Single-session endoscopic ultrasound-directed transgastric endoscopy for treatment of upper gastrointestinal bleeding after Roux-en-Y gastric bypass

Endoscopic ultrasound (EUS)-directed transgastric endoscopic retrograde cholangiopancreatography (ERCP) – also known as EDGE – for the purpose of accessing the duodenum to perform EUS or ERCP has been well described in patients who have undergone Roux-en-Y gastric bypass (RYGB) [1]. Few reports, however, have described the use of EDGE to manage upper gastrointestinal bleeding in patients with RYGB anatomy [2].

A 48-year-old woman (Jehovah’s Witness) with a history of RYGB presented with melena and a hemoglobin level of 9.0 g/dL. An upper endoscopy revealed a healthy appearing gastrojejunal anastomosis and no source of bleeding. The hemoglobin level dropped further to 5.0 g/dL and the patient had persistent melena. A computed tomography angiography was concerning for hemorrhagic fluid in the descending duodenum (▶ Fig. 1). After discussing possible treatment options with the patient, including balloon-assisted enteroscopy vs. single-session EDGE, the patient opted for the latter.

After successful placement (▶ Fig. 2) and suturing of a gastrogastric 20 × 10 mm lumen-apposing metal stent (LAMS), the excluded stomach was entered (▶ Video 1). An ulcer with a pigmented spot was found in the first portion of the duodenum (▶ Fig. 3), which was treated using bipolar cautery. Given the patient’s religious preference to avoid blood products, we then placed a 20 × 10 mm LAMS to tamponade the ulcer and allow healing (▶ Fig. 4). Both LAMS were removed 1 month later with complete ulcer healing (▶ Fig. 5).

The EDGE procedure allows access to the excluded stomach and duodenum in patients with RYGB anatomy [1]. We describe the use of single-session EDGE to treat gastrointestinal bleeding secondary to peptic ulcer disease. We also highlight how a luminal LAMS was utilized to create a tamponade effect, reducing the exposure to acidic and pancreaticobiliary contents and thus the risk of rebleeding, which was particularly important in this case, given the patient’s religious beliefs.
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Conflict of Interest

S. Han is a consultant for Boston Scientific. J. Burlen, A. Manudhane, L. Roberts, A. Cecilia Amaral, and G. Papachristou declare that they have no conflict of interest.

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