

Case Report

Spontaneous Mesenteric Haematoma - An Unusual Cause of Acute Hemorrhagic Abdomen

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Abstract

Spontaneous mesentery hematomas are a rare clinical and surgical entity that is difficult to diagnose. We describe the case report of a patient with spontaneous transverse mesocolon hematoma of idiopathic etiology, whose definitive diagnosis was made during the surgery. Literature review was carried out presenting its main clinical manifestations, associated risk factors, diagnostic methods and clinical surgical management.

Keywords: Mesentery; Colonic diseases; Gastrointestinal hemorrhage; Acute abdomen; Hematoma

Introduction

Spontaneous Mesentery Hematoma (SMH) is a rare diagnosis, having been obtained only 110 cases until the beginning of the 20th century [1], however, with the increase in the use of computed tomography in the evaluation of the abdomen, its diagnosis and report became more frequent in the last two decades [2,3].

Mesentery hematomas are associated with abdominal trauma, rupture of visceral aneurysms, coagulation disorders, or erratic use of anticoagulants, as well as complications from episodes of pancreatitis [3-6]. They present in clinical practice as acute hemorrhagic abdomen or abdominal masses [2].

As well as the diagnosis, the early and minimally invasive intervention has gained space in the treatment of these patients [7,8], however, the patient with hemodynamic instability and HEM is still a diagnostic and therapeutic challenge for the surgeon, which reinforces the importance of his knowledge.

We report the case of a hemodynamically unstable patient with a spontaneous appearance of a transverse mesocolon hematoma undergoing surgical treatment.

Case Presentation

A 55-year-old male patient, in the emergency surgical service complaining of sudden and spontaneous abdominal pain in the mesogastrium for 2 days. He reported nausea and vomiting, as well as the sudden and concomitant presence of an abdominal mass in painful mesogastrium and abdominal palpation. Personal history of

smoking 50 packs/year, denied alcoholism, comorbidities, previous surgery, or use of medications.

On physical examination: regular general condition, tachypneic, tachycardia, hypotensive, pale and dehydrated. Cardiopulmonary examination without changes. Globose, tense, distended abdomen, bulging in the mesogastrium, decreased hydro-aerial noises, diffuse painful, but with greater intensity the palpation of the mesogastric region. Laboratory tests showing increased white blood cell count; Hemoglobin of 9.3 g/dL, Platelets of 153,000/mm³ and INR of 1.23.

A contrasted tomographic study of the abdomen with an image in the mesogastric topography, hyperdense (65 UH) in the non-contrast phase, heterogeneous, well delimited, adjacent to the transverse colon and gastric antrum was performed. He had a clear cleavage plane with the pancreas in its entirety. Moderate amount of free fluid in the abdominal cavity without radiological signs suggestive of acute or chronic pancreatitis. In the arterial phase, a slight heterogeneous enhancement of the mesogastric mass.

Endovascular therapy with selective arterial embolization would be an option without therapy [8], however, the medical center in question did not have the available resource and the transfer of the hemodynamically unstable patient was not feasible. Abdominal with large amount of blood in the peritoneal cavity from the encapsulated collection on the posterior surface of the transverse mesocolon. Absence of visceral aneurysms to be performed and palpation, but with diffuse bleeding in the transverse mesocolon in the topography of the right branch of middle colic associated with colonic devascularization of the proximal segment of the transverse colon (Figures 1 and 2).

Hemostasis was performed in the transverse mesocolon and opted for segmental colectomy with terminal colostomy and mucous fistula due to colic devascularization and hemodynamic instability of the patient (Figure 3).

The patient progressed satisfactorily and was discharged from the hospital on the 6th postoperative day with good oral acceptance of the diet and without hydro electrolytic or infectious complications. Maintains outpatient follow-up for intestinal transit reconstruction planning, without new complaints (Figure 4).

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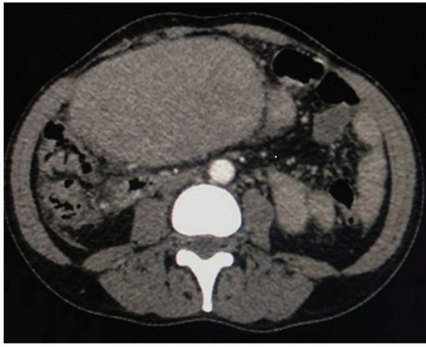


Figure 1: Abdominal tomography in the axial section, arterial phase, showing a large hyper dense image adjacent to the transverse colon and gastric antrum.



Figure 4: Intraoperative finding: transverse colon devascularized by arterial involvement of the nearby segment. Evascularization of the proximal colon segment of the transverse colon.



Figure 2: Tomography of the abdomen and pelvis, coronal section, arterial phase showing massive hyper dense formation in transverse mesocolon topography.

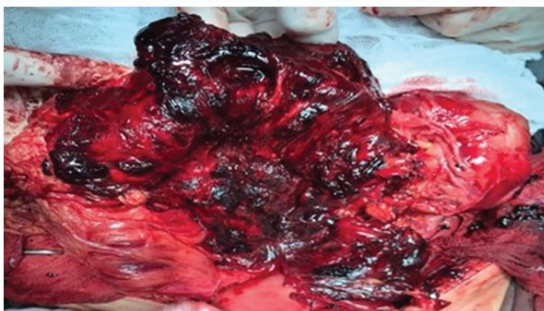


Figure 3: Transverse Mesocolon hematoma - intraoperative finding: extensive hematoma in the transverse mesocolon compromising the vascularization of the segment.

Discussion

Spontaneous mesentery hematoma is a rare clinical entity, with only 110 cases until the beginning of the 20th century. The first report described dates from 1909, in which Barber [2] describes the case

of a 32-year-old woman with an abdominal mass associated with anemic syndrome, whose origin she attributed to labor. Over the past two decades, the cases described in the literature have progressively increased with the wide use of diagnostic imaging methods [9].

Mesentery hematoma can be defined as peripheral bleeding from mesenteric vessels caused by abdominal trauma [3], postoperative complications [4], blood dyscrasias [5], collagen diseases and rupture of visceral aneurysms [6,10], in the absence of these conditions mentioned is that the diagnosis of spontaneous mesentery hematoma is necessary.

The clinical signs presented vary according to the location of the hematoma and the integrity of its envelope, with intraperitoneal hemorrhage being unusual, as found in the case [11]. Tanioka et al. [12] reported that only 3 out of a series of 11 patients (27.27%) presented with abdominal apoplexy at diagnosis.

The most common symptom found is abdominal pain [9], but it can present as a condition of low digestive hemorrhage or even obstruction associated with extrinsic compression of the gastrointestinal tract [5].

The lack of specificity of the clinical picture makes the diagnosis a challenge to the surgeon, being necessary diagnostic complementation with ultrasound, contrasted tomography or abdomen resonance [3].

The tomographic findings of the hematoma are dynamic and the radiological diagnosis can be difficult if a long time after the onset of the condition. In the first 2 weeks, the CT scan of the abdomen without contrast shows a heterogeneous image with 70 HU to 90 HU and peripheral reinforcement, which may have a contrast blush. One month after the beginning of the picture, the image tends to be homogeneous and the density decreases to 20 UH to 30 UH [9].

The chronic presentation of the hematoma, especially when there is peripheral calcification, should be noted because it is a differential diagnosis with mesentery lymphomas and small intestine GIST [12].

Treatment is closely associated with the patient's hemodynamic stability and the institution's therapeutic resources. The conservative follow-up of the case can be done in an institution structured for intensive follow-up and immediate approach, if necessary, and in a hemodynamically stable patient [9]. In the absence of hemodynamic stability or intestinal obstruction refractory to clinical treatment, a surgical approach is necessary and can be performed endovascularly with selective embolization [7], minimally invasive through video laparoscopy [8] or by exploratory laparotomy [13].

Finally, it is concluded that the transverse mesocolon hematoma is a rare clinical entity, however it must be remembered among the differential diagnoses of abdominal apoplexy, as well as abdominal mass.

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