VIDEO CASE REPORT

Endoscopic hemostasis with hemoclips for post-variceal ligation bleeding ulcer

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The development of portal hypertension in cirrhosis is associated with a multitude of diagnoses, most commonly ascites, gastroesophageal varices (GEV), and hepatic encephalopathy. Nearly half of the patients with cirrhosis have GEV at the time of diagnosis, and 5% to 15% of the patients experience esophageal varices each year.[1] Guidelines recommend noncardioselective β-blockers or endoscopic variceal ligation (EVL).[2] Recurrent bleeding after initially successful EVL occurs in 20% to 60% of patients, most commonly from the ulcers, and is associated with 20% to 50% mortality.[3]

We describe a 53-year-old woman with a medical history of obesity, diabetes, liver cirrhosis for non-alcoholic steatohepatitis, Child B, and Model for End-Stage Liver Disease 12 (diagnosed in 2011) with GEV in secondary prophylaxis (variceal bleeding in 2011 and 2012, scheduled for EVL in July 2013 (Fig. 1).

She was admitted in August 2013 to the Pontifical University Hospital of Chile because of massive hematemesis with hemodynamic compromise. Gastroscopy with the patient under general anesthesia, prophylactic administration of antibiotics, and concomitant use of vasoactive agents

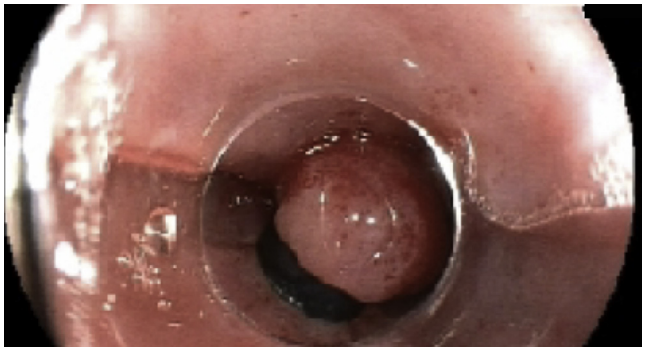

Figure 1. Elective scheduled endoscopic variceal ligation 1 year before acute variceal bleeding.

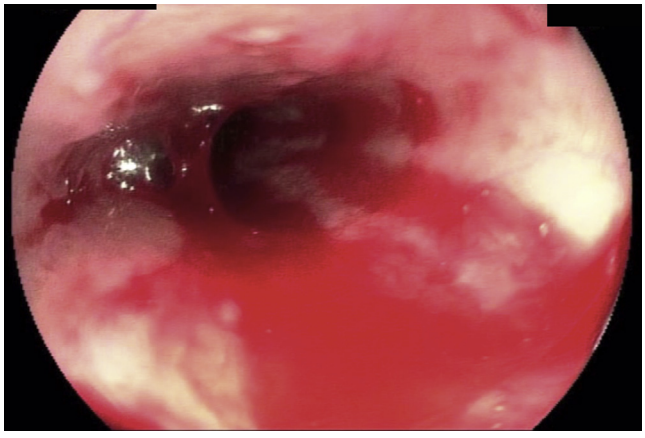

Figure 2. Massive blood oozing from a post-endoscopic variceal ligation ulcer.

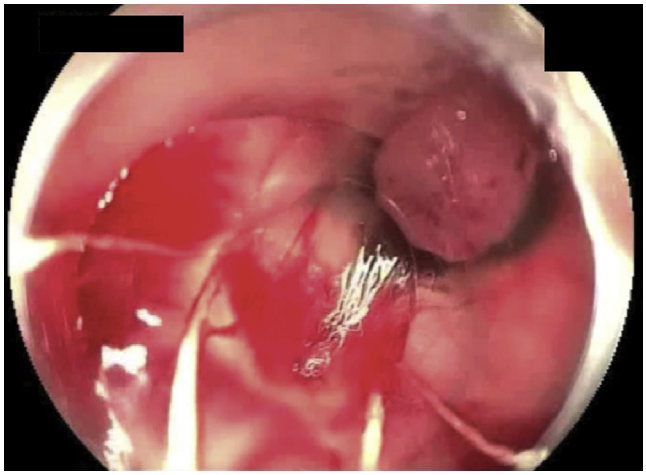

Figure 3. Elastic band falling off a fibrotic region in the distal esophagus.

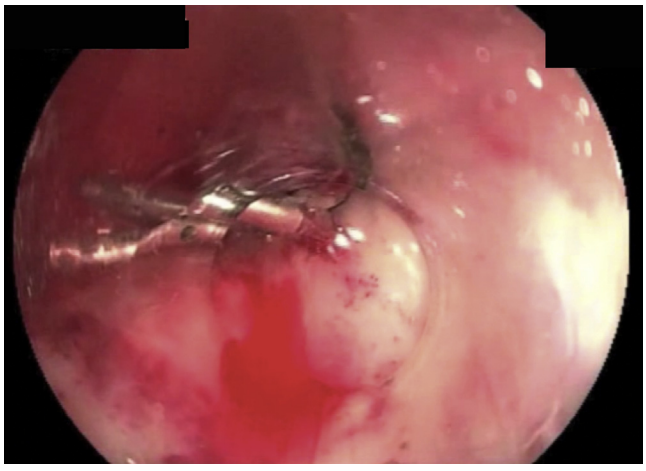

Figure 4. Partial hemostasis in post-endoscopic variceal ligation ulcer bleeding with 2 hemoclips.

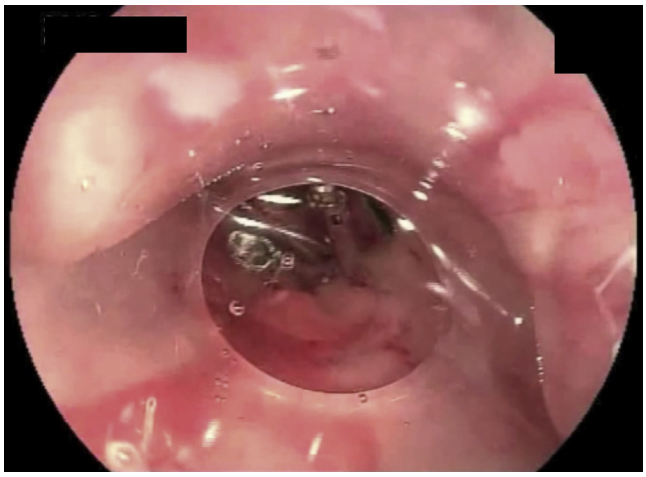

Figure 5. Complete hemostasis in post-endoscopic variceal ligation ulcer bleeding with 3 hemoclips.

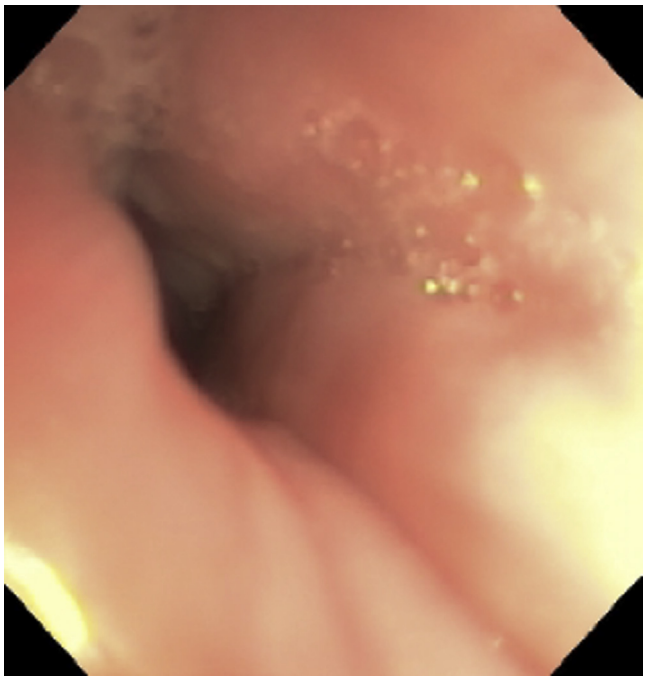

Figure 6. Endoscopic follow-up 1 year after variceal bleeding.

was performed, and a large amount of blood was observed oozing from the base of a varix with a previous ligation scar 32 cm from the incisors (Fig. 2). Distally, 2 large varices were observed. The Z line was 35 cm from the incisors. EVL was applied 3 times, and 1 attempt was made to apply ligation at the site of the hemorrhage, but the elastic band fell off of a fibrotic region (Fig. 3). After that, we administered 20 mL adrenaline (1: 20,000), and 3 clips were placed, with the use of an endoscopic cup, on the scar, achieving partial hemostasis with the first 2 clips (Fig. 4) and complete hemostasis with the third (Fig. 5). After the procedure, the patient's condition was favorable, without abdominal pain and no signs of bleeding in the digestive tract. She was discharged 5 days later. Endoscopic follow-up at 1 year showed small esophageal varices in medical treatment (Fig. 6).

There are a few reports of the use of clipping systems in variceal bleeding.[4] Despite the current recommendations, endoscopic clipping is as effective as band ligation.[5] There are also reports of over-the-scope clipping systems in variceal bleeding,[6] but the high cost limits their use. We report the use of hemoclips as rescue therapy for post-EVL ulcer bleeding in challenging clinical circumstances, with low cost of the procedure (Video 1, available online at www.VideoGIE.org).

DISCLOSURE

All authors disclosed no financial relationships relevant to this publication.

Abbreviations: EVL, endoscopic variceal ligation; GEV, gastroesophageal varices.

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