CASE REPORT

Mesenteric cyst: abdominal lymphangioma

Cisto mesentérico: linfangioma abdominal

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ABSTRACT

Lymphangioma is a rare benign disease with increased prevalence in children. Its symptomatology is varied, from absent until capable of causing acute abdomen. The ultrasound can, in most cases, establish a diagnosis; however, it relies on histopathological analyzes. Most of the time, it has a good prognosis. This report describes abdominal lymphangioma in adult, of rare appearance, showing the diagnosis methods and treatment.

Key words: Mesenteric Cyst; Lymphangioma/diagnosis; Lymphangioma/therapy.

RESUMO

O linfangioma é uma afecção rara, benigna, com mais prevalência em crianças. Sua sintomatologia é bem variada, desde ausente até capaz de provocar abdome agudo. A ultrassonografia pode, na maioria das vezes, fazer o diagnóstico, entretanto, ele baseia-se na análise anatomopatológica. Na maioria das vezes tem bom prognóstico. Este relato descreve linfangioma abdominal em adulto, de aparecimento raro, mostrando os métodos de diagnóstico e tratamento.

Palavras-chave: *Cisto Mesentérico; Linfangioma/diagnóstico; Linfangioma/terapia.*

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INTRODUCTION

A mesenteric cyst is defined as any cystic lesion located between the leaflets of the mesentery, from the duodenum to the rectum, being more commonly found at the ileum level. It was first described in 1507 by Benevienae, and 820 cases were reported until 1993.[1-3]

Lymphangiomas are benign tumors, with a probable congenital origin, and are more common in the cervical and axillary regions. They are uncommon in pancreatic and abdominal location.[1] Their incidence is estimated at around 1:100,000 to 1:250,000 in adults and 1:20,000 in children admitted to a hospital. The first excision was performed by Tillaux in 1802.[2] Despite its long-time recognition, its origin, classification, and pathology remain controversial.

The highest incidence is among people in the third and fourth decades of life, being 75% of the cases diagnosed after the age of 10, incidentally and with a discreet predominance in females.

The lymphangioma term is used when hemodynamic isolation occurs, i.e. the lesion is not related to the arterial or venous system.[2,3]Lymphangiomas constitute one of the major groups of vascular hamartomas, which result from a failure in the

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evolutionary development of the vascular system, including lymph nodes and/or arteries and veins.[2]

These lymphatic tumors (lymphangiomas) are divided into:

- simple, with lymphatic capillary channels;
- cavernous, with dilated lymphatic and capsule; and
- macrocystic malformations, clinically referred to as cystic hygroma.[2]

The cystic hygroma is the most common type and the most affected sites are the head and neck. The main differential diagnosis is made with hemangioma, branchial cyst, lipomas, and rhabdomyosarcoma. Their differential diagnosis from hydatidosis requires attention. The sure diagnosis is made by biopsy of the suspicious nodule, and the main treatment is surgical excision.[4-9]

CASE REPORT

PCM, 58 years old, male, from da São Caetano Moreira farm, Goianorte-TO. He sought assistance at the São Francisco Hospital, in Taquaral, Goiás, without diagnosis or treatment, on 10/14/2010, due to the development, for more than one year, of a slow evolution nodulation. He denied pain, headache, fever, diarrhea, and other associated symptoms. He presented good general condition, acyanotic, afebrile, hydrated, and systemic arterial pressure of 120 x 80 mmHg; normal phonetic rhythmic sounds, in two times, symmetrical, without breath; and mobile nodulation in the abdomen with 10 cm in diameter, without pain on superficial and deep palpation.

The diagnostic doubt in relation to the palpated abdominal structure demanded the performance of an ultrasonography (Figure 1) and computed tomography (Figure 2), which revealed a nodular lesion without apparent adherence, characterized as a cyst.

He was referred to an exploratory laparotomy through median supraumbilical access that revealed an intraperitoneal cyst in the Douglas bag region, not adhered to any structure and avascular.

The anatomopathological analysis of the cyst revealed:

- **macroscopy:** thin-walled unilocular cystic lesion and transparent with "rock water" content but discreetly viscous; ovoid form; cystic consistency; weight: 316.27 g; measurements: 11.0 X 8.0 X 5.0 cm;
- **microscopy:** cystic wall internally covered by atrophic epithelium and flat, and wall with sclero-connective tissue showing some lymphatic capillaries in between. The diagnosis established was of a mesenteric cyst (lymphangioma).

The patient was discharged on 10/16/2010, uneventful and asymptomatic.

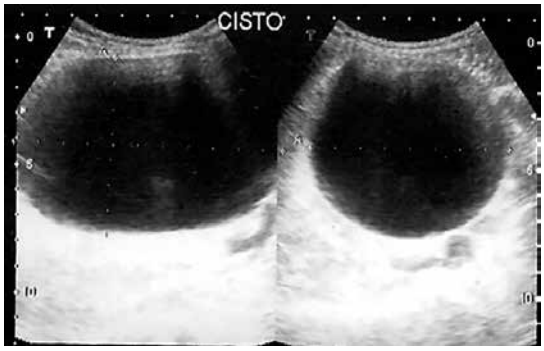

Figure 1 - Abdomen ultrasound revealing a massive intraperitoneal cyst apparently mesenteric.

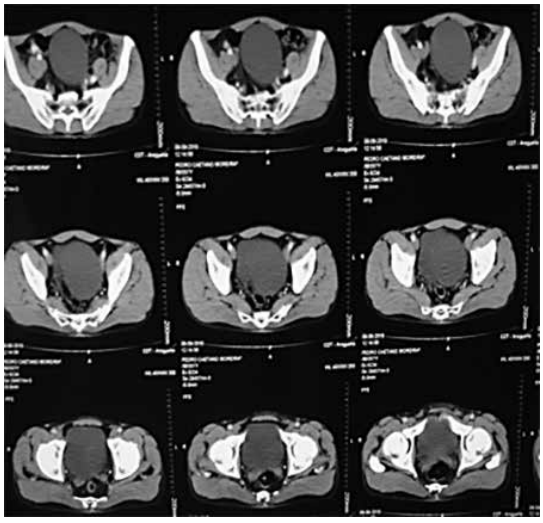

Figure 2 - Abdomen computed tomography with contrast that revealed hyper-dense nodulation with a cystic aspect, non-contrast capturing, measuring 9.0 x 7.1 cm in its greatest transverse axes, located in the hypogastrium, without adherence to the bladder.

Figure 3 - Macroscopic aspect of the abdominal cyst removed through laparotomy.

DISCUSSION

The mesenteric cyst does not have pathognomonic symptoms, however, Santana et al.[10] reported, in 18 cases, pain and abdominal mass, vomiting and constipation, and acute abdomen in 12, five, and one patient, respectively.

Palpation of the lesion is usually painless and its outline is smooth and well-defined, with great transversal and around its axis mobility. The finding of compressible abdominal mass with great transversal and around a central axis mobility is called Tillaux signal.[2,3] The abdominal growth is slow and progressive, and just noticed belatedly in some cases, confusing itself with ascites in 18-20% of cases.

There are few reports of malignant mesenteric cysts, usually low grade sarcomas. Kurtz et al. reviewed 162 cases of mesenteric cysts, finding only 3% of malignization and all in adults.[10]

Mesenteric cysts are usually diagnosed incidentally during laparotomy or imaging tests in up to 40% of cases. The development of acute abdomen occurs when there is a rupture, infection, hemorrhage, or cyst torsion, eventually being mistaken for acute appendicitis or aortic aneurysm.

The complementary propedeutics can greatly help to establish a diagnosis, especially imaging tests. Simple radiological study of the abdomen may show calcifications; the arteriography and intestinal transit may show a compressive mass. Ultrasonography, computed tomography, and magnetic resonance imaging are the exams that provide the best diagnostic accuracy. The diagnosis of certainty, however, is recognized by the anatomopathological exam and classified based on histopathology through optical light microscopy as: serous; serosanguinolent; mucoid; chylous; and chylous-sanguinolent.

The mesenteric cyst must be dried in order to avoid complications.[2,3] Its complete surgical excision should be indicated in all cases to avoid recurrence, possible malignant transformation, and complications such as bleeding, torsion, obstruction, traumatic rupture, and infection.[11-13]

The internal drainage can be an option when there is a possibility of short bowel syndrome. In selected cases, the laparoscopic approach may be an option.

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