



Hydatid Cyst of Spleen- A Rare Entity

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Abstract

Hydatid disease of the liver is still endemic in certain parts of the world but the hydatid cyst of Spleen is a rare entity. The diagnosis of non-complicated hydatid cyst depends on clinical suspicion. Ultrasonography and computed tomography, the most important diagnostic tools, are helpful for determining the complications and planning treatment. The modern treatment of hydatid cyst varies from surgical intervention to percutaneous drainage or medical therapy. Surgery is still the treatment of choice and can be performed by the conventional or laparoscopic approach. Percutaneous drainage and treatment of the cyst with hypertonic saline or alcohol seems to be a good alternative to surgery in selected cases.

Hydatid disease is a parasitic infestation of humans caused by Echinococcus granulosus. Dogs and some wild carnivores like foxes are definitive hosts, harbouring worms in their intestine. Eggs are passed in the faeces and eaten by the intermediate hosts, and larvae encyst in the liver, lungs, Spleen and other organs.

Case Report

A 40 year old woman presented to the Surgery department of S.L.N. Medical College & Hospital, Koraput, Odisha, for abdominal mass in epigastric region & associated with mild pain, an ultrasound examination of her abdomen revealed huge hydatid cyst in spleen.

Ultrasound revealed a huge mixed echogenic predominantly cystic mass in the region of the spleen. The normal splenic tissue was replaced with this cystic septated mass. There were a few specks of calcification and septation was also noted. Because of the nature of the mass a provisional diagnosis of hydatid cyst was made and she was referred for urgent computed tomography. The computed tomogram revealed a large cystic mass with septations in the spleen. A diagnosis of hydatid cyst was made. Further

investigation like ELISA test for hydatid cyst was positive.

The case was reported as hydatid cyst of spleen is a rare entity. we have done splenectomy The patient recovered uneventfully & discharged with tab. Albendazol 10mg/ kg body wt. twice daily & advised to continued this medication for next follow up.



Fig 1 a Hydatid Cyst of Spleen



Fig 1 b Cystic Aspiration



Fig 2a,b (Daughter cyst & Cystic Cavity)



Fig. 3 Splenectomy

Discussion

In humans hydatid disease is caused by the larvae of a flat tapeworm, *E granulosus*. It is seen worldwide and is endemic in many areas, of India. The life cycle alternates between herbivores and carnivores for example, sheep and dogs; man is an accidental intermediate host and an end point in the parasite's life cycle. The sheep ingests the egg

and the egg hatches in the small intestine and the larval tapeworm burrows through the intestinal wall and travels to the liver via the blood. The hydatid cyst develops in the liver, lungs, Spleen, brain, or other organ. When a dog eats the sheep viscera and ingests the hydatid cyst, the protoscolices attach to the small intestinal wall and the worms begin to form proglottids. Gravid proglottids, containing the eggs, detach from the end of the worm and spill their eggs into the lumen of the intestine. The eggs pass out in the faeces. Animals like cows and sheep become infected by eating the contaminated grass. Contaminated vegetables are the culprit in human infestations.

Treatment

Hydatid cyst of the spleen must be treated surgically.^{1,2} Albendazole 10 mg/kg/day for 3–6 weeks before surgery should be given to sterilise the cyst. During surgery special care should be taken not to spill the hydatid fluid. Precautions include packing the area with povidone iodine soaked sponges, aspiration of some of the hydatid fluid to reduce the tension, instillation of a scolicidal agent like hypertonic saline, and use of a suction cone.^{3,4} The pericyst is incised so that the hydatid cyst extrudes. The cyst is usually held with a sponge holder and removed very carefully (with daughter cysts inside). The residual pericystic cavity can be partially excised, filled with saline, and closed or obliterated with multiple purse string sutures. If endoscopic retrograde cholangiopancreatography reveals any daughter cysts in the common bile duct the duct should be explored, cleared, and drained with a T tube. After the operation the patient should continue albendazole for at least 6–8 weeks to clear up any spilled hydatid fluid containing live scolices.⁵ Recent reports of percutaneous aspiration and obliteration of hydatid cyst of liver with sclerosant have appeared in the literature, but the role of this treatment method still remain unproved.^{6,7}

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