

Retroperitoneal Hydatid cyst

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ABSTRACT

Hepatic cysts are a diverse group of lesions ranging from developmental infection to neoplastic in etiology. Hydatid infection with *E. granulosus* is a major public health problem & a common cause of cystic lesions of liver. Human infection occurs following oral ingestion of cestode eggs. Advances in abdominal imaging have led to increasing incidental diagnosis of asymptomatic cysts, diagnosis prompts therapy to halt the progression of infection & to prevent complications. Retroperitoneal hydatid cysts are extremely rare, we here present a case of retroperitoneal hydatid cyst presented with a vague abdominal discomfort. Diagnosis was made on Radiological imaging & Serological tests.

Keywords: Hydatid Cyst, Retroperitoneum, Cysto-pericystectomy.

INTRODUCTION

Hydatid disease is one of the oldest diseases known to mankind. In 85-95% of the cases the liver/lung is involved and in 5-15% the cyst occurs at other sites (spleen, kidneys, retroperitoneum, brain). Primary retroperitoneal hydatid cyst is extremely rare and only occasional case reports have been documented. Most cysts are asymptomatic for prolonged periods.

CASE REPORT

A 58 year old male presented to the General Surgery OPD with history of abdominal discomfort in the form of vague abdominal pain & abdominal distension over the past 15 days. It was insidious in onset & pain increased in its severity during the 3 days before arriving at hospital.

No radiation of pain, No vomiting/fever/jaundice. Normal bowel and bladder habits.

General physical examination was normal. patient afebrile with vitals stable.

Examination of abdomen revealed a lump in the right lumbar region, firm, moving up and down with respiration, lower border is well defined and is 6 fingers below the costal margin. Dullness over the swelling is continuous with the

liver. The initial impression was simple liver cyst, and hence proceeded with further investigations.

USG Abdomen the appropriate 1st line diagnostic test, confirms the diagnosis, number & location. In this patient it suggested the presence of multiple large cystic lesions noted in the right lobe of liver extending into sub hepatic region largest of size 6 cm displacing the kidney anteriorly. CECT abdomen confirmed a hydatid cyst in retroperitoneal region.

MRCP done to check for biliary communication, suggestive of mild compression of the biliary radicles. Diagnosis is confirmed by Serological demonstration of an antibody response

Patient has been treated preoperatively with Albendazole 400mg twice daily for 1month.

The patient was taken up for surgery for evacuation to prevent further infection & intraperitoneal rupture [Figure 1]. Large hydatid cyst displacing the kidney anteriorly, after taking adequate precautions to avoid spillage, on puncturing the cyst, straw coloured fluid aspirated, intact daughter cysts, grand daughter cysts found [Figure 2].



Figure 1



Figure 2

Figure 1: Photograph showing intra operative findings

Figure 2: Photograph showing many daughter cysts.

Excised the redundant portion of the cyst, leaving out the pericyst intact to peritoneum. The cyst edges sutured to prevent bleeding [Figure 3].

Cysto-pericystectomy done observing the usual adequate precautions to avoid anaphylaxis. The rest of the peritoneal cavity & the liver were thoroughly examined to rule out any other hydatid cyst. Patient had an uneventful post operative

period and the drainage tube was removed after a few days. Post-operative period uneventful. Suture removal done and wound healing was satisfactory. The cysts were sent to Pathology department and it was confirmed as Hydatid cyst on histopathology [Figure 4].



Figure 3

Figure 3: Photograph showing intra operative findings

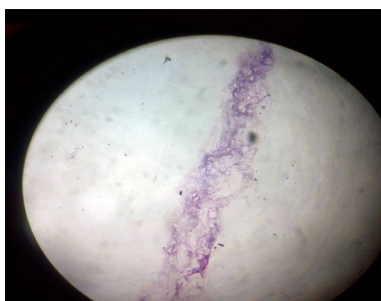


Figure 4:

Figure 4: Microscopic picture showing hydatid laminated membrane.[H&E,x100].

DISCUSSION

Man is an accidental host in the life cycle of the *E. granulosus*. Life cycle has definitive host which is dog, intermediate host is sheep and humans are accidental intermediate hosts. When they get infected from dogs, infestation occurs when the infected cestode eggs are swallowed. In the stomach, the outer protective coat of egg is digested and larvae are liberated^{1,2}. These penetrate the mucosa of proximal bowel to enter the portal system. About 85-95% of the larvae are trapped in the liver & lung & only 5-15% escape into systemic circulation to involve other organs - muscle, kidney, retroperitoneum, brain. Retroperitoneum involvement was always thought to be secondary to rupture / spillage during surgery of liver hydatids. Primary retroperitoneal hydatid cysts are rare^{3,4,5}.

The development of cyst in liver is often responsible for severe complications including local infection, biliary fistula, rupture to peritoneum/chest. Correct pre operative diagnosis is difficult to make. Diagnosis is made with good imaging techniques. Surgery is the most effective treatment.

As a result of slow growth, cysts usually become symptomatic a few years after infection. Most people with good immunity may overcome infection, making cyst viable without ever becoming symptomatic. Humans are dead-end host, the disease is not transmitted from human to human.

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