

Case Report

Hydatid Cyst in the Anterior Abdominal Wall; A Case Presentation

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Abstract: Objective: A 30 years old male presented with swelling in right abdomen. Initially it was small but with the passage of time it gradually increased in size. The surgical exploration revealed mass present in anterior abdominal wall without involvement of intra-abdominal structure. CT scan of abdomen was suggestive of intra-abdominal, but surprisingly hydatid cyst was found in anterior abdominal wall without intra abdominal involvement.

Keywords: Hydatid cyst, Anterior abdominal wall, Swelling, *Echinococcus*, Abdomin.

INTRODUCTION

It is an exceptional entity to have hydatid cyst in abdominal wall, even in those countries where echinococcus granulosus infestation is endemic. Hydatid disease is caused by the larval stage of the *Echinococcus* tapeworm [1-4]. The two major types of hydatid disease are caused by *E. granulosus* and *E. multilocularis* [5]. *Echinococcus granulosus* is most commonly seen worldwide which affects humans.

Various studies suggest that liver is involved in approximately 75% of cases while lung in 15% of cases. Other anatomical location in 10% of cases [6] liver is frequently involved organ as it acts as the first line of defense [7].

CASE PRESENTATION

A 30 years old male presented in the OPD with complaints of gradually increasing pain and swelling in the right iliac fossa for 7 months with the history of contact with dogs and sheep. On examination there were two swellings of about 5 x 5 cm each in the right lower quadrant near the midline. Swelling was beneath the rectus muscle. It is mobile in a transverse direction and immobile in the longitudinal direction. Based on the findings, a provisional diagnosis of mesenteric cyst was made and further workup was done (Fig. 1).



Fig. (1). Showing Swelling Present in the Right Side of Abdomen in the Patient.

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His CBC, Urea, creatinine, PT, INR, electrolytes, HCV and HBV were done which shows HB as 15%, TLC 8.1, Eosinophils count 3%, Platelets 252, PT 11, APTT 22.3, INR 1.05, BUN 12, Creatinine 1.20, Na 145, K 4.2, Cl 97, Bilirubin 0.5, ALT 15 and ALP 65. Anti HCV and HBsAg were both negative.

Ultrasound findings showed two cystic lesions seen in right iliac fossa measuring 7.5 x 6 cm and 5.8 x 5.7 cm. A large bilobed cystic lesion measuring 11.2 x 4.5 cm with small cysts in the periphery of large cyst noted below the umbilicus lateral to the midline. On doppler no central vascularity noted. Impression as bilobed benign looking mesenteric cyst was observed.

CT scan findings showed that multiple cystic lesions noted in the pelvis largest 7.6 x 6.8 cm. It is displacing the adjacent bowel loops and indenting the urinary bladder inferiorly. It is causing pressure effect and indentation of the right rectus muscle (Fig. 2). Impression on CT scan showed that above findings are likely suggestive of hydatid cyst. Other differential could be mesenteric cysts. However *echinococcus* antibody titer was negative (0.239).

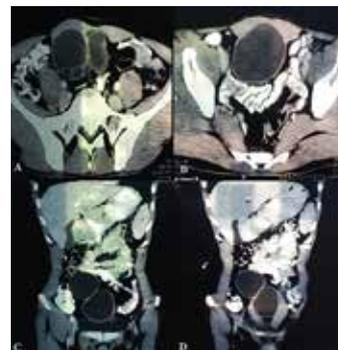


Fig. (2). Showing Contrast Enhanced C.T Abdomen and Pelvis Images.

With the provisional diagnosis of intra-abdominal hydatid cyst, exploratory laparotomy done by midline incision. Surprisingly there was no intra-abdominal cyst but cystic swelling in the anterior abdominal wall. When rectus sheath was opened two hydatid cyst were found between the posterior rectus sheath and the peritoneum. They contained clear fluid and few daughter cysts. Pericystectomy was performed, and postoperative recovery was uneventful. (Fig. 3 and 4). Patient was put on tab. albendazole 400 mg BD. Midline abdominal wound was closed (Fig. 5).



Fig. (3). Showing Midline Incision Being Made.



Fig. (4). Showing Hydatid Cyst Seen in Kidney Tray After Removal.



Fig. (5). Showing Abdominal Wall closed.

DISCUSSION

Hydatid cyst is serious public health problem in endemic area. It is parasitic infection caused by *Echinococcus granulosus*. Since 2000 years hydatid disease of the liver is known to Hippocrate caused by larva of the dog tapeworm, *Echinococcus granulosus*, while men are accidental host [8]. It is unique parasitic disease which is found worldwide specially in the Middle East North Africa, South Africa, Australia, New Zealand [9]. The hydatid cyst can occur anywhere in the body.

Various studies suggest that liver is most frequently involved organ (75%) followed by lung (15%), other organ involved are heart pericardium, orbit, gastric wall, mussels and adrenal glands [10-13].

The solitary primary location in anterior abdominal wall is an exceptional entity and its incidence is less than 1%. In our patient, the Hydatid cyst was located in anterior abdominal wall without the involvement of any intra-abdominal structure.

It was very unusual presentation we have already discussed, it is common in liver and lung but no structure of body is exempted from involvement of the hydrated cyst. It means the hydrated cyst can occur in any part of the body.

CONCLUSION

The case we report here is Hydatid cyst in anterior abdominal wall, which is rare entity it was not picked by ultrasound, CT scan, as anterior abdominal wall hydatid cyst. *Echinococcus* titre was normal. Before operation it was considered as intra-abdominal hydrated cyst but after surgical exploration it was found in anterior abdominal wall without involvement of intra-abdominal structure. There should be high index of suspicion of hydatid cyst of Anterior abdominal wall while dealing with other anterior abdominal wall swellings and it should be kept in differential diagnosis.

CONFLICT OF INTEREST

Declared none.

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