

HYDATID CYST OF SPLEEN

Bhuiyan MJH¹, Siddiq AKMZ², Akhter L³,

Introduction

Hydatid disease is endemic in region where animal husbandry is common¹. The causative organism is tape worm *Echinococcus granulosus*, is present in dog intestine and the ova are ingested by human and pass in the portal blood to the liver. In human the liver is the organ most frequently affected followed by the lungs². Splenic hydatid disease is rare, its occurrence even in endemic areas is less than 5% of the total incidence of the echinococcosis³. A case of hydatid cyst of spleen is presented here which is very rare disease in Bangladesh too. The disease is mainly diagnosed by the ultrasonography of abdomen. Serological diagnosis is done by Enzyme Linked Immuno Sorbant Assay (ELISA) for *Echinococcus granulosus* antibody. Diagnosis is confirmed now a day by CT scan of abdomen.

Case Report

A female patient of about forty years from Sirajganj presented with the complain of fever for three months dull-aching pain and heaviness of the left side of the abdomen, gradual loss of weight, loss of appetite and generalised weakness. On examination of the chest there was no abnormality. On abdominal examination, abdomen found slightly distended, umbilicus centrally placed, liver not palpable, spleen palpable three inches from left costal margin and slightly tender. Ultrasonography of the abdomen showed-enlarged spleen, multi-cystic soft tissue mass measuring 169x115 sq mm which seemed a hydatid cyst. CT scan of abdomen showed large hydatid cyst within the spleen without any calcification.

Operation Note

Exploratory laparotomy and splenectomy was done under general anesthesia. Through left subcostal incision abdomen was opened, spleen was hugely enlarged about four fold, which was difficult to mobilize. Cystectomy was done, daughter cysts were removed cautiously. Then splenectomy was done, haemostasis obtained. Liver, pancreas and omentum, were normal, abdomen was closed in layer keeping a drain in situ. One unit of blood was transfused during operation. Post operative anaesthetic recovery was uneventful and no other post-operative complications observed. Stitches were removed after tenth post-operative day and the wound was healthy.

During discharge from the hospital, patient was advised to take Tablet Albendazole 400 mg per orally twice daily for three months. Patient was reviewed monthly for three months. There was no post-operative complication.

Discussion

Hydatid disease is endemic in South America, Africa, Middle East, Turkey, Southern Europe, India, New Zeland and Australia. Infestation by hydatid disease in human most commonly occurs in the liver (55-70%) followed by the lungs (18-35%), the two organs can be affected simultaneously in about 5-13% of cases^{4,5}. Splenic hydatid cysts are uncommon and are often asymptomatic⁶. In reported case it was presented as a painful mass in left upper abdominal quadrant and enlarged spleen with fever. The common complications are infection rapture cyst in the abdominal cavity. Harefuah. described a twenty years old soldier who



Fig-1: Specimen of Daughter cysts

presented with anaphylactic shock due to rupture of a splenic echinococcal cyst induced by blunt trauma to the left chest wall and upper abdomen. The main clinical manifestation which developed within minutes of the trauma, were high fever, pruritis, oedema of lips and eye lids, dyspnoea, stridor and rhinorrhoea. Eosinophilia was not present on admission but appeared four days latter⁷. The main problem in the diagnosis of splenic hydatidosis is in differentiating it from other splenic cystic lesions, such as epidermoid cyst, pseudocyst, abscess, haematoma and cystic neoplasm of the spleen. Hydatidosis should always be suspected particularly in endemic areas⁸. More definitive diagnosis is based on abdominal ultrasound and CT scan which have greater sensitivity & specificity⁹. CT

1. Dr Md Jahangir Hossain Bhuiyan MS, Asstt Prof of Surgery, Ibn Sina Medical College; 2. Maj Gen AKM Zafrullah Siddiq FCPS, DGMS, Bangladesh Armed Forces; 3. Dr Latifa Akter MBBS, Dept of Obs and Gynac, BSMMU.

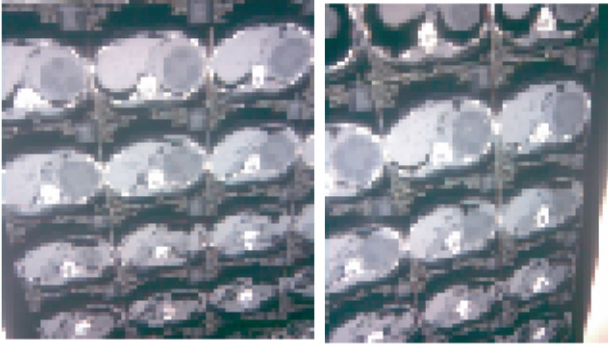


Fig-2: CT scan of abdomen shows splenic hydatid cyst

Scan of abdomen confirms the cystic lesions with or without daughter cysts. Within the spleen, with

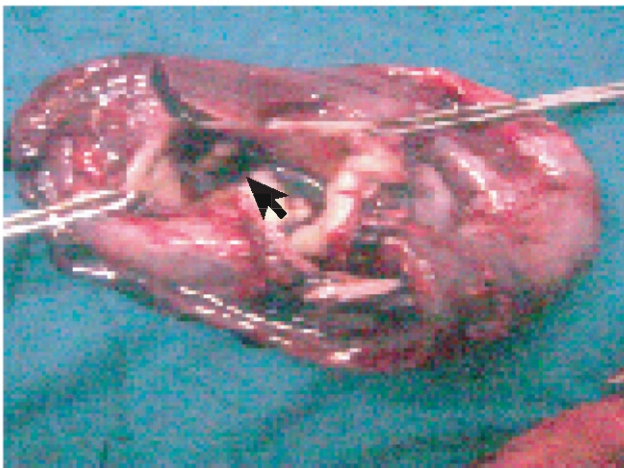


Fig-3: Specimen of spleen after splenectomy shows large hydatid cyst (arrow).

attenuation value near that of water and does not enhance after intravenous contrast administration. It is more sensitive than ultrasonography in depicting subtle wall calcification¹⁰.

Although splenectomy has been the conventional treatment of choice for splenic hydatidosis. Khoury et al had recommended laparoscopic approach for

uncomplicated hydatid cyst of liver and spleen which has been a safe and effective option with favorable long term results¹¹.

After splenectomy no infection was encountered, since disseminated echinococcosis is an absolute indication for anti-helminthics drug therapy, the patient was also given Albendazole 400 mg twice daily for three months¹².

Conclusion

A hydatid cyst must be included in the differential diagnosis of cystic lesions of the spleen. A splenic hydatid cyst should be treated surgically due to the high risk of a rupture and ideal procedure in adulthood is standard splenectomy

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