

## Endoscopic band ligation for the treatment of bleeding colonic and ileal diverticula

Lower gastrointestinal bleeding accounts for about a fifth of all gastrointestinal bleeding cases, and generally has a less severe course and stops spontaneously in most cases (80%–85%) [1–3]. However, some patients require endoscopic, surgical, or angiographic treatment, depending on the nature of the bleed [4]. Endoscopic band ligation (EBL) is effective for the treatment of both variceal and nonvariceal upper gastrointestinal bleeding [5]. Here we report our experiences of using EBL in the treatment of bleeding colonic and ileal diverticula.

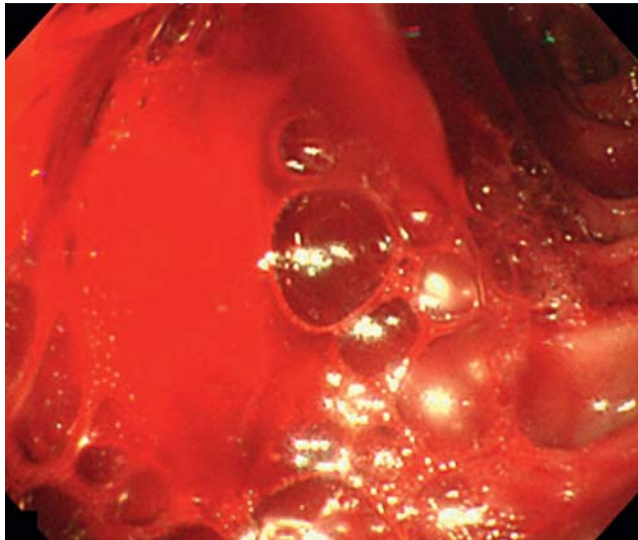
A 58-year-old man with a history of hyperlipidemia was admitted to our hospital with painless hematochezia. A bleeding source could not be identified at urgent colonoscopy after bowel preparation following ingestion of 2 L of polyethylene glycol (PEG). At 12 hours after the first colonoscopy, the patient suddenly developed massive hematochezia and hypotension, requiring aggressive resuscitation. A second colonoscopy revealed active bleeding from the diverticulum in the distal ascending colon (● Fig. 1). After making a mark with an endoclip near the bleeding diverticulum, the colonoscope was removed and then reinserted after attaching a band-ligator device (MD-48710 EVL Device, Sumitomo Bakelite Co. Ltd., Tokyo, Japan) to the tip of the colonoscope. The colonic diverticulum was suctioned into the suction cup of the endoscopic ligator and the elastic O ring was released, which resulted in hemostasis (● Fig. 2).

A second patient, 46-year-old man with alcoholic liver disease, was admitted due to episodes of hematochezia. Colonoscopy revealed active bleeding from an ileal diverticulum (● Fig. 3). EBL was carried out, resulting in hemostasis (● Fig. 4). Both patients showed no clinical evidence of further bleeding during the following 2 months.

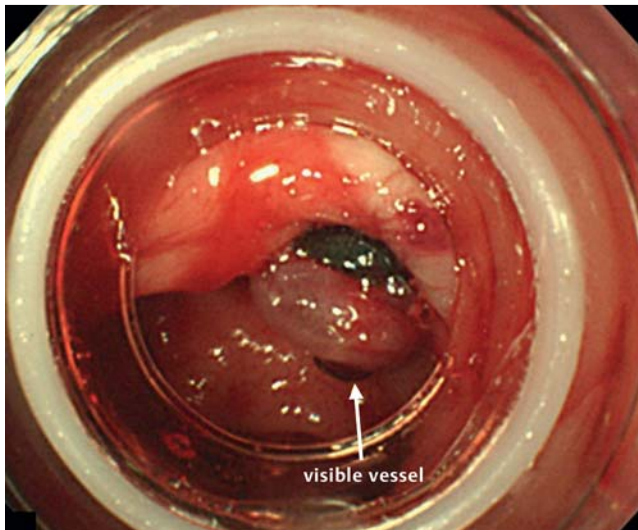
EBL is a safe and effective hemostatic method for bleeding colonic and ileal diverticula.

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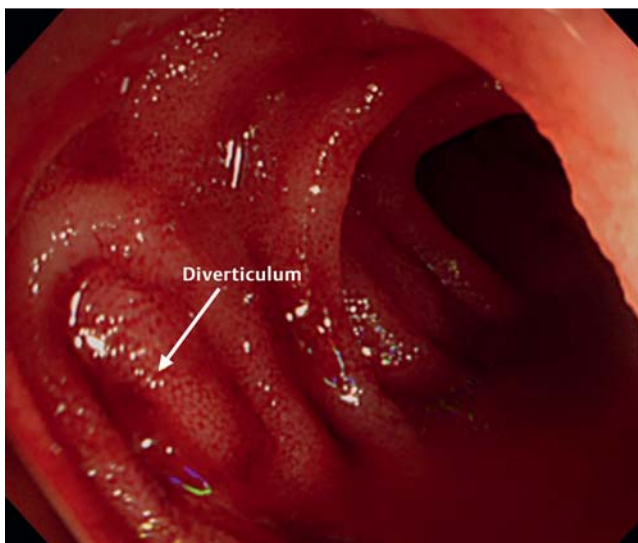
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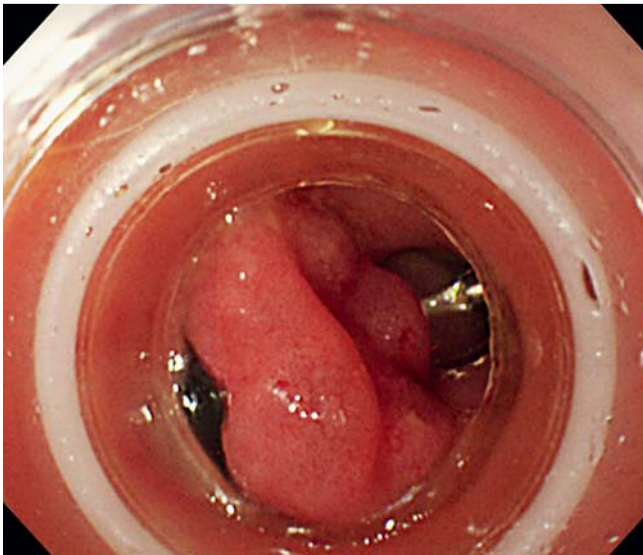
**Fig. 1** Endoscopic view of active bleeding from the diverticulum in the distal ascending colon.



**Fig. 2** Suctioning of the colonic diverticulum into the suction cup of the endoscopic ligator with release of the elastic O ring, which resulted in hemostasis. A large vessel is seen on the everted and banded diverticulum.



**Fig. 3** Endoscopic view of active bleeding from an ileal diverticulum.



**Fig. 4** Endoscopic band ligation of the bleeding ileal diverticulum, resulting in hemostasis.

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#### References

- 1 *McGuire HH Jr.* Bleeding colonic diverticula. A reappraisal of natural history and management. *Ann Surg* 1994; 220: 653–656
- 2 *Suzman MS, Talmor M, Jennis R et al.* Accurate localization and surgical management of active lower gastrointestinal hemorrhage with technetium-labeled erythrocyte scintigraphy. *Ann Surg* 1996; 224: 29–36

3 *Farrell JJ, Friedman LS.* Gastrointestinal bleeding in the elderly. *Gastroenterol Clin North Am* 2001; 30: 377–407

4 *Jensen DM, Machicado GA.* Colonoscopy for diagnosis and treatment of severe lower gastrointestinal bleeding. Routine outcomes and cost analysis. *Gastrointest Endosc Clin North Am* 1997; 7: 477–498

5 *Abi-Hanna D, Williams SJ, Gillespie PE et al.* Endoscopic band ligation for non-variceal non-ulcer gastrointestinal hemorrhage. *Gastrointest Endosc* 1998; 48: 510–514

#### Bibliography

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