Acute Intestinal Occlusion Revealing a Cystic Mesenteric Lymphangioma

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Abstract

Introduction: Cystic lymphangioma is a benign tumor of dysembryological origin. Its abdominal topography is rare.

Results: We report a case of cystic mesenteric lymphangioma revealed by an acute intestinal mechanical occlusion in an 8 - year - old patient.

Conclusion: Cystic mesenteric lymphangioma, although rare, is not exceptional. It can be revealed in the course of an inaugural mechanical complication.

Keywords: Cystic mesenteric lymphangioma-complication.

Introduction

Cystic lymphangioma is a benign tumor of dysembryological origin. It is a rare disease; its annual incidence is estimated at 1 / 20,000 in children and 1 / 100,000 in adults [1]. Its abdominal localization is rarer, with 2% of cases of cystic lymphangiomas; but the cystic lymphangioma of the mesentery remains the most frequent variety of this abdominal topography [2]. Through this observation and a review of the literature, we recall the epidemiological and evolutionary aspects of this pathology.

Clinical observation

It was an 8-year-old patient admitted to the digestive surgical emergency department for acute abdominal pain, with abrupt onset, located in the umbilical region and evolving since 48 hours. This pain was permanent, not calmed by analgesic and was associated with a nauseous state, an episode of vomiting and a stopping of intestinal transit. No similar painful episode was found at the interrogatory; similarly, no rectal bleeding was found. On examination, the patient presented a good general condition, colored conjunctiva, body temperature at 37°8.

The physical examination objectivated, a painful oblong tumefaction at the palpation of the umbilical region and meteorism from the right flank to the percussion. There was no defense, no contracture and no cry of the umbilicus. The sign of Dance was absent. The rectal examination was normal. The hypothesis of an acute intussusception had been evoked. The patient was hospitalized with injectable paracetamol-based medical treatment and paraclinic explorations undertaken. The biological result was normal; the prescribed abdominal ultrasound was not feasible.

An emergency laparotomy demonstrated a mesenteric tumor stenosing the ileum (Figures 1 and 2). A tumorectomy was performed with end to end ileal anastomosis (Figures 3 and 4). The post-operative follow-up was simple with resumption of transit on the 3rd postoperative day. The patient left the hospital on the 6th post-operative day. The histological examination of the resection specimen concluded to a cystic lymphangioma of the mesentery (Figure 5). The postoperative control at 1 month was normal.
Figure 1: Anterior view of the cystic lymphangioma of the mesentery

Figure 2: Posterior view of the cystic lymphangioma of the mesentery

Figure 3: Specimen of the cystic lymphangioma of the mesentery

Figure 4: Restoration of ileal continuity
The cystic lymphangioma is a rare benign pathology. The cystic abdominal lymphangioma is very rare with 2% of cases. The preferentially topographies of cystic lymphangioma remain the cervical region with 66% of cases and the facial region with 12% of cases. But in its abdominal localization, the mesentery is the seat of predilection with 70.5% of the cases [2]. The cystic mesenteric lymphangioma occurs in children between 5 and 10 years of age without any sexual predominance [3]. In our observation, this patient was 8 years old. Its symptoms are polymorphic and non-specific: the abdominal pain is observed in 40% to 90% of the cases according to the authors [3], the transit disorders are inconstant. The presence of a palpable mass would be the most frequent revealing sign according to Guivarch; it has been found in 74% of its 102 cases [4]. The ultrasound or at best, the abdominal computed tomography makes it possible to evoke the diagnosis. In some parts of Africa south of the Sahara, these explorations are not urgently available, as is the case with our observation. The diagnostic confirmation remains histological. However, some cystic lymphangiomas of the mesentery remain asymptomatic, thus exposing to evolutive complications revealing the disease. They are infectious, haemorrhagic and mechanical as the case of our observation. The mechanical complications occur in 15% of cases [3]. A case of malignant transformation was described in 1994 [5]. The treatment of cystic mesenteric lymphangioma is essentially surgical and consists of complete resection. In our observation, the excision took into account the ileal stenosis zone and was therefore followed by a restoration of continuity by end to end ileal anastomosis; it was a lymphangioma type 2 according to the classification of Losanoff and Kjossev. The post operative follow-up is generally simple and the prognosis is favorable for types 1 and 2. A recurrence remains possible in 17% if the macroscopic excision was incomplete. For the type 3, which has a retroperitoneal extension, the excision is often incomplete and exposes to a recurrence rate of 40%. For the type 4, which involves an invasion on vital retroperitoneal structures, surgery gives way to the injection of sclerosing agents [6,7].

Discussion

The cystic lymphangioma is a rare benign pathology. The cystic abdominal lymphangioma is very rare with 2% of cases. The preferentially topographies of cystic lymphangioma remain the cervical region with 66% of cases and the facial region with 12% of cases. But in its abdominal localization, the mesentery is the seat of predilection with 70.5% of the cases [2]. The cystic mesenteric lymphangioma occurs in children between 5 and 10 years of age without any sexual predominance [3]. In our observation, this patient was 8 years old. Its symptoms are polymorphic and non-specific: the abdominal pain is observed in 40% to 90% of the cases according to the authors [3], the transit disorders are inconstant. The presence of a palpable mass would be the most frequent revealing sign according to Guivarch; it has been found in 74% of its 102 cases [4]. The ultrasound or at best, the abdominal computed tomography makes it possible to evoke the diagnosis. In some parts of Africa south of the Sahara, these explorations are not urgently available, as is the case with our observation. The diagnostic confirmation remains histological. However, some cystic lymphangiomas of the mesentery remain asymptomatic, thus exposing to evolutive complications revealing the disease. They are infectious, haemorrhagic and mechanical as the case of our observation. The mechanical complications occur in 15% of cases [3]. A case of malignant transformation was described in 1994 [5]. The treatment of cystic mesenteric lymphangioma is essentially surgical and consists of complete resection. In our observation, the excision took into account the ileal stenosis zone and was therefore followed by a restoration of continuity by end to end ileal anastomosis; it was a lymphangioma type 2 according to the classification of Losanoff and Kjossev. The post operative follow-up is generally simple and the prognosis is favorable for types 1 and 2. A recurrence remains possible in 17% if the macroscopic excision was incomplete. For the type 3, which has a retroperitoneal extension, the excision is often incomplete and exposes to a recurrence rate of 40%. For the type 4, which involves an invasion on vital retroperitoneal structures, surgery gives way to the injection of sclerosing agents [6,7].

Conclusion

The cystic mesenteric lymphangioma, although rare, is not exceptional. It can be revealed in the course of an inaugural mechanical complication.

Conflict of interest

The authors do not declare any conflicts of interest.

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