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Primary Splenic Hydatid Cyst: Case Report

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Abstract **Case Report**

The rarity of splenic hydatid disease poses a challenge for clinicians, particularly in non-endemic areas. As the hydatid cyst can present as a simple cyst without having the classical symptoms and later can lead to life-threatening complications; Serology and featuring images are necessary for the diagnosis. The treatment is mainly surgical with, in particular the total splenectomy In this article, we report a case of Hydatic cyst of spleen treated at the Department of Visceral Surgery of the Hospital ibn tofail CHU Mohammad VI Marrakesh.

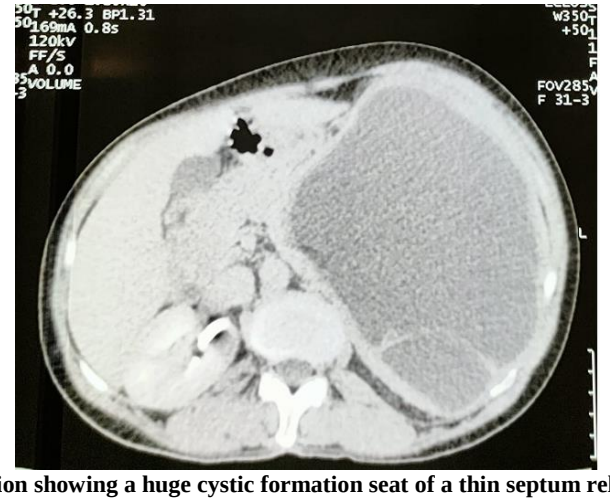
Keywords: Hydatid cyst, Spleen, Echinococcus granulosus.

INTRODUCTION

Hydatidosis is a major public health problem. It is a parasitic infection endemic in many countries of Mediterranean basin, in particular in Morocco, in Algeria, Tunisia, Italy, Greece and Turkey, as well as Oceania and North America South [1]. The most frequent localizations are liver and lung. The disease occurs the most in the spleen with a rate of 0.9-8% of all human echinococcal infections [2]. Out of endemic countries it remains exceptional disease and the clinical presentation lacks specifity.

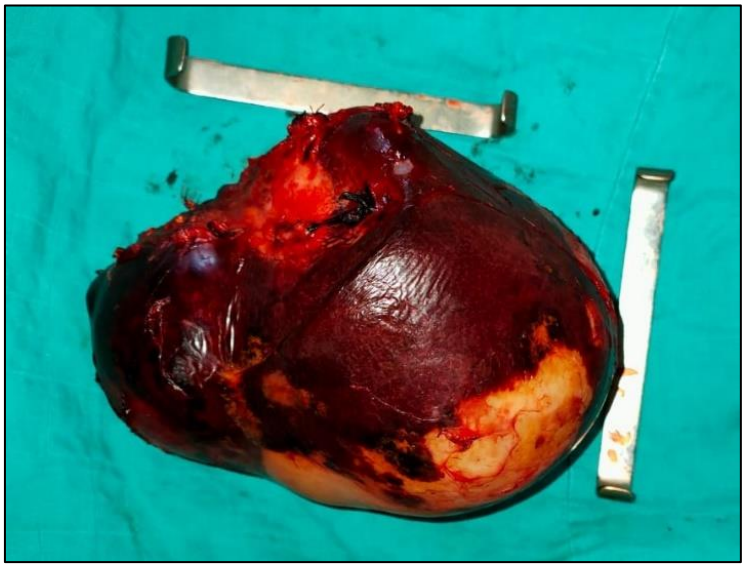
PRESENTATION OF THE CASE

We report a case of hydatic cyst of spleen treated at the Department of Visceral Surgery of the Hospital ibn tofail CHU Mohammad VI Marrakesh. A 49-year-old patient, with no medical history, presented to surgery departement with left upper quadrant pain evolving for 4 months, the clinical examination has objectified an abdominal dull next to the epigastrium and the left hypochondrium without irradiation or inflammatory signs. An abdominal ultrasound objectified a large compressive abdominal median cystic lesion of 12x16 cm suggesting a hydatid cyst probably hepatic, splenic or peritoneal. On thoraco-abdominal CT scan reported a voluminous splenic cystic lesion measuring 14.5x15.5x10 cm deplacing posteriorly, the neighboring organs connected with an hydatid cyst with not significant abnormality at the thoracic level (Picture 1).



Picture 1: Scanographic section showing a huge cystic formation seat of a thin septum related to a splenic hydatid cyst

Blood tests were normal except hydatid serology which was positive. A midline laparotomy was performed, surgical exploration revealed a voluminous splenic hydatid cyst of 15x20cm adherent to the tail of the pancreas ,the upper pole of the left kidney and the diaphragm compressing the neighborhood structures with no other localizations. The patient underwent splenectomy with drainage of the splenic space by two Redon drains .The postoperative follow ups were simple (Picture 2). Anti-pneumococcal and anti-meningococcal vaccination were prescripted on post-surgery with an imidazole-based treatment for 6 months. Patient was discharged on 6th postoperative day. Post operative follow up was uneventful.



Picture 2: Operative specimen of total splenectomy of a splenic hydatid cyst

DISCUSSION

The splenic localization of the hydatid cyst comes in 3rd position. Other splenic contamination pathways were evoked: the contiguity pathway (transparietal gastric or colonic), the lymphatic pathway and the retrograde porto-splenic venous pathway [3,4]. This is an affection rare outside endemic areas. In Africa, it is mainly encountered in the Maghreb from where our patient is from [5]. Splenic HK mainly affects adults between 30 and 40 years old with a slight female predominance [3]. The most frequent reasons for consultation are pain like our patient's case, constatation of a mass in the left hypochondrium and the incidental finding. The splenic HK can also be discovered during complications such as abscess, fissuring and rupture in the pleura, stomach, colon or skin [3, 4, 6]. Ultrasound, CT scan and magnetic resonance imaging of the abdomen are the most useful examinations in the diagnosis, showing cystic calcifications, vesicles, or intrauterine septa cysts [3, 4, 7]. Combined with hydatid serology, these imaging examinations allow the diagnostic confirmation of splenic HK [3, 5]. The scanner of our patient found a bulky cyst of the spleen containing a thin septum [8]; hydatid serology was also positive, thus confirming the diagnosis of splenic KH. It can, however, pose some diagnostic difficulties with other non-parasitic cysts of the spleen making their clinical and radiological presentation similar [9, 10]. Imadazol based treatement can be prescripted for multi visceral forms even though results are insufficient [3]. The treatment of splenic HK is essentially surgery [3, 5, 9]. Total splenectomy has the advantage of removing the parasitized organ and to avoid secondary recurrences [11], as in our patient. It can be difficult due to cysto-visceral adhesions. Protruding dome resection has the advantage of being a benign intervention, little hemorrhagic, almost always feasible, since the KH is accessible on the surface of the spleen. On the other hand, it leaves pericyst in place which can be seat of residual cavity and postoperative infection [3, 11, 12]. First The way, depends on the location of splenic KH(s), than association with other cystic locations. The laparoscopic approach is feasible for almost all cases, with good results in the short term and long term [3, 5, 13].

CONCLUSION

Outside areas where eccinochoccosis is endemic. Splenic HK remains a rare condition .The diagnosis is confirmed by the association of a positive hydatid serology and images specific to that disease . The treatment is mainly surgical with, in particular the total splenectomy. Laparoscopy can reduce postoperative morbidity.

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