

## Life-threatening small-bowel diverticular bleed treated by double-balloon enteroscopy in a patient refusing transfusion



**Video 1** Hemostasis of jejunal diverticular bleeding achieved by double-balloon enteroscopy-facilitated endotherapy.

Double-balloon enteroscopy (DBE) is the gold standard for minimally invasive investigation and management of a vast array of small-bowel pathology [1]. Small-bowel diverticulosis is rare, with a prevalence of 1%–2% in the general population [2]. Complications including diverticular bleeding, perforation, and obstruction may occur in 10%–30% of cases [2, 3]. We present a case of massive jejunal diverticular bleed successfully managed by DBE-facilitated endotherapy. A 65-year-old man presented to our tertiary center with a short history of melena, abdominal pain, and symptomatic anemia, including dizziness and syncopal episodes at rest, on a background of severe COVID-19 infection. He was transferred to the intensive care unit (ICU) as his hemoglobin dipped to a critically low level (32 g/L) during admission. Despite counseling regarding risk, the patient refused blood transfusion due to religious beliefs. Emergent esophagogastroduodenoscopy and colonoscopy were unrevealing. Given ongoing bleeding, two separate computed tomography angiograms of the abdomen–pelvis were subsequently performed, but failed to show the bleeding source. Small-bowel capsule endos-

copy showed multiple diverticula in the jejunum with blood content in the small bowel and colon. Emergency antero-grade DBE was performed under general anesthesia in the ICU, showing severe jejunal diverticulosis with large vessels in the diverticula sacs. Active bleeding was identified at a sizable small-bowel diverticulum, and three endoclips were deployed for successful hemostasis (▶ **Video 1**). The hemoglobin returned to acceptable levels during admission following treatment with intravenous iron infusions, tranexamic acid, and erythropoietin. During 3 years of follow-up, there was no recurrence of bleeding.

This case demonstrates that DBE-facilitated endotherapy is a safe and effective approach in the context of life-threatening jejunal diverticular bleeding, even in a challenging scenario with a critically low hemoglobin in a patient refusing transfusion.

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### Conflict of Interest

Edward J. Despott has acted as a consultant for Boston Scientific and Ambu. He has also received academic grants and speaker honoraria from Fujifilm, Aquilant Endoscopy, Norgine, and Olympus. Alberto Murino has acted as a consultant for Boston Scientific and GI Supply. He has also received academic grants from Fujifilm, Aquilant Endoscopy, Norgine, and Olympus. All other authors have no conflicts of interest to declare.

### The authors

**Laura A. Lucaciu**<sup>1</sup>, **Alexandros Skamnelos**<sup>1</sup>, **Alberto Murino**<sup>1,2</sup>, **Nikolaos Lazaridis**<sup>1</sup>, **Rocio Chacchi Cahuin**<sup>1,2</sup>, **Regina Raymond**<sup>1</sup>, **Edward J. Despott**<sup>1,2</sup>

1 Royal Free Unit for Endoscopy, Royal Free London NHS Foundation Trust, London, United Kingdom of Great Britain and Northern Ireland

2 University College London Institute for Liver and Digestive Health, London, United Kingdom of Great Britain and Northern Ireland

### Corresponding author

**Edward J. Despott, MD, FRCP, FESGE, MD (Res)**

University College London (UCL), Institute for Liver & Digestive Health, 8th Floor South Offices, The Royal Free Hospital & UCL School of Medicine, Royal Free London NHS Foundation Trust, Pond Street, Hampstead, NW3 2QG London, United Kingdom  
edward.despott@nhs.net

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