Bleeding malignant gastric ulcer: successful endoscopic hemostasis with an over-the-scope clip



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There are limited published data on the role of the overthe-scope clip (OTSC) in hemostasis from upper-GI tract neoplasia.¹ The use of OTSCs in other locations (ie, esophagus and colon) has been shown to be effective for refractory GI bleeding^{2,3}; nonetheless, reports of the use of OTSCs in the setting of malignant bleeding in these locations are also scarce. In the setting of refractory GI bleeding, the OTSC is a valuable tool and has been shown to perform better than Padlock devices.⁴

A 76-year-old man with a medical history of Parkinson's disease and bradyarrhythmia was admitted to the emergency department because of hematemesis. At admission, he was experiencing hypotension (blood pressure 87/ 69 mm Hg), and his hemoglobin level was 6.6 g/dL. After his condition was stabilized, and a transfusion of 2 units of red blood cells and a bolus (80 mg) of intravenous pantoprazole followed by infusion (8 mg/h), the patient underwent EGD, which showed an ulcerated neoformation with a large adherent blood clot (Video 1, available online at www.VideoGIE.org). Because the endoscopic findings were suggestive of gastric neoplasia (Figs. 1 and 2), biopsies were performed. Hemostasis was not attempted once the patient was sent for surgical treatment. Staging examinations were ordered, but the next day, after continued evidence of bleeding, temporary endoscopic

hemostasis was attempted to avoid urgent surgery during the wait for histologic evaluation.

A second EGD was performed, in which the previously described blood clot was removed. A large 6-mm vessel without active bleeding was observed (Fig. 3). High-definition endoscopes with narrow-band imaging (Olympus GIF-H185; Olympus Medical Systems Co. Ltd, Tokyo, Japan) were used in both evaluations.

Considering the high-risk characteristics of the lesion, namely, excavated fibrotic ulcer with high-risk stigmata (visible large-caliber artery), we decided to place an OTSC; a type t (pointed) OTSC was chosen to assure tissue capture and decrease the risk of the clip slipping, considering the presence of fibrotic tissue in the lesion.⁵ An OTSC (14/6t; Ovesco Endoscopy AG, Tuebingen, Germany) was successfully placed over the vessel (Figs. 4 and 5).

After endoscopic therapy, no recurrent bleeding occurred. Histologic examination confirmed the diagnosis of gastric adenocarcinoma. Hospitalization was prolonged as a result of *Citrobacter koseri* bacteraemia, which was successfully treated with ceftazidime. The patient was discharged after 15 days with a hemoglobin level of 11.0 g/dL. After 8 weeks, he was admitted for elective subtotal gastrectomy.

Bleeding is one of the most serious adverse events of gastric cancer and is associated with a poor prognosis.^{6,7} In patients bleeding from upper-GI neoplasia, endoscopic



Figure 1. Ulcerated area in the gastric antrum.



Figure 2. Ulcerated neoformation with a large adherent blood clot.



Figure 3. Large adherent blood clot.



Figure 5. Large visible vessel (6 mm) after over-the-scope clip placement.



Figure 4. Over-the-scope clip properly placed over the visible vessel.

hemostasis can be performed to avoid urgent surgery and reduce blood transfusion requirements.⁸ The OTSC is an innovative device that can be used in multiple settings, namely, GI bleeding, acute perforation, prophylaxis for perforation, anastomotic leakage, and stent fixation.⁹

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Abbreviation: OTSC, over-the-scope clip.

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