

# Massive Hematemesis: An Uncommon Presentation of an Unusual Diagnosis

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## Keywords

Gastrointestinal bleeding · Dieulafoy's lesion · Small-bowel diverticulosis

**Hematemeses massivas: Apresentação rara de um diagnóstico incomum**

## Palavras Chave

Hemorragia gastrointestinal · Lesão de Dieulafoy · Diverticulose do intestino delgado

A 74-year-old male presented to the emergency department following several episodes of hematemesis and hematochezia. The patient was on dabigatran for chronic atrial fibrillation. Physical examination revealed pallor, tachycardia, and hypotension with a systolic blood pressure of 87 mm Hg. Laboratory blood tests showed a hemoglobin level of 8.8 g/dL, urea of 36 mg/dL, and creatinine of 1.06 mg/dL. The patient responded to the initial resuscitative measures, requiring idarucizumab and 2 units of red blood cells, and underwent an upper gastrointestinal endoscopy that revealed

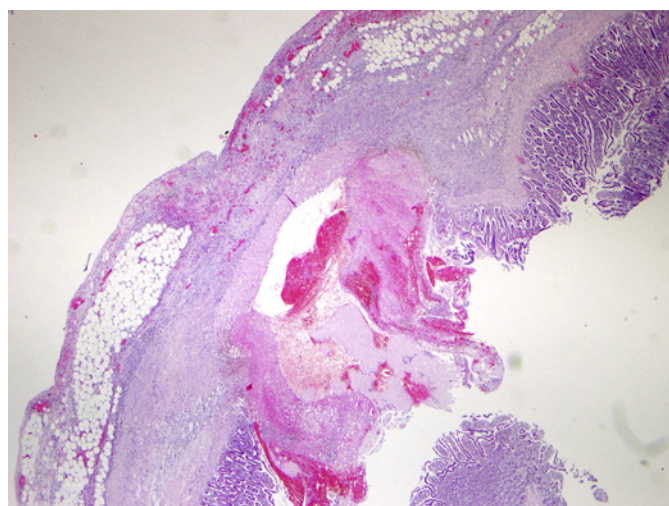
fresh blood in the stomach and duodenum without signs of an active bleeding lesion. The patient subsequently experienced a second episode of hemodynamically significant hematemesis and hematochezia requiring additional transfusion support. Upper gastrointestinal endoscopy was repeated soon thereafter, but it was once again inconclusive. Ultimately, the patient developed shock, and a computed tomography (CT) angiography was performed, showing an actively bleeding jejunal lesion on the CT angiography (Fig. 1). The patient underwent a laparotomy that uncovered a diverticulum on the mesenteric border of the proximal jejunum, 30 cm distal to the ligament of Treitz, with an apparent intraluminal bleeding. There was rapid hemodynamic improvement after surgical resection (Fig. 2). Histopathology disclosed a pseudo-diverticulum with a dilated submucosal artery protruding through normal surrounding mucosa that ruptured into the intestinal lumen (Fig. 3), compatible with a Dieulafoy's lesion in a jejunal diverticulum.

Small-bowel diverticulosis is an uncommon condition, with an estimated incidence of 0.4–4.6% [1]. It is usually an asymptomatic condition, typically arising on the mesenteric border of the bowel [1]. Rarely, it can be



**Fig. 1.** CT angiography showing an actively bleeding jejunal lesion (arrow).

**Fig. 2.** Jejunal diverticulum after surgical resection.



**Fig. 3.** Histopathology revealing a pseudo-diverticulum with a dilated submucosal artery protruding through normal surrounding mucosa, rupturing into the intestinal lumen.

associated with complications such as diverticulitis, perforation, and massive gastrointestinal bleeding (GIB) [1]. Delay in the diagnosis of massive GIB secondary to small-bowel diverticulosis is common. As a result, it is associated with significant morbidity and mortality. On the other hand, a Dieulafoy's lesion is frequently associated with massive GIB but is usually located in the stomach and, less frequently, in the duodenum, small bowel, and colon [2].

In this particular case, intermittent and hemodynamically significant hematemesis suggested an upper GIB arising from a Dieulafoy's lesion, but despite performing an upper endoscopy soon after the second episode, no bleeding site was found. Hence, a CT angiography was done and led to the diagnosis. As interventional radiology was unavailable, a surgical consultation was therefore obtained. Had we considered that hematemesis was a rare presentation of a small-bowel GIB, a push enteroscopy could have followed the second inconclusive upper endoscopy. However, the patient remained unstable after the CT findings, precluding another endoscopy.

We present this case not only due to the unusual presentation of hematemesis following a massive small-bowel bleeding but also due to the uncommon association between a Dieulafoy's lesion and a jejunal diverticulum.

#### Statement of Ethics

The authors have no ethical conflicts to disclose.

#### Disclosure Statement

The authors declare no conflicts of interest.

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### Author Contributions

Rui Mendo: acquisition of data; analysis and interpretation of data; drafting of the manuscript.

Catarina Félix: acquisition of data; revision of the manuscript for important intellectual content.

Pedro C. Figueiredo: critical revision of the manuscript for important intellectual content.

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