# Disseminated Intra-Abdominal Hydatidosis: A Very Rare Presentation

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**Citation**

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**Abstract**

We report a very rare case of multiple (more than 1000) abdominal hydatid cysts involving about each and every part of the abdominal cavity in a female patient. The case was managed with surgery followed by systemic treatment with albendazole and praziquantel. Surgical treatment included hepatic cystectomy, splenectomy and omentectomy.

## INTRODUCTION

Hydatid disease is caused by the parasitic tapeworm Echinococcus and can occur anywhere from the crown of the head[1] to the big toe[2]. The most frequently involved organs are the liver (55-70%) followed by the lung (18-35%); these two organs can be affected simultaneously in about 5-13% of cases.[3] Non-symptomatic hydatid disease may present with complications, but unusual locations as well as multiple primary or secondary hydatid disease pose special therapeutic challenges.

We are presenting a very rare case of a patient with more than 1000 intra-abdominal hydatid cysts. To our knowledge this is first report of this large number of abdominal hydatid cysts involving about each and every organ of the abdominal cavity. This late presentation was due to poverty, lack of medical facility and casual attitude towards health.

## CASE REPORT

A 30-year-old female presented to the outpatient department with the complaint of upper abdominal pain for one year. The pain was gradual in onset, moderate in intensity, intermittent, aggravated by movements and relieved by lying down. It was associated with low grade fever, fatigability, lack of appetite, burning micturation and nausea. There was a history of dogs and sheep in her home.

On examination, she was vitally stable with pale colour. A soft mass of 10x8cm which was tender, mobile and cystic in consistency was palpable in the epigastrium and right hypochondrium. Soft irregular masses were also felt in the umbilical and hypogastric regions.

Hematological tests showed a slight anemia and a mild increase in the eosinophile count (3%). All other lab tests including liver function tests were within normal limits except for a positive test for antibodies against Echinococcus granulosus. Ultrasound and CT were done and showed a cystic lesion of 5x4.5cm in segment VII of the liver and multiple small cystic lesions involving spleen, omentum and mesentry extending down to the pelvis.

Her surgical management was planned and a one month preoperative treatment with albendazole was started in order to insure protective parasiticidal doses in the peritoneal cavity during the surgical procedure. Operative findings included more than 1000 hydatid cysts of about 1-2cm in diameter in the whole abdominal and pelvic cavity. Small multiple cysts were present in the omentum (Figure-1), the spleen (Figure-2) and the liver with a huge cyst in the pelvic cavity. The pelvic cyst was ruptured during exploration.

**Figure 1**

Figure 1: Multiple small hydatid cysts in the omentum

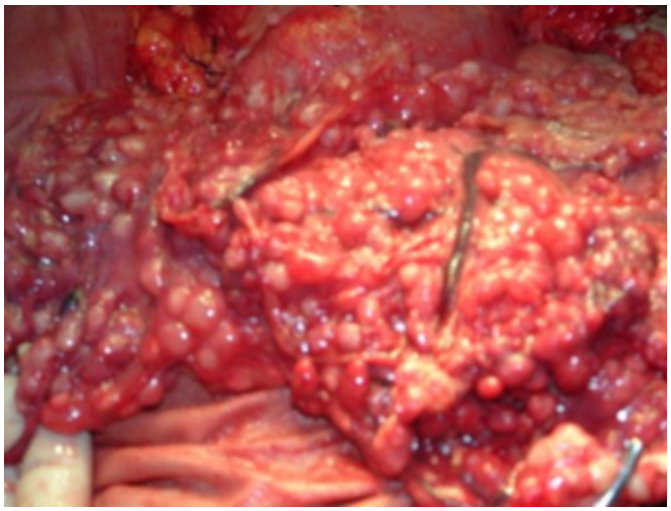
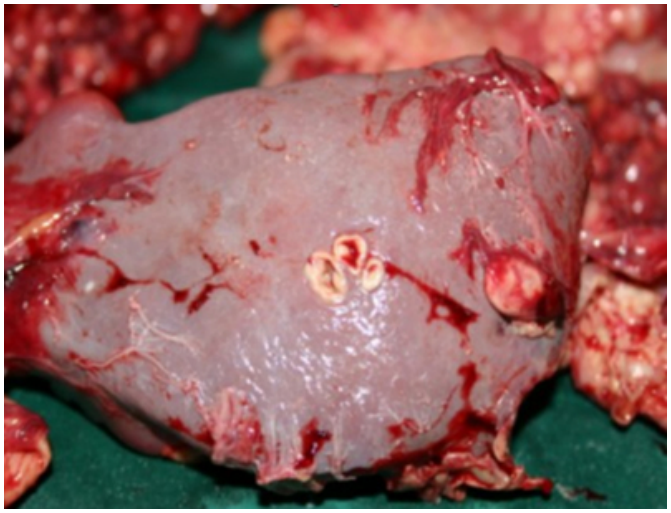


**Figure 2**

Figure 2: Multiple hydatid cysts in the spleen



Hepatic pericystectomy, splenectomy and omentectomy were performed (Figure-3). Most of the cysts were removed from the abdominal cavity (Figure-4) but many which were adherent to other structures like portal vein or hepatic duct were left in-situ.

**Figure 3**

Figure 3: Excised omentum and spleen with multiple hydatid cysts

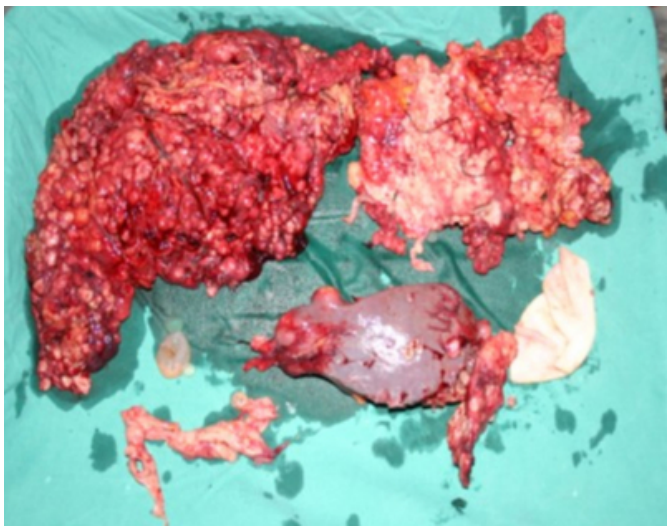
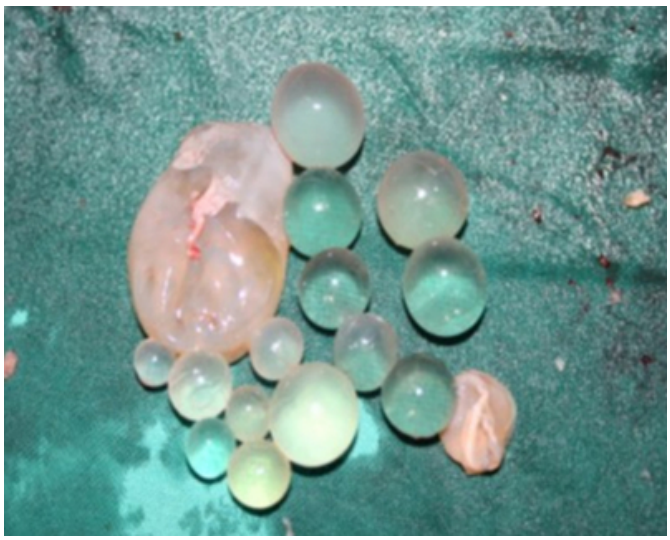


**Figure 4**

Figure 4: Multiple small cysts after removal from the abdomen



During surgery, the patient went into shock but was recovered within 15 minutes. Post-operatively, she received praziquantel and albendazole for two weeks and albendazole was continued for further six months. On one year follow-up, she was fine without any sequel.

## DISCUSSION

Hydatid disease is often seen in areas where sheep breeding is common such as China, Mediterranean and Balkan counties, South America and Middle East.[4] It is also not uncommon in Pakistan and use of ultrasonic imaging techniques has made possible an earlier diagnosis prior to

serious complications. Apart from common sites such as liver and lungs in humans, hydatid cysts can present in unusual sites which include spleen, peritoneum, kidney, muscle, adrenal gland, ovary, pancreas, thyroid gland, pleura, diaphragm, uterus and brain.[5,6,7] Peritoneal hydatid disease represents an uncommon occurrence and its diagnosis is more accurate today due to the new imaging techniques.[8] Onset of symptoms of hydatid cysts are nearly always hepatomegaly and abdominal palpable mass.[9]

To the best of the authors' knowledge this is the first report with more than 1000 intra-abdominal hydatid cysts. One case report with 56 abdominal hydatid cysts was found after literature search[8].

The principal treatment of hydatid cysts is surgical. However, pre- and post-operative courses of Albendazole and Praziquantel should be considered in order to sterilize the cyst, decrease the chance of anaphylaxis, and to reduce the recurrence risk.[10]The surgical procedure should be customized to each patient depending on size, location and complications of each cyst.

We reported this case because of its rarity with more than 1000 intra-abdominal hydatid cysts, one of them most likely broken into the peritoneal cavity and with numerous secondary lesions. The patient was managed by surgical treatment inlcluding pre- and postoperative Albendazole and Praziquantel treatment.

It is the dilemma of developing countries that patients present late due to lack of medical facility, poverty and unawareness of personal hygiene.

## CORRESPONDENCE TO

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