Solitary hydatid cyst of the spleen: 
A case report 
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Abstract:
Hydatid disease is endemic in rural areas of India. The most common site of disease is the liver, followed by the lungs, kidney, bones and brain. Other sites such as the heart, spleen, pancreas and muscles are very rarely affected. Splenic hydatid disease has been reported to constitute up to 4% of cases of abdominal hydatid disease. Usually, splenic hydatid cysts are secondary, either resulting from spontaneous spread of cysts or occurring after operations involving hydatidosis in other regions. The rarity of splenic hydatid disease poses a diagnostic challenge for clinicians. Here, we report a case of a primary isolated splenic hydatid cyst in a 34 year old housewife treated with splenectomy.

Keywords: Hydatid cyst, spleen, operative.

Case report
A 34 year old housewife from Kawakhali, a village near the medical college, presented with pain in the upper left abdomen for the last one to one and a half year. She was a non vegetarian who occasionally had pork with addiction for betel leaves and chewable tobacco. They had no cat or dog as pet but owned a cattle shed.

The pain was sudden in onset, gradually progressive in intensity of dull aching type and paroxysomal in nature. There were no aggravating factors but the pain was relieved with mild analgesics. She also had low grade intermittent fever for the last one and a half year. For the last six months she has noticed early satiety and fullness of abdomen and has had considerable weight loss over the same duration. There was no significant past history. She was not a known hypertensive or diabetic. Menstrual history was normal. She has had two natural deliveries and a tubectomy operation 5 years back.

Apart from mild pallor, the general physical examination was unremarkable. Hypertension was absent. Inspection of the abdomen in supine position with propped up knees and hands by the side did not reveal any swelling, discoloration, or prominent veins. On palpation, spleen was found to be enlarged 13 cms along the axis of 9th rib. The anterior notch of the spleen could not be palpated. There was mild tenderness on left upper quadrant. There was no hepatomegaly. Percussion and Auscultation revealed normal results.

Laboratory studies revealed normal leucocyte counts, mild normocytic anemia (Hb 10.0 g/dl) and normal liver function tests (Serum Bilirubin 0.3 mg/ dl, AST 19 U/L, ALT 10 U/L). Echinococcal Immuno Assay (ELISA) to look for IgG against Echinococcal antigen was negative. (0.086 OD; positive above 0.3 OD and negative below 0.3 OD)

Skiagram of the abdomen revealed well-defined, rounded soft-tissue opacity with calcified margins in the left hypochondrium. Abdominal CT scan shows a homogenous cystic lesion in spleen measuring 60 x 57 mm with calcified walls and mild splenomegaly. All other organs appeared normal on the CT scan.

Laparotomy was performed through a midline incision. patient was vaccinated for Streptococcus pneumoniae, Haemophilus influenza type b and Neisseria meningitides and operated after 2 weeks following the last vaccination. The postoperative period was uneventful and the patient was discharged on the seventh postoperative day. The patient was asked to follow up at the concerned unit after 6 months or as

![Image]

Figure 1: X ray abdomen in erect posture shows calcified cystic mass in the left hypochondrium

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and when needed. She was put on a lifelong penicillin prophylaxis of 250-500 mg daily.

**Discussion**

From a clinical point of view, clinical manifestations of hydatidosis in humans are variable. Most patients seem to tolerate the infection for extended periods without any symptoms, or they may suddenly show dramatic and acute symptoms. Symptoms are mostly due to the mass effects of the cyst like pain in the left hypochondrium and renal artery compression leading to systemic hypertension. The cyst can rupture resulting in spread to other organs or may cause anaphylaxis reaction to the contents of the cyst.

Radiological imaging with X-Ray, Ultrasonography (USG), CT and MRI can also be used to diagnose hydatidosis. On abdominal or chest radiograph, marginal or crumpled eggshell-like calcifications in the splenic area are suggestive of splenic hydatidosis. Ultrasonography and computed tomography are the major diagnostic tools for splenic hydatid cyst. Serological tests are highly sensitive and specific for Echinococcosis.

Splenetic hydatid cysts are usually treated surgically because of the increased risk of spontaneous or traumatic rupture. The standard treatment is splenectomy (Hoffman, 1957) as complete resection removes all parasitic and pericystic tissues.

Despite major advances in our understanding and treatment of hydatidosis over the past two decades, control of this zoonotic disease remains a challenging endeavour. Fortunately, because of the high risk of infection, the high morbidity rate and the unpredictable outcome of hydatid infection, there is an increasing realization in international health agencies that hydatidosis is an important disease that causes life-threatening morbidity. Like many diseases, prevention is the key to control, and we know that simple changes in social habits and hygiene can prevent infection and disease in humans.

**Conclusion**

Although rare, the spleen is the third commonest organ for hydatid cysts. It is difficult to diagnose as patients may remain asymptomatic or present with dramatic symptoms. Hydatid disease should be considered in the differential diagnosis of all cystic masses in the abdomen, especially in the geographical regions where the disease is endemic. Patients with equivocal history, physical findings, or laboratory results should not be considered negative unless there are no obvious positive radiographic findings. Computerised tomography scan is the most sensitive investigation for diagnosis. A surgical resection with an intact hydatid cyst is the best curative procedure. Postsurgical pharmacological treatment is necessary to ensure complete healing.

**Declaration of patient consent**

The author certifies that written informed patient consent was obtained before publication. The patient understands that no identifying information will be published and identity of the patient will be completely concealed.

**Funding: no funding sources**

**Conflict of interest: none declared**

**References**