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 gastrojejunostomy 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.
Endoscopy_UCTN_Code_TTT_1AS_2AB

Acknowledgement

S. Han is supported by the Path to K award from the Ohio State University College of Medicine Office of Research and the Center for Clinical and Translational Science through the Richard P. & Marie R. Bremer Medical Research Fund and William H. Davis Endowment for Basic Medical Research.

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.

The authors

Jordan Burlen1, Albert Manudhane1, Luke Roberts1, Anna Cecilia Amaral2, Georgios I. Papachristou1, Samuel Han3
1 Gastroenterology and Hepatology, The Ohio State University Wexner Medical Center, Columbus, United States
2 Gastroenterology, Hepatology, and Nutrition, The Ohio State University Wexner Medical Center, Columbus, United States
3 Division of Gastroenterology, Hepatology and Nutrition, The Ohio State University Wexner Medical Center, Columbus, United States

Corresponding author

Samuel Han, MD, MSCS
The Ohio State University Wexner Medical Center, Division of Gastroenterology, Hepatology and Nutrition, Columbus, United States
samuel.han@osumc.edu
samuel.y.han@gmail.com

References


Bibliography

Endoscopy 2023; 55: E1205–E1206
DOI 10.1055/a-2197-9404
ISSN 0013-726X
© 2023. The Author(s).
This is an open access article published by Thieme under the terms of the Creative Commons Attribution License, permitting unrestricted use, distribution, and reproduction so long as the original work is properly cited (https://creativecommons.org/licenses/by/4.0/).
Georg Thieme Verlag KG, Rüdigerstraße 14, 70469 Stuttgart, Germany

E1206