## DISSEMINATED INTRAABDOMINAL HYDATID DISEASE WITH UMBILICAL HYDATID CYST AND SPONTANEOUS CYST RUPTURE: A RARE CASE REPORT

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#### ABSTRACT

#### INTRODUCTION

Hydatid cysts located superficially may rupture following trivial trauma that often goes unnoticed by patients. The role of surgical intervention is paramount in such circumstances. We present a patient with multiple intraabdominal hydatid cysts.

#### **KEYWORDS**

Hydatid cyst, Echinococcosis, Umbilical hydatid cyst, Ruptured hydatid cyst.

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**INTRODUCTION: CASE REPORT:** A 44-year-old lady was admitted to our OPD with complaints of abdominal pain and distension associated with dragging type of upper abdominal pain of 5 years' duration. On examination her abdomen was grossly distended, with an everted umbilicus and tenderness in her epigastrium and right hypochondrium, and free fluid with shifting dullness on percussion. Routine laboratory investigations were normal. Abdominal ultrasonogram revealed an intraperitoneal, exophytic cystic lesion of size 4.2 cm x 4.6 cm attached to the hepatic capsule with multiple intraperitoneal daughter cysts, & superior displacement of the liver. CT Abdomen revealed a large hydatid cyst replacing the entire liver with multiple daughter cysts inside & gross loculated intraperitoneal fluid collections containing multiple daughter cysts.



Fig. 1: CT ABDOMEN—intraabdominal hydatid cyst, including umbilical cyst

She was posted for laparotomy with a diagnosis of ruptured intra-abdominal hydatid cyst. Albendazole was administered pre-operatively for 1 week. Intra-operatively,

a huge thick-walled cyst of size 15 cm x 10 cm in the right lobe of liver involving segments 5, 6 & 7, another cyst of size 7 cm x 8 cm arising from the left lobe of the liver & a cyst measuring 4 cm x 4 cm in the omentum with adherence to the umbilicus were noted.



Fig. 2: CT ABDOMEN-intraabdominal hydatid cysts



Fig. 3: Umbilical hydatid cyst

Pericystectomy <sup>1</sup> was done, and around 2 litres of hydatid fluid & numerous daughter cysts were aspirated, after taking measures to avoid spillage. The umbilical cyst was removed in toto. The other cyst cavities were washed with 20% povidone iodine solution followed by partial anterior

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cystectomy & obliteration of their cavities by introflexion after keeping intracystic tube drains, as they were adherent to the omentum and bowel posteriorly. Post-operative period was uneventful. A follow-up ultra-sonogram revealed no residual collection & the patient was discharged on the fourteenth post-operative day after removing the drains. She was advised to continue taking Albendazole for 6 months after discharge.

DISCUSSION: Hydatid disease or Echinococcosis is a zoonosis that occurs in regions where sheep-grazing is common.<sup>2</sup> Dogs are the definitive hosts for the parasite. Humans acquire the disease from dogs. Human infestation is a dead end in the life cycle of this parasite. Echinococcosis granulosus is the most common organism associated with hydatid disease, whereas E. multilocularis and E. oligartus account for a minimal amount of cases. The adult tapeworm is attached to the villi of the ileum of dogs, passing thousands of ova (eggs) per day along with dog faeces. Sheep are the usual intermediate host, whereas humans are accidental intermediate hosts. In the human duodenum the parasite releases an oncosphere that penetrates the mucosa and enters the bloodstream to reach the liver (most commonly) or the lungs, where the larval stage, known as Hydatid cyst develops. Hydatid disease equally affects both sexes with a median age of diagnosis of 45 years.

Hydatid cysts usually remain asymptomatic till complications occur.<sup>3,4,5</sup> In case of rupture disseminated hydatid disease with potential anaphylactic reaction may occur.<sup>6</sup>

**CONCLUSION:** Hydatid cyst rupture may lead to severe anaphylactic reaction and death. Here we have a patient in whom hydatid cysts had grown quite large and had undergone rupture, without such complications. Another interesting aspect of this case was the presence of an umbilical hydatid cyst.<sup>7,8</sup> The role of surgical intervention in complicated hydatid cysts cannot be emphasized enough.<sup>9</sup>

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