—Images and Videos—

A rare cause of upper gastrointestinal bleeding from a submucosal tumor

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A 65-year-old male patient was admitted to our emergency department with melena. Initial laboratory findings revealed a normochromic and normocytic anemia (9.3 g/dL) and acute kidney failure (creatinine 1.49 mg/dL). On physical examination, no abnormalities were detected nor abdominal pain or distention was reported. Medical history revealed hepatosplenomegaly of unknown cause, noninsulin-dependent diabetes mellitus, and arterial hypertension. Vital signs such as heart rate (100 bpm), respiratory rate (RR) (16/min), and blood pressure (Riva-Rocci: 130/72) were stable. Gastroscopy was performed within 12 h of admission with no signs of acute or past bleeding in the esophagus and stomach. In the descending duodenum, a protrusion with a central scar was noted close to the Papilla vateri. For improved visualization, a duodenoscope was used which revealed a submucosal tumor with a central porus adjacent to the Papilla vateri [Figure 1a and b]. The most probable diagnosis seemed to be a ruptured gastrointestinal stromal tumor, as it is the most common malignant subepithelial lesion of the gastrointestinal tract and frequently found in the small intestine. [1,2] To confirm our diagnosis,

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endoscopic ultrasound was performed immediately. Strikingly, a large pulsating vessel with a thrombotic material and a tiny fistula channel to the duodenum was detected [Figure 2a and b]. Subsequent computed tomography angiography could confirm a partially thrombosed infrarenal abdominal aortic aneurysm with a hyperechoic thrombus cap, indicating fresh thrombus portions and occurrence of recent bleeding.

After emergency bridging therapy with an endovascular full-cover stent, antibiotic therapy, and stent removal, an open aortic reconstruction with bovine pericardial patch and pancreas-preserving duodenectomy was performed. Histological analysis revealed a ruptured mycotic aortic aneurysm.

Rupture of the aorta is a life-threatening condition with a prognosis depending on its early recognition. [3] Especially in elderly patients with symptoms of upper gastrointestinal bleeding and cardiovascular risk factors, endoscopists should be aware of aortoduodenal fistula even without known aortic aneurysm. [4] As presented in this case, endoscopic ultrasound is an important

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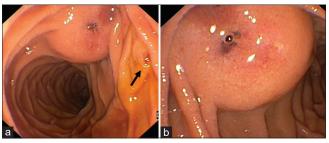


Figure 1. (a and b) Endoscopic view of the submucosal tumor with central porus/scar close to the Papilla vateri (black arrow)

diagnostic modality for the differential diagnosis of submucosal tumors detected by gastroscopy.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient has given his consent for his images and other clinical information to be reported in the journal. The patient understands that his name and initials will not be published and due efforts will be made to conceal his identity, but anonymity cannot be guaranteed.

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Figure 2. (a and b) Endoscopic ultrasound images showing a vascular convolute with fistula opening and thrombotic material

Conflicts of interest

There are no conflicts of interest.

REFERENCES

- Tran T, Davila JA, El-Serag HB. The epidemiology of malignant gastrointestinal stromal tumors: An analysis of 1,458 cases from 1992 to 2000. Am J Gastroenterol 2005;100:162-8.
- Akahoshi K, Oya M, Koga T, et al. Current clinical management of gastrointestinal stromal tumor. World J Gastroenterol 2018;24:2806-17.
- Rimbaş M, Attili F, Larghi A. Aortic wall rupture from a mediastinal tumor invasion diagnosed by endoscopic ultrasound. *Endoscopy* 2015;47 Suppl 1 UCTN: E66-7.
- Lin TC, Tsai CL, Chang YT, et al. Primary aortoduodenal fistula associated with abdominal aortic aneurysm with presentation of gastrointestinal bleeding: A case report. BMC Cardiovasc Disord 2018;18:1-5.