

CASE REPORT

Disseminated intra-abdominal Hydatidosis - A Case Report

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ABSTRACT

Aim: We present a case of advanced Hydatidosis with cysts at unusual sites throughout the abdomen.

Background: Cystic echinococcosis is the most common zoonotic disease caused by the larvae of *Echinococcus granulosus*. Humans are the intermediate hosts in their life cycle 1, 2. Adult worms have been recovered from their definitive hosts (dogs, jackals, and wolves), but pathological reports have reported human cases from hospital archives 3. The infection is commonly seen in the liver, muscles, and bones. However, other organs, such as the kidney, brain, and spleen, are also affected. The disseminated intra-abdominal Hydatid disease is rare and accounts for 2% of intra-abdominal cysts 2, 4. We have a case where multiple Hydatid cysts were present in the abdominal cavity.

Case description: We report a case of diffuse abdominal Hydatidosis in a 60-year-old male patient. He was admitted to the hospital with a complaint of pain abdomen and distension for two months. He was a known case of COPD with no history of contact with carnivores or sheep. Physical examination revealed a non-tender distended abdomen with mild liver enlargement. Routine blood investigations were also normal, with no rise in the eosinophilic count. Computed tomography (CT) scan revealed multiple, well-defined cysts throughout the abdomen (fig 1). The cysts varied in size, with the largest in the right lobe of the liver measuring=12x8cm, 6x5cm in the bladder neck, 4x6cm in the omentum, 4x3 cm in the splenic hilum, and a few mesenteric cysts. Few cysts showed septa and daughter cysts. Features were consistent with diffuse abdominal Hydatidosis.

Two of the omental cysts were removed. Grossly, the cysts had ivory-white colored membranes and inner semitransparent white and yellowish membranes (Figure 2A). On histopathology, multiple laminated membranes were identified with surrounding dense host inflammatory response and extensive areas of necrosis and calcification (figure 2B). There was an exacerbation of COPD, and the patient was discharged 16 days after the surgery. The anthelmintic agent albendazole (10 mg/kg) was administered daily to the patient. The patient expired after two months of surgery.

Keywords: Hydatid cyst, *Echinococcus granulosus*

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Hydatid disease is an important public health problem throughout the world. In India, Kashmir is an endemic state for hydatid disease. Most of the cases are seen in the rural population. The infection occurs in childhood with asymptomatic progression until late adulthood⁴. Clinically the disease presents with non-specific signs and symptoms such as abdominal pain, fullness, fever, shortness of breath, and headache. The diagnostic modalities are ultrasonography, CT scan, MRI, and serology. Hydatid disease has been classified into three types by the World Health Organization Informal Working Group on Echinococcosis (WHO-IWGE). Based on ultrasound findings the disease can be active, transitional, and inactive. Fine needle aspiration cytology can help in diagnosis but

prophylactic antihelminthics should be started to prevent anaphylactic reaction and peritoneal seeding.

The liver and lungs are the most commonly affected organs, but the disease can be present in any organ of the body. In this case report multiple hydatid cysts were present in the abdomen, some at unusual sites such as the spleen, bladder, and omentum. They are asymptomatic with nonspecific left upper quadrant pain in a few patients. When multiloculated cysts are present throughout the abdominal cavity, the condition is referred to as peritoneal hydatidosis³. Omentum is also a rare site and usually reaches the pelvis and presents

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as a pelvic cyst⁷. Most of them result from the traumatic or surgical rupture of a hepatic, spleen, or mesenteric cyst. These may also result from the dissemination either through lymphatic or systemic circulation².

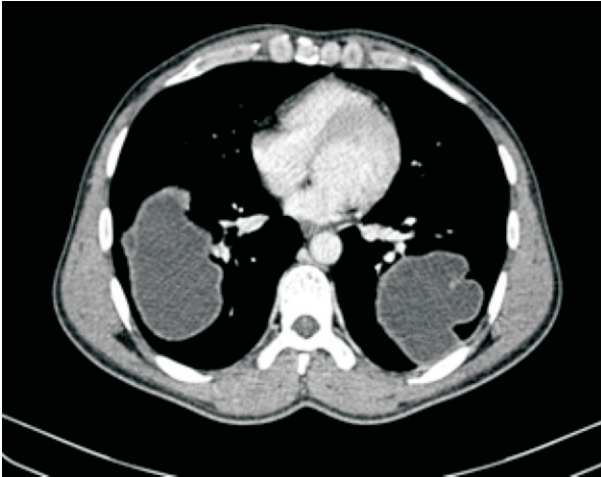


Figure 1: Abdominal CT scan showing multiple cysts.



Figure 2a: Gross image of omental hydatid cyst

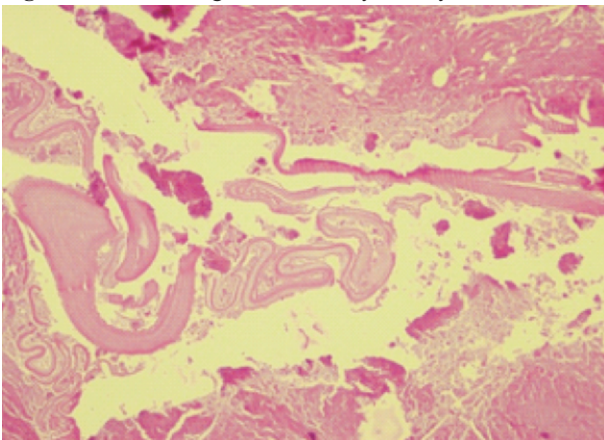


Fig. 2b: M/E:-Laminated membranes with areas of necrosis (H&E x200).

The treatment of choice for disseminated abdominal hydatidosis is surgical excision, accompanied by postoperative medical therapy. Laparotomy is mostly performed. Radical procedures such as liver resection and pericystectomy are procedures to resect the closed cysts with a wide safety margin^{3,4}. After surgery, albendazole therapy should be started for 4 months, and follow-up is advised with imaging and serology².

Conclusion: - Hydatid cysts can be present at any site of the body; however, multiple abdominal hydatidosis are unusual and can be fatal. Therefore, requires early diagnosis with surgical and medical management.

Clinical significance: - Kashmir is an endemic state for hydatid disease. Hence, Hydatidosis should be considered a differential diagnosis of the cystic lesions of the abdomen. These patients should be treated early and followed up with albendazole for total eradication and prevention of recurrence.

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