

Primary Hydatid Cyst of Spleen - A Rare Entity

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Abstract

Hydatid disease is endemic in farming areas but occurs worldwide. 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.¹ The rarity of splenic hydatid disease may pose a diagnostic challenge for clinicians, especially in nonendemic areas.² In this report, we present the case of a young women who was admitted to our hospital with the history of pain in the left upper abdomen and with the complain of heaviness in the left upper abdomen. She got the usg and cect whole abdomen done in december and was told to have a large cyst in left uppen abdomen. She has a history of pain abdomen since the last 7 months for which initially she went to the local doctor and was prescribed some medications and got relief of pain.

Key Words -Spleen , hydatid cyst, splenectomy

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I. Introduction

Splenic hydatidosis has been reported since ancient times. It may be detected incidentally or present with non-specific complaints. It is endemic in cattle-rearing areas of the world. Worldwide incidence of splenic hydatid is 0.5-4%. [3]. Parasitic cysts of the spleen are almost exclusively hydatid cyst. In endemic areas 50 -80 % splenic cysts are echinococcal.

II. Case Report

We present a case of a 21 year old lady who presented to the S.M.S hospital jaipur in the department of general surgery in december 2020 with a complain of pain in the left upper abdomen since the last 7 months . The pain was dull aching in nature , mild in intensity , having no relation with the food and was on and off in nature . 7 months back the patient went to the local doctor and was prescribed some medications and got relief. After 1 month she again had the pain ,went to a district hospital there she got the ultrasound abdomen done and was told to have a cyst which was small at that time. So she was prescribed some medications and she used to get relief from it.

After that patient came to our opd on 30th december 2020 with the complain of pain abdomen and heaviness in the left upper abdomen and with early satiety. Upon clinical examination there was mild tenderness in LUQ with the well defined huge mass palpable , reaching 3 cm above the umblicus. Repeat ultrasound whole abdomen of the patient was done which was suggestive of 13×14 cm thickened well defined cystic lesion with detached membrane and echoes – hydatid cyst. Then CECT whole abdomen was done , the findings were –

- 1) Spleen is bulky and shows peripherally enhanced lesion measuring 12×14×15.8 cm in size with thin septa and calcification.
- 2) It is bulging outside the capsule of the spleen and causing mild compression over greater curvature of stomach and tail of pancreas likely dermoid cyst(ddx hydatid cyst).



Laboratory examination of the patient was unremarkable except the anti echinococcal igG antibody which came out to be positive as 3.10(>1.1 s/o positive report).

So now after the proper evaluation of the patient we prescribed the patient with the tablet albendazole 400mg bd for 14 days and the patient was also vaccinated with the 3 vaccines against the capsulated organisms – meningococcal , pneumococcal and hemophilous influenza b, then she was readmitted into the ward after 14 days .

Now the definitive surgery of the patient was planned- open splenectomy.

A single dose of the antibiotic prophylaxis was given under general anesthesia. 15 cm long incision was given in the left subcostal region . All the layers of abdomen were opened one by one, huge cyst was found along with the gross splenomegaly. Spleen was made free from all the attachments and all the vascular pedicles were tied taking care not to rupture the cyst and the whole cyst along with the spleen were taken out as en masse. Hemostasis was achieved and a abdominal drain no 32 was put in splenorenal pouch and the skin incision was closed layer by layer.





The patient recovered well after the surgery . She was allowed clear liquids on the same evening and with liquids and semisolid diet the next day.

There was no note of any febrile episodes and the post op recovery was uneventful. Post op chest xray of the patient was done which was normal and the patient was advised to do intensive spirometry and chest physiotherapy and adequate mobilisation of the patient was done. The patient was discharged on the post op day 4.

On the postop day 10 patient was reviewed in the opd. The wound was healthy and the skin stapplers were removed.



III. Discussion

Hydatid disease(Echinococcosis) is a zoonotic infection caused by the larval form of the parasites of tapeworm *echinococcus granulosus*. Humans are the accidental intermediate host[7]. Four species of *echinococcus* causes infection in the humans ; *Echinococcus granulosus* and *Echinococcus multilocularis* are the most common. The two other species are *Echinococcus vogeli* and *Echinococcus oligarthus*, and are less frequently associated with human infection [8].

Splenic hydatid cysts are generally asymptomatic. Diagnosis is usually established incidentally during investigation of unrelated symptoms. When the cyst reaches an advanced size, the patient presents with a painful mass in the left hypochondrium.[1,2]. Our patient was admitted to hospital for pain and a rapidly enlarging mass in the left upper quadrant of her abdomen.

The imaging characteristics of splenic hydatid cysts are similar to those of hepatic hydatid cysts:[5] calcification of the cyst wall, the presence of daughter cysts and membrane detachment. The differential

diagnosis for splenic hydatid cysts includes other splenic cystic lesions such as epidermoid cysts, pseudocysts, splenic abscesses, hematomas and cystic neoplasms of the spleen. [5,6].

IV. Conclusion

Despite the advances in medical technology, it is still difficult to differentiate between parasitic and non-parasitic splenic cysts.

Patient's personal history, the presence of calcification of the cyst wall, and especially the presence of daughter cysts in a large cystic lesion or concomitant cystic lesions in the liver or other organs, are helpful for diagnosing splenic hydatidosis. CT remains the most sensitive investigation for diagnosis. Total splenectomy is the treatment of choice in adults because it offers complete cure from the disease with low mortality and morbidity rates, but in children spleenpreserving surgery should be considered to prevent OPSI. Although the recurrence rates are much lower for the splenectomy as considered in spleen preserving surgery but still preoperatively and postoperatively medical prophylaxis should be considered in the form of albendazole or praziquantel.

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