Small Bowel Obstruction Secondary to a Spontaneous Intramural Jejunal Hematoma

Oclusão Intestinal por Hematoma Intramural Espontâneo do Jejuno

Keywords: Anticoagulants/adverse effects; Hematoma/chemically induced; Intestinal Obstruction
Palavras-chave: Anticoagulantes/efeitos adversos; Hematoma/induzido quimicamente; Obstrução Intestinal

A 68-year-old man with no history of trauma or recent digestive tract procedures presented to the emergency department with a one-day history of abdominal pain and vomiting. The patient had undergone a mitral valve replacement one month before and was taking daily warfarin since then. He also had congestive heart failure and chronic obstructive pulmonary disease. On physical examination he was hemodynamically stable and presented a distended and globally tender abdomen. The blood workup revealed a hemoglobin level of 9.7 g/dL, an INR of 10 and increased inflammatory parameters. A plain abdominal film showed gas-fluid levels in the small bowel and the computed tomography (CT) scan suggested an intestinal obstruction due to an intramural jejunal hematoma with a moderate hemoperitoneum (Fig. 1). The elevated INR was reversed to a normal value with administration of prothrombin complex concentrate. During observation, the patient became hypotensive and tachycardic, accompanied by a drop of hemoglobin level to 7.8 g/dL, and therefore the team decided to abandon a conservative approach and perform an urgent laparotomy. We found a moderate hemoperitoneum and confirmed a small bowel occlusion due to a single circumferential intramural jejunal hematoma with signs of vascular compromise. This hematoma was 2.5 cm wide, 20 cm long and extended into the respective mesentery. Thereafter, we performed a segmental enterectomy (Fig. 2). Anti-coagulation was reintroduced on the third postoperative day with low molecular weight heparin. On the seventh postoperative day the patient was diagnosed with a hemorrhage of the anastomosis, which was managed conservatively. The subsequent evolution was eventless, and the histopathology report confirmed the diagnosis.

Small bowel obstruction in the setting of a spontaneous intramural jejunal hematoma is a rare condition and should be considered in patients taking oral anti-coagulants presenting with intestinal obstruction symptoms with no history of trauma. The diagnosis can be made by CT scan, which shows an intramural hyperdensity and circumferential thickening with luminal narrowing of a small bowel loop.[1] The treatment can be conservative or surgical, according to the patient's hemodynamic condition and the presence of signs of bowel ischemia or perforation.[2]

AUTHOR CONTRIBUTIONS

AAS: Design of the work, data acquisition, drafting of the manuscript.

CA, DS: Critical review of the manuscript.

PROTECTION OF HUMANS AND ANIMALS

The authors declare that the procedures were followed according to the regulations established by the Clinical Research and Ethics Committee and to the Helsinki Declaration of the World Medical Association updated in 2013.

DATA CONFIDENTIALITY

The authors declare having followed the protocols in use at their working center regarding patients' data publication.

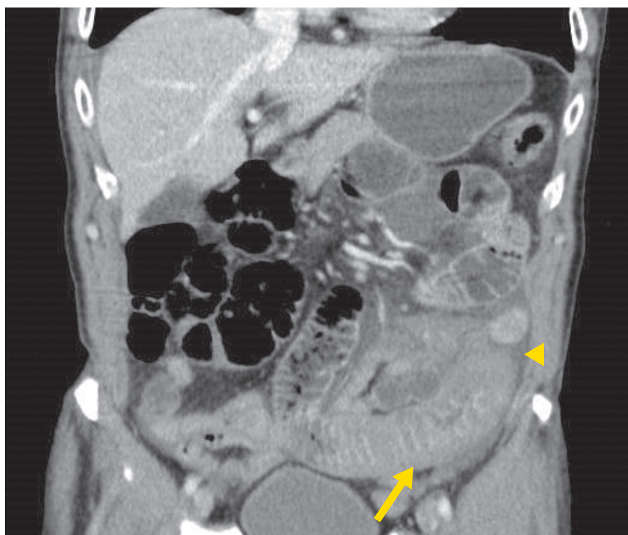

Figure 1 – Coronal abdominal computed tomography: intramural hyperdensity and circumferential thickening with luminal narrowing of a small bowel loop, suggestive of intramural jejunal hematoma (arrow), and hemoperitoneum (arrow head)

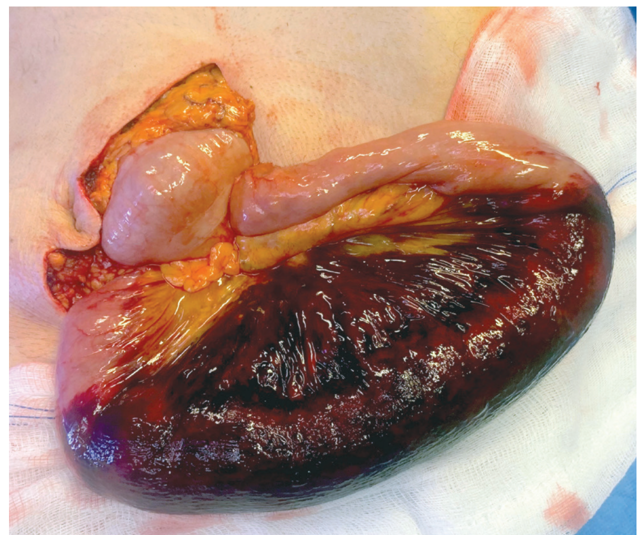

Figure 2 – Surgical findings showing a single, well delimited, 20 cm long circumferential intramural jejunal hematoma, extending into the respective mesentery

PATIENT CONSENT

Obtained.

COMPETING INTERESTS

The authors have declared that no competing interests exist.

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Alberto ABREU DA SILVA✉[1], Caferra AMARO[1], Diogo SOUSA[1]
1. Serviço de Cirurgia Geral. Unidade Local de Saúde do Litoral Alentejano. Santiago do Cacém. Portugal.
✉ **Autor correspondente:** Alberto Abreu da Silva. alberto.abreudasilva@gmail.com
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