

## A CASE PRESENTATION : DISSEMINATED ABDOMINAL HYDATIDOSIS

## Internal Medicine

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## ABSTRACT

Hydatid disease, a parasitic infestation caused by *Echinococcus granulosus* is characterized by cyst formation in various organs. Secondary involvement via the hematogenous route can be found in any anatomic area. A typical case of Intra-abdominal Disseminated abdominal hydatidosis presented to us in the Hepatology OPD in PGIMER, Chandigarh and was medically managed with tablet albendazole

## KEYWORDS

## CASE REPORT

A 27 year old married female presented to the Hepatology OPD with complaints of lump in the abdomen for 5-6 months, intermittent abdominal pain for 4 months and low grade fever for 1 month. The patient had previously been treated for hydatid cyst in 2016. On examination, patient's vitals were stable and she was afebrile. The abdomen on examination was soft and non tender. The liver was palpable 2-3 cm below the right costal margin and the spleen was palpable 3-4 cm below the left costal margin. Multiple small intra abdominal masses could also be palpated. There was no free fluid and bowel sounds were absent. Respiratory, cardiovascular and nervous system were within normal limits.

Lab investigations showed that the patient had a haemoglobin of 11.8 gm/dL, TLC count of 11700 with eosinophil count of 29.1%, 33.5% neutrophils, 29.9% lymphocytes, 6% monocytes and 1.2% basophils. The platelet count was 271000. The patient had normal bilirubin levels (0.38 and 0.1 mg/dL) AST was 24.55 U/L and ALT was 12.91 U/L and ALP was 103.45 U/L. The renal function tests were in the normal range. The coagulation profile was also normal. Further investigations revealed Alfa Feto Protein of 2.07 IU/ml, CA-125 was 52.73 IU/ml. CA 19-9 was 21.59 IU/ml and CEA was 1.17 ng/ml. HIV and VDRL were non reactive. IgG for Hydatidosis by ELISA was suggestive with a titre of 1:1600 whereas IgG for Amoebiasis was negative. An ultrasound abdomen done outside revealed multiple cysts in the pelvic cavity, peritoneal cavity and around the uterus. CECT chest and abdomen revealed multiple cysts of varying sizes seen scattered in the abdominal cavity, in the liver, spleen, mesentery, omentum, pelvis and in the pouch of Douglas. No internal calcification/membranes/ debris were seen within the cysts. A small hypodense lesion was seen in the lower lobe of the left lung. The liver measured 16.3 cm in craniocaudal span and had multiple cysts of various sizes predominantly in the subcapsular region and the parenchyma. The spleen measured 15.4 cm and showed multiple cysts.

The patient was started on Tablet Albendazole 400 mg twice a day for 3 weeks followed by 7 days off and continued for 6 cycles. The patient is currently doing well and no lump abdomen could be palpated in the subsequent visit.

Figures 1,2,3 show the presence of multiple hydatid cysts as seen in the liver, spleen and the peritoneum.

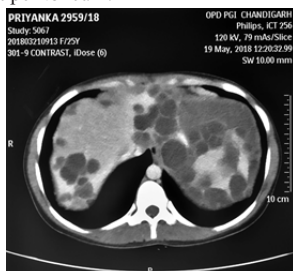


Figure 1



Figure 2

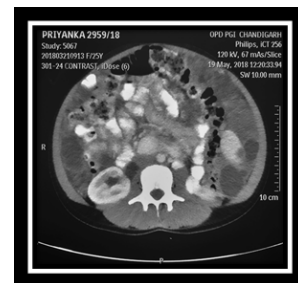


Figure 3

## DISCUSSION

Hydatid disease, also known as hydatidosis or echinococcosis, is caused as a result of infection with the larva of tapeworm *Echinococcus*. *E. granulosus* cysts following primary infection may occur in any anatomic location. The two most commonly involved organs are the liver (65%) and lungs (25%). Other sites that can be affected include muscles (5%), bones (3%), kidneys (2%), heart (1%), spleen (1%), pancreas (1%) and the nervous system (1%).<sup>(1)</sup> The life cycle of *Echinococcus* has a definitive host, mostly dog, and an intermediate host mostly sheep. Humans are accidental, intermediate hosts that are infected by contact with the definitive host or by consumption of vegetables or water which is contaminated by the ova. Peritoneal hydatidosis is an uncommon form of hydatid disease. Secondary peritoneal disease, which occurs as a result of surgical or traumatic rupture of hepatic, splenic, or mesenteric cyst is the most common form of peritoneal hydatid disease. Spontaneous rupture of intra abdominal hydatid cysts into the peritoneum occurs in about 12% of the cases. Primary hydatidosis is a rare entity accounting for 2% of intra-abdominal hydatid disease.<sup>(2-4)</sup>

Most patients are asymptomatic for many years and present with vague abdominal symptoms such as nonspecific pain, sense of abdominal fullness, anorexia, dyspepsia, and vomiting.<sup>(4)</sup> The diagnosis is based on the history of exposure in an endemic area, findings shown by ultrasonography and Computed Tomography. This can be supplemented by specific IgG, indirect fluorescent, complement fixation and ELISA.<sup>(5)</sup> The management of Hydatid disease depends on the size, location, manifestations of the cysts and the well being of the

patient. For hydatid cysts that are localised in the liver or the lungs, the management of choice is preferably surgical while the treatment for disseminated intra-abdominal hydatidosis is medical<sup>(6)</sup>

### CONCLUSION

Disseminated abdominal hydatidosis is an uncommon presentation of a common zoonosis. The disease usually presents with vague abdominal pain and abdominal fullness. Treatment with albendazole, as in our patient has been shown to be effective.

### CONFLICT OF INTEREST

None

### CONSENT OF PATIENT

Has been obtained

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