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# Primary Umbilical Hydatyid Cyst: A Case Report

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## Abstract

Hydatid disease is endemic in Middle Eastern countries. Liver is the most involved organ, followed by the lung. We review a case of abdominal wall hydatid cyst in a 75 years old lady that was presented with bulging and redness of umbilicus mimiking umbilical hernia. After opening the abdominal wall hydatid cyst was diagnosed and removed and after irrigation with silver nitrate the abdominal wall was closed . And in one year follow up no recurrence has been detected.

#### Keywords: Umbilical; Hydatid cyst; Pancreas

#### Introduction

The larvae of Echinococcus granulosus is the cause of human hydatid disease and is endemic in the Mediterranean countries and Middle East [1]. Liver is the most prevalent involved organ. Hydatid cysts are mostly located in liver or lungs (78%). Other sites include muscle, peritoneum, bone, spleen, pancreas, heart, kidney, and brain [2,3]. The solitary primary localization in abdominal wall is extremely rare, and its incidence is unknown [4]. In this article review an article about an old lady presenting with abdominal wall cyst resembeling umblical hernia.

#### **Case Report**

A 75 years old lady case of previous liver hydatid cyst that had underwent surgery with kocher incision 2 years ago and know has been referred with bulging in umbilicus infavoure of umbilical hernia. Abdominopelvic sonography only showed umbilical cyst without any differential diagnosis. Midline laparatomy was done to remove the cyst and repair umbilical defect. Incidental finding was ha 4\*5 midline hydatid cyst that was drained and cyst wall was removed and the site irrigated with silver nitrate (Figures 1 and 2), no penetrance to abdominal cavity was detected. The cyst was sent for pathology and skin closed. The patient was discharged with oral albendazole and with one year follow up no recurrence has been detected.

### Discussion

Ecchinococcus granulosusis cause of hydatid disease. The adult parasite settles in the intestines of canines. The intermediate hosts (herbivores and humans) ingests the ova. The ova penetrate the small



and cyst wall was removed and the site irrigated with silver nitrate.



Figure 2: No penetrance to abdominal cavity was detected.

intestine, and reach the liver. Sinusoids trap them; consequently, the liver is the most prevalent involved organ (70%). The larvae escaping this first filter, reach the lung from right heart. If they escape this second filter they make hydatid disease in other organs. In addition, some data have shown dissemination via lymphatic pathway that may be the way of infection in primary uncommon site of disease [5].

Brain, heart, bone or other organs are rarely involved. However, a review of the English medical literature also revealed cases infecting the muscles of the chest wall, Sartorius, biceps brachii, supraspinatus and gluteus. The clinical presentation of the disease is caused by localization and pressure effect of the slowly growing cyst in the infected organ. Differential diagnosis of all cystic masses in all anatomic locations is hydatid cyst especially in endemic areas [5].

In this case despite endemic area pre-operation estimation of hydatid cyst was not done. Pre-operative diagnose was umbilical hernia that during operation the appearance of cyst resembled hydatid cyst so complete excision and irrigation with silver nitrate was done and pathology result approved it.

When intact resection of cyst is not possible, content removal of the cyst should be considered. Endocystectomy, pericystectomy, marsupialization, capitonnage, simple drainage of the cyst, and

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resection of the infected organ are surgical strategies used in practice. Then, the cyst cavity should be irrigated with scolicidal agents. In some studies, albendazole therapy has shown effectiveness in preventing the postoperative recurrence of hydatid cyst disease of abdominal wall because of the low prevalence of this presentation, has not been studied yet [4].

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