swelling within the spleen suggestive of hydatid Cyst. So splenectomy was done and spleen was sent for histopathological examination which confirmed the diagnosis.

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INTRODUCTION

Echinococcus granulosus is one of the parasites that belong to the cestode (tapeworms) which causes the hydatid cyst. It is widespread in the Africa, Middle East, India, New Zealand, South America and Australia. (Franquet *et al*., 1990; Uriarte *et al*., 1991) It commonly involves the liver and lung (Arikanoglu *et al*., 2012). The Spleen is an uncommon site forhydatid cyst, representing less than 2-3.5% of all cases. This make it is challenging for the clinicians, especially in non endemic areas.

Case report

A 40 year old male presented with dull dragging pain in the left upper quadrant of abdomen that was increasing gradually, mild in severity. On examination, his vital parameters were within normal limits. Renal and liver function tests were within normal limits. Blood Test within normal. Ultrasound examination of the abdomen, a single unilocular cyst. Contrast enhanced computed tomography CT SCAN of the abdomen showed a well defined rounded mass 8x8x7 with dense calcification in the spleen suggestive of old calcifiedcyst or abscess. The cyst along with spleen (Figure 1). Splenectomy was done & sent for histopathological examination which confirmed the diagnosis of hydatid cyst of spleen (Figure 2).

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DISCUSSION

Hydatic disease is common in areas where sheep and cattle rearing are important. It is a zoonotic infection caused by the tapeworm of the genus *Echinococcus* (Hariqbal and Sumeet Arora, 2003) The most common form is cystic hydatid disease that is caused by *Echinococcus granulosus*, whereas the alveolar type is caused by *E. multilocularis* (Ibrahim *et al*., 2011). The primary hosts are the members of the canrnivarous family, usually dogs, wolves and coyotes. The life cycle of this worm may also involve other animals called intermediate hosts and are infected via the in ingestion of eggs shed in the feces of infected animals (Hariqbal and Sumeet Arora, 2003). Humans are accidental intermediate hosts that becomeinfected by handling soil, dirt or animal haircontaining parasite eggs. Hydatidosis mostcommonly affects the liver70% and the lungs 15% (Fernández-Ruiz *et al*., 2008).

Practically no organ is immune toinfestation by hydatid disease. (Bhobhate *et al*., 1984) The rare sites include spleen, thyroid, gall bladder, centralnervous system, kidney, psoas sheet, retroperitoneal region, orbit, cervix, and adductor longus muscle.

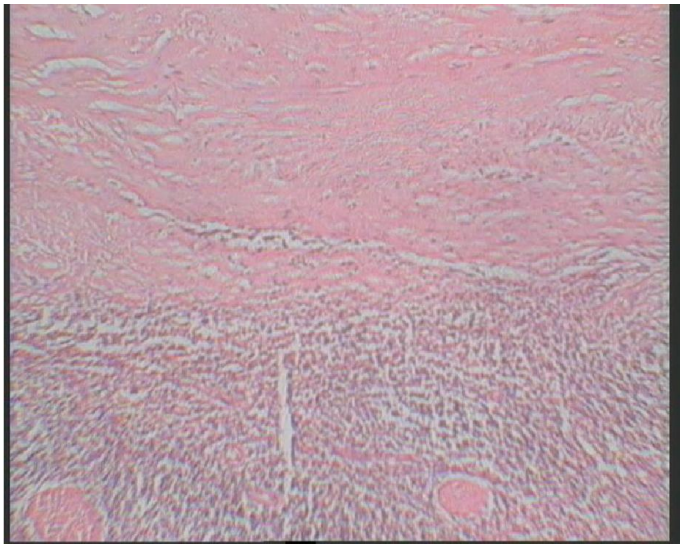

Figure 1.

Primary and isolated involvement of spleen, as in our case, is rare. It has a frequency of 0.5 - 4% within abdominal hydatid disease (Fernández-Ruiz *et al*., 2008). Splenic hydatid cysts are generally asymptomatic. Diagnosis is usually made accidentally for unrelated complaints.

When the cyst grows in size, it gives painful mass in the left upper abdomen. The c linical presentations are possible like renal arterialcompression and systemic hypetension or rupture of the splenic hydatid cyst to the other organs (Pukar *et al*., 2013). Our patient wasadmitted to hospital for sensation of heaviness in her left hypochondrium. The diagnosis is suspected when a cystic lesion is seen in abdominal ultrasonography. The differentialdiagnosis for splenic hydatid cysts includes epidermoid cysts, cystic hemangiomas orlymphangiomas, splenic abscesses orhematoma (Fernández-Ruiz *et al*., 2008). Specific laboratory tests using differentserological reactions; indirect hemagglutination with sensevity 85%, complement fixation, andindirect immunofluorescence are useful fordiagnosis. Immunoelectrophoresis highlights the specific arc 5 of hydatidosis, giving nocross-reaction with other helminths butnegative serology does not exclude hydatid disease (Krassimira *et al*., 2006).

The treatment of the splenic hydatid is debated. Certain authors recommend total splenectomy while others are in favour of conservative surgery. The surgical technique depends on data of imaging and the association with other locations (Rauf Ahmad Wani *et al*., 2005). Surgical excision of the cyst remains the corner stone of curative treatment; nevertheless, good results have been reported with chemotherapy based on albendazole (Usharani *et al*., 2013). According to the WHO guidelines, preoperative administration should begin between 1 month and 4 days before surgery for albendazole and 3 months before surgery for mebendazole. WHO also recommends albendazole after surgery to reduce the risk of preoperative dissemination of hydaticscolices Splenic involvement is an uncommon manifestation of hydatid disease and should be suspected on detection of any splenic cystespecially in endemic areas of the world. Ultrasonography and computed tomographyare the most useful diagnostic tools.

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