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Case Report

Mesenteric Lymphatic Malformation in Children - A Case Report

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Abstract

Background: Mesenteric lymphatic malformations are a heterogeneous group of benign diseases of the lymphatic system that present with cystic dilated lymphatics of the mesentery. They are frequently localized in the head, neck, trunk and extremities. They are rare and the abdominal localization represents less than 5% of all lymphatic malformations.

Various symptoms, including abdominal pain, abdominal distension, and abdominal masses, might occur, which could be accompanied by complications, such as rupture, hemorrhage and volvulus.

Abdominal ultrasonography is the procedure of choice for establishing the diagnosis. When the size of the tumor, the boundaries, or the relationship with the mesenteric vessels and neighboring organs is not clear, the computed tomography with oral and intravenous contrast in the safest option for diagnosis.

Complete excision of the cysts with or without intestinal resection is mandatory to prevent recurrence. The long-term prognosis is excellent.

Objective: Describe a patient with mesenteric lymphatic malformation, update the tumor classification, the diagnosis algorithm and the therapeutic approach.

Case Report: Descriptive study with long term follow up. 3 years old patient with a mesenteric lymphatic malformation, who starts with abdominal pain and a palpable abdominal mass. Complementary studies were performed and surgical conduct was decided.

Result: During the laparotomy procedure a tumoral formation, compatible with macrocystic mesenteric lymphatic malformation, according to the classification of the International Society for the Study of Vascular anomalies (ISSVA), was found. Mass excision with 50 cm segmental intestine resection was performed.

Conclusion: The mesenteric lymphatic malformations are a group of benign diseases with a very low frequency. It´s symptomatology could be unspecific, being necessary to appeal to abdominal ultrasound or computed tomography to achieve the correct diagnosis. The treatment of choice is complete excision and the prognosis is excellent if the resection is complete.

Keywords: *Lymphatic malformation; Lymphangioma; Mesenteric; Classification; Treatment; Children*

Introduction

Mesenteric lymphatic malformations are benign cystic tumors formed by dilations of the lymphatic ducts. Abdominal location accounts for only 5% of total lymphatic malformations.

According to surgical findings, so-Hong Kim and collaborators developed a mesenteric lymphatic Malformations classification.

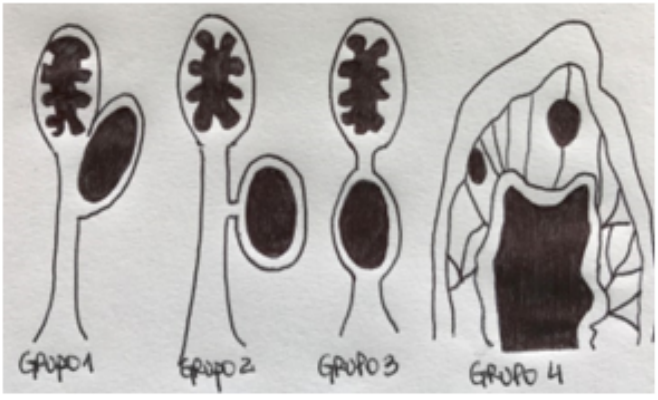

Figure 1: *Group 1 includes Mesenteric Lymphatic Malformations that invade the intestinal wall, group 2 covers mesenteric lymphatic malformations pediculated without affectation of mesenteric vessels, the group 3 presents Mesenteric Lymphatic Malformation at the limits of the mesentery near the mesenteric vessels and group 4 covers those multicentre and diffusely infiltrative mesenteric lymphatic cells.*

Objectives of the Study

Describe a patient with a mesenteric lymphatic malformation, update tumor classification, diagnostic algorithm and therapeutic approach.

Case Report

We reported the case of a 3-year-old patient with a mesenteric lymphatic malformation who debuted with interment abdominal pain, diffuse and palpable abdominal mass in epigastrium and right flank. Complementary studies were conducted and surgical behaviour decided.

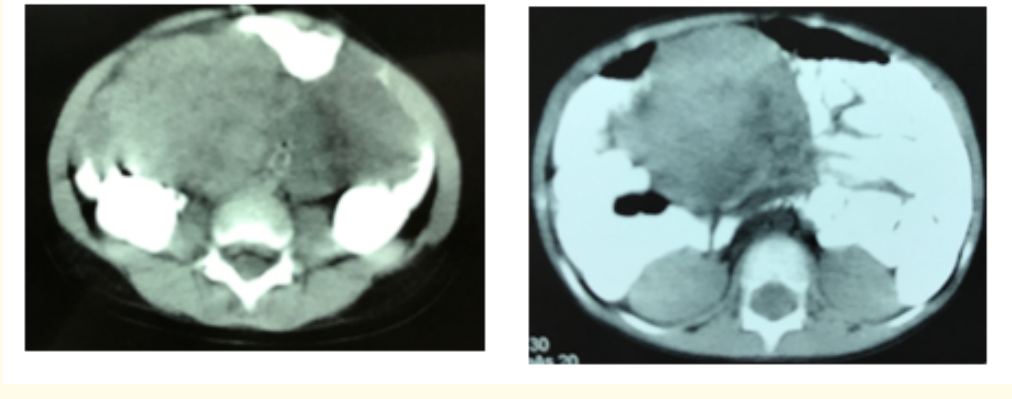

Figure 2: *CT of the abdomen and pelvis. Extensive formation expansive density of soft parts, solid, heterogeneous, little contours defined, in abdominal cavity and retroperitoneal, 1 3 X 8 X 9 Cm.*

Results and Discussion

During the scout laparotomy, a tumor formation compatible with macrosenteric Malformation Lymphatic was found according to the Classification of the International Society for the Study of Vascular anomalies (ISSVA). Complete resection of the tumor was performed along with 50 cm of small intestine.

Surgical findings

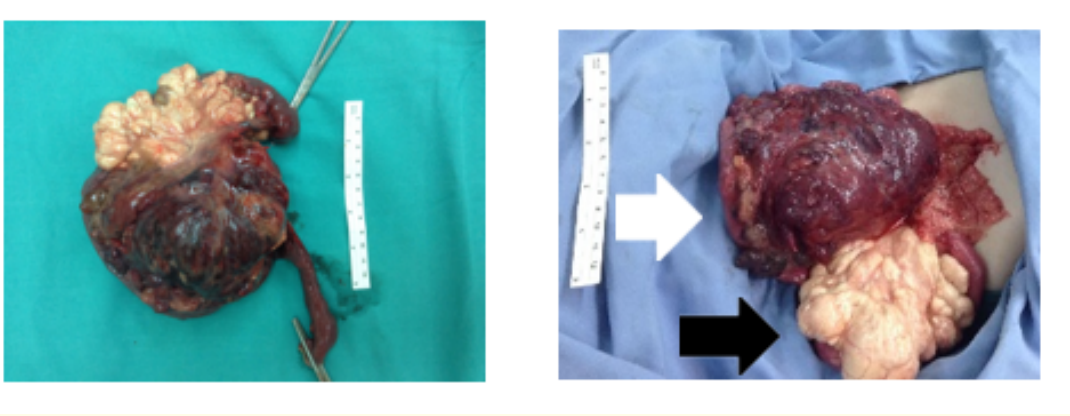

Figure 3: *Black arrow macro-cystic area. White arrow solid area.*

Pathology: The definitive diagnosis was made by the pathological anatomy study, in which the presence of vascular cavities delimited by a simple endothelial wall and smooth muscle fibers was observed.

Diagnostic confirmation is performed with the expression of the lymphatic epithelium marker D2-40.

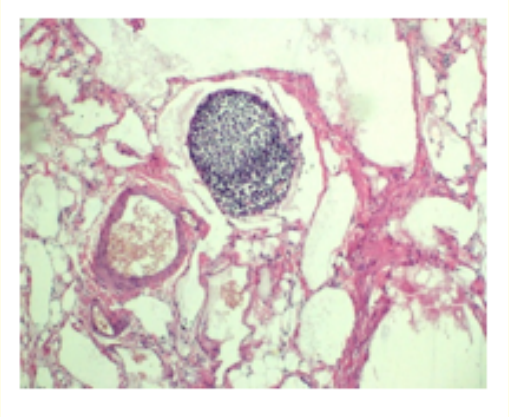

Figure 4: *Numerous vessels of distinct caliber covered by making you muddled and content or eosinophilic.*

Conclusion

Mesenteric lymphatic malformations are a Pathology Benign of Low Frequency. Its symptomatology may be non-specific and need to be used abdominal ultrasound and abdominal tomography for the correct diagnosis. Elec treatment surgical and the prognosis is excellent always what achieve a complete resection.

Follow-up of these patients should be long-term through clinical examination and ultrasound checks, especially in patients where complete programming was not possible [1-11].

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