

Case Report

General Surgery

Hydatid Cyst of the Liver Fistulized into the Abdominal Wall (Case Report)

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Abstract

Hydatidosis can affect up to 5% of the population in areas of high endemicity. Its preferred location is the liver. It is a disease considered benign but can become serious due to its complications. The fistulization of a hydatid cyst (HC) into the abdominal wall is a rare complication. We report the case of a hydatid cyst of the liver fistulized into the abdominal wall.

Keywords: Hydatidosis, Liver Cyst, Fistulization, Abdominal Wall, Complication.

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INTRODUCTION

Hydatidosis is a cosmopolitan anthroponosis caused by the development in the human body of the larval form of a dog tapeworm called "Echinococcus granulosus" [1-3]. It can affect up to 5% of the population in areas of high endemicity [4]. Its preferred location is the liver [2]. It is a disease considered benign but can become serious due to its complications. The fistulization of a hydatid cyst (HC) into the abdominal wall is a rare complication. We report the case of a hydatid cyst of the liver fistulized into the abdominal wall.

CASE REPORT

68-year-old patient, operated on 15 years ago for peritoneal hydatidosis, presenting for consultation with a swelling in the right hypochondrium that has been evolving for a week. The examination found a febrile patient at 38.5°, presenting a purulent mass in the right hypochondrium, red, fluctuating, painful, fixed relative to the superficial plane with the presence of a cutaneous fistula in sight (Figure 1). The rest of the clinical examination was unremarkable. The biological assessment found leukocytosis and elevated CRP.



Figure 1: Purulent mass in the right hypochondrium

An abdominal ultrasound (Figure 2) was performed and showed a fluid collection in the right anterolateral abdominal wall communicating with a peripheral subcapsular hepatic mass with a calcified wall in places and heterogeneous content.



Figure 2: Abdominal ultrasound

An abdominal scan was performed without and with the injection of iodinated contrast material and revealed the presence of multiple calcified lesions:

hepatic, splenic, and parietal, as well as a right parietal fluid lesion with thickened, partially calcified walls, measuring 8.7x69mm (Figure 3).

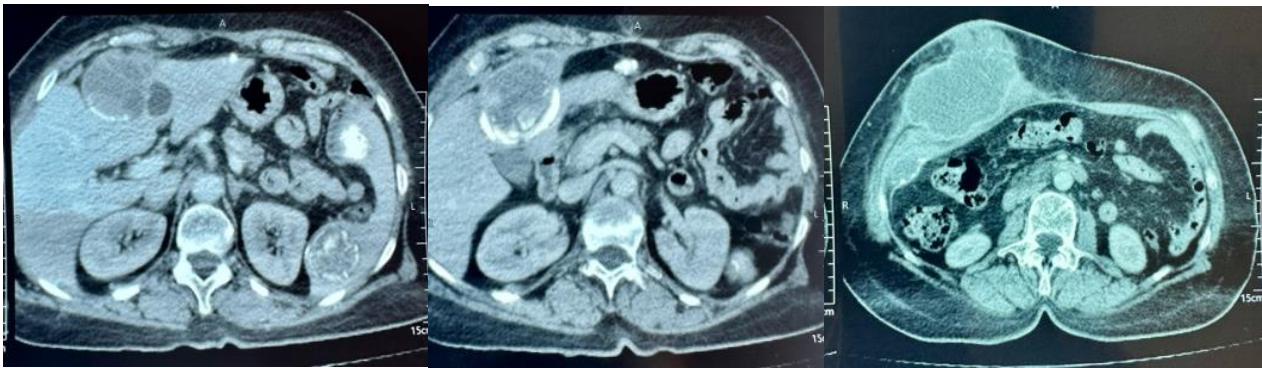


Figure 3: Abdominal scan

The diagnosis of a hepatic HC infected and fistulized in the abdominal wall and complicated by a subcutaneous abscess was diagnosed. The treatment was surgical with simple postoperative outcomes.

DISCUSSION

Hydatid disease represents one of the most serious health problems in the world, costing the international community 200 million dollars annually [5]. This zoonosis is cosmopolitan, it is found all over the world. But, due to its mode of transmission, it is primarily endemic in sheep-rearing countries.

The Mediterranean rim, East Africa, South America, the south of Australia, and New Zealand [6].

The condition is most often asymptomatic and the clinical symptoms are variable; they depend on the location of the cyst, its size, its stage of development, and the presence or absence of complications. Abdominal pain remains the most frequent clinical symptom [7].

The most common complications are infection of the cyst contents and rupture into the bile ducts, which

occurs in 5 to 10% of cases [7]. Fistulization in the abdominal wall is an exceptional complication, found in 0.1 to 1.5% of cases [8]. Fewer than ten cases have been reported in the literature [9].

It is the consequence of a double factor, mechanical and inflammatory. On one hand, there is the infection of the cyst content leading to inflammation of the pericyst and its fusion with the abdominal wall. On the other hand, the progressive erosion of the abdominal wall by a thick and calcified pericyst is favored by respiratory movements [9]. In all described cases, the cyst was in contact with the abdominal wall, and fistulization was the mode of revelation [10]. The symptoms consist of a painful and febrile abdominal wall mass, associated or not with cutaneous-mucosal jaundice. Biology allows for the detection of leukocytosis and an elevation of CRP indicating infection, as well as a disturbance in the liver function tests in case of biliary complications [11].

The diagnosis relies on cross-sectional imaging, particularly ultrasound and CT scans, which allow for the identification of the cyst, specification of its location,

type, dimensions, and demonstration of communication with the abdominal parietal collection [11]. The treatment is surgical, consisting of an initial cysto-parietal disconnection with evacuation of the intermediate abscess, followed by treatment of the HC, and the residual cavity. The prescription of albendazole seems necessary to avoid recurrence [10].

CONCLUSION

The fistulization of the HC into the abdominal wall is a rare complication. Imaging plays an important role in positive diagnosis and postoperative monitoring. It is a disease reputed to be benign but can become serious due to its complications, hence the importance of prevention as well as early diagnosis and treatment.

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