An uncommon cause of upper gastrointestinal bleeding: Epiphrenic esophageal diverticulum

Uma causa rara de hemorragia digestiva alta: divertículo epifrénico do esófago

Pedro Monsanto*, José Paulo Andrade, Nuno Almeida, Hermano Gouveia, Carlos Sofia

Serviço de Gastroenterologia, Hospital da Universidade de Coimbra, Portugal

Received 28 December 2011; accepted 22 March 2012
Available online 18 September 2012

A 71-year-old man presented to the emergency department with hematemesis. Blood pressure was 105/70 mmHg and with heart rate of 85 beats per minute. He was under dual antiplatelet therapy with aspirin and clopidogrel for past acute coronary syndrome requiring coronary intervention with 4 drug-eluting stents. Hemoglobin level was 14.2 g/dL (normal 13.5–17.5) and urgent endoscopy was performed. At distal esophagus, 35 cm from the incisors, a large epiphrenic diverticulum was found (Fig. 1). Within the esophageal and diverticular lumen there was some red blood. Targeted jet irrigation was used to wash the diverticulum walls and a small ulcer with an actively oozing visible

* Corresponding author.
E-mail address: pedromonsanto@gmail.com (P. Monsanto).

Figure 1  Large epiphrenic diverticulum with some red blood in the lumen just above gastroesophageal junction.

Figure 2  Epiphrenic diverticulum with large ulcerated mouth with oozing hemorrhage.
vessel was identified in the diverticular mouth (Fig. 2). Endoscopic injection therapy was performed with a solution of epinephrine (6 cc of a 1:10,000 dilution) and application of one hemostatic clip (EZ Clip; Olympus) directly to the vessel, which resulted in hemostasis (Fig. 3). The patient did well thereafter with stable hemoglobin levels. A follow-up endoscopy on day 6 revealed a small ulcer covered by exudates with no stigmata of hemorrhage. Surgical options were discussed, but the patient rejected any surgical intervention. He remains asymptomatic on regular follow-up.

Esophageal diverticula are very rarely seen. They are classified according to its location: upper (pharyngoesophageal or Zenker), middle and lower (epiphrenic). Epiphrenic diverticula are generally secondary to an esophageal body dysmotility and occur within 10 cm of the gastroesophageal junction. They are typically asymptomatic and discovered incidentally. Up to 80% of patients have no symptoms or minimal symptoms such as intermittent dysphagia and vomiting, and ulceration with bleeding is an extremely rare complication.\(^1\)\(^-\)\(^5\) Ulceration can arise on diverticular mucosa secondary to entrapment of food or pills inside the diverticulum. To our knowledge, this represents the third report of a patient with upper gastrointestinal bleeding from an epiphrenic diverticulum that was successfully managed endoscopically.\(^2\)\(^-\)\(^3\)

**Conflicts of interest**

The authors have no conflicts of interest to declare.

**References**