A Case of Abdominal Cystic Lymphangioma Seen at The University Hospital of Antananarivo HJRA

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ABSTRACT

Cystic lymphangioma is a benign malformations of the lymphatic system. Most of them are found in the head and neck. The abdominal localization represents 2 to 5% of cases and poses a preoperative diagnostic difficulty. Most of the diagnosis is made following laparotomy indicated because of signs of complications. We report one case of mesenteric cystic lymphangioma in children. The revealing manifestation was chronic vomiting with repercussions on the general condition. The diagnosis was not established until after the histopathology examination of the resection piece. Resection was complete. No recurrence was observed. The quality of resection determines the postoperative outcome and prognosis of abdominal cystic lymphangiomas.

Keywords: Acute Abdomen, child, cystic lymphangioma, mesentery, recurrence

I. INTRODUCTION

Cystic lymphangioma can affect all lymphatic chains. The cervical and craniofacial regions are the most affected. Abdominal localization is rare and often insidious [1]. Regarding this rare situation, the average age at the time of its discovery is 2 years [2]. In general, the diagnosis is made following a laparotomy indicated before signs of complications [3]. We report two cases of abdominal cystic lymphangioma in children with different early signs.

II. OBSERVATIONS

A 14-year-old patient presented postprandial vomiting for 3 weeks. The vomiting worsened and became bilious during the last 8 days. Questioning revealed recurrent epigastralgia and a weight loss of 3kg in one month. Other than signs of moderate dehydration, the clinical examination was normal. The abdominal x-ray was normal. Gastrointestinal endoscopy revealed erythematous gastritis and significant gastric stasis without visible antropyloric and duodenal obstruction. The abdominal CT-scan showed an encysted collection between the rectum and the bladder. It seemed to be in continuity with a small intestine. A laparotomy has been indicated. It revealed an encysted mass attached to the jejunum 10 cm from Treitz’s angle and extending over a length of 10 cm (Fig. 1). An intestinal resection removing the mass followed by an end-to-end anastomosis was performed. The surgical outcome was favorable: resumption of oral feeding on D3 and return home on D6. The histopathological examination concluded in a cystic mesenteric lymphangioma.

III. DISCUSSION

Cystic lymphangiomas are benign malformative vascular tumors [2]. They represent 5 to 6% of all benign tumors in children [4], [5]. They can reach all the lymphatic chains. The most frequent locations are the craniofacial and cervical regions [6]. Abdominal localization is rare, in the order of 1 to 4 cases per 100,000 individuals and represents 2 to 8% of
all cystic lymphangiomas [1], [7]. Preferred sites are the mesentery followed by the omentum, mesocolon and retroperitoneal region [8]. In children, there is a male predominance with a sex ratio of 5:2.

Abdominal cystic lymphangiomas can be seen at any age, but 60% of cases are diagnosed before age 5 [9]. The average age at diagnosis is 2 years [10]. The clinical manifestation is polymorphous. It may be a simple gradual increase in the size of the abdomen. Often, signs of complications lead to the diagnosis: abdominal pain from intracystic bleeding or twisting, signs of compressions, peritoneal irritation from rupture or infection of the cyst [3] [11]. The preoperative diagnosis is difficult. In the majority of cases, this is an intraoperative discovery, especially for forms with inaugural complications. X-ray of the abdomen may show image of fluid pushing back digestive clarity. On ultrasound, it is an unvascularized cystic mass. The CT-scan reveals a cystic tumor and determines its size, location and the organ involved [3], [11]. Only the anatomico-pathological examination of the resection piece can confirm the diagnosis. There are 3 types of abdominal cystic lymphangioma: simple cystic lymphangioma with capillary lymphatic ducts, cavernous cystic lymphangioma with dilated lymphatic ducts with presence of capsule, and macrocystic lymphangioma or cystic hygroma [6].

The surgical indication is formal for forms with complications. It consists of a resection as complete as possible. For asymptomatic forms, the opinion is divided. Some authors suggest surgery as soon as possible to prevent complications. Others recommend abstaining because of the possibility of spontaneous regression of around 10% [11]-[13]. Aspiration supplemented by sclerosing injection can be used for emergency decompression. This technique carries a high risk of recurrence [12]. Laparoscopic treatment can be done by aspirating the cystic contents before resection [14].

Complete healing can be achieved with complete resection. Recurrence occurs in 10 to 15% of cases if the resection is incomplete [15]. Some severe inaugural complications can be fatal [16].

IV. CONCLUSION

Abdominal cystic lymphangioma does not have a specific sign allowing a formal diagnosis to be made before surgery. The quality of the resection determines the long-term outcome.

CONFLICTS OF INTEREST

All authors certify that they have no affiliation or involvement in any organization or entity with the interests (such as honoraria, scholarships, participation in speakers’ offices; and expert testimony or agreements of patent license), or non-financial interests (such as personal or professional relationships, affiliations, knowledge or beliefs) in the subject or material discussed in this manuscript.

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