# **Images in Gastroenterology and Hepatology**



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# **Splenic Rupture following Transnasal Endoscopy**

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### **Keywords**

Splenic rupture · Transnasal endoscopy · Ultraslim gastroscope

#### Rotura Esplénica após Endoscopia Transnasal

#### **Palavras Chave**

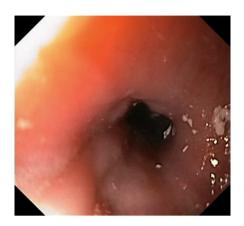
Rotura espénica · Endoscopia transnasal · Endoscópio ultra-fino

We present the case of an 82-year-old Caucasian male with a known medical history of ischemic heart disease and atrial fibrillation under anticoagulation with apixaban who was admitted with dysphagia for solids and liquids starting 1 month before. On physical examination, he was malnourished and dehydrated. Laboratory workup showed a hemoglobin level of 12 g/dL, INR 1.0, and aPTT 24 s. Upper endoscopy revealed a stenosis of the middle esophagus covered by normal-appearing mucosa (presumptive extrinsic compression), which could not be passed with the conventional gastroscope (outer diameter: 9.2 mm) (Fig. 1). After forceps biopsies of the stenosis, transnasal endoscopy was performed using the ultraslim gastroscope (outer diameter: 5.2 mm), which allowed passing the stenosis and placing a feeding tube. Immediately after the procedure, the patient complained of severe left abdominal pain and became hypotensive and tachycardic. His abdomen was tender with guarding over the left quadrants. His hemoglobin level initially dropped from 12 to 8 g/dL and reached a minimum of 6 g/dL, requiring transfusion of 2 packed red blood cell units. The patient was started on intravenous fluids, and anticoagulation (which had been switched to subcutaneous enoxaparin 2 days before) was withheld. After unremarkable chest and abdomen radiographs, contrastenhanced thoracoabdominal computed tomography showed a laceration of the superior splenic pole, with active extravasation of contrast and a large perisplenic hematoma and hemoperitoneum (Fig. 2a, b). It also revealed a 45-mm heterogeneous mass between the aorta, esophagus, and left main bronchus. The patient was managed conservatively and made an adequate recovery. After 2 weeks, he underwent endoscopic ultrasonography with fine-needle aspiration of the mediastinal mass, which was inconclusive. He later suffered a cardioembolic stroke and eventually died from a hospital-acquired pneumonia.

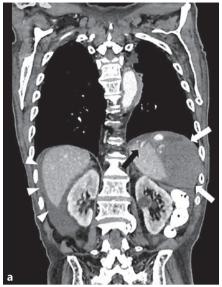
Splenic rupture is a rare but increasingly recognized complication of colonoscopy [1]. Its occurrence following upper endoscopy is even rarer, with very few cases reported in the literature [2–5]. It is thought to result from the excessive stretching of splenodiaphragmatic ligaments and splenoperitoneal lateral attachments during endoscopy [4, 5]. To the best of our knowledge, this is the first case attributable to the ultraslim gastroscope.

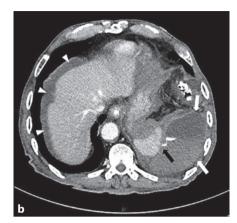
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**Fig. 1.** Endoscopic image showing a stenosis of the middle esophagus covered by normal-appearing mucosa (presumptive extrinsic compression).





**Fig. 2.** Coronal (**a**) and sagittal (**b**) images of contrast-enhanced thoracoabdominal computed tomography showing a laceration of the superior splenic pole, with active extravasation of contrast (black arrows) and a large perisplenic hematoma (white arrows) and hemoperitoneum (arrowheads).

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#### **Statement of Ethics**

This study did not require informed consent or review/approval by the appropriate ethics committee.

#### **Disclosure Statement**

The authors state no conflicts of interest.

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