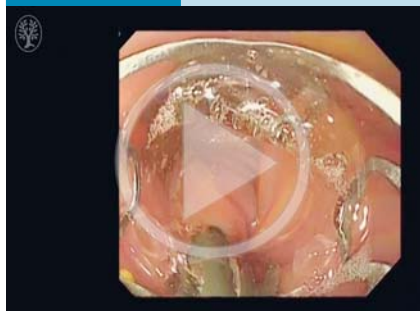


Safe guidewire-assisted method of over-the-scope clip delivery for bleeding in the small intestine



Fig. 1 Endoscopic image of the terminal ileum showing a refractory ulcer with active bleeding. An exposed vessel was present on the ulcer floor.

Video 1



With guidewire assistance, the colonoscope-mounted over-the-scope clip (OTSC) was inserted from the anal side toward the refractory bleeding ulcer in the terminal ileum. The ulcer floor had an exposed vessel and bleeding was continuous. The entire ulcer was suctioned into the application cap, and one OTSC was released. The OTSC was deployed successfully.

The efficacy of the over-the-scope clip (OTSC; Ovesco Endoscopy GmbH, Tübingen, Germany) for refractory gastrointestinal bleeding has been described in many clinical case reports [1–3]. However, there are no reports regarding the delivery method of OTSCs in the small intestine. The bear claw on the OTSC may pose a risk of mucosal injury owing to the anatomical features of the small and large intestine. However, it is not only the anatomical characteristics of the small intestine that make successful hemostasis difficult, as delivery of the OTSC itself may also be problematic [4,5]. We report the first case involving a guidewire-assisted



Fig. 2 Radiograph showing the placement of the guidewire through the colonoscope to the proximal side of the bleeding ulcer.



Fig. 3 Radiograph showing safe guidewire-assisted delivery of the over-the-scope clip mounted on the colonoscope.

method for the safe delivery of an OTSC in the small intestine.

A 71-year-old man who suffered from ulcer bleeding in the terminal ileum had undergone three failed attempts at hemostasis with conventional hemoclips and hemostatic forceps. Because of the refractory nature of the bleeding (Fig. 1), an

OTSC was applied following informed consent (Video 1).

The colonoscope was inserted into the ileum, and a guidewire (Sumitomo Bakelite Co., Ltd., Tokyo, Japan) was placed through the scope to the proximal side of the lesion (Fig. 2). Using guidewire assistance (Fig. 3), the colonoscope



Fig. 4 Radiograph showing the over-the-scope clip mounted on the colonoscope and reaching the bleeding ulcer in the terminal ileum.

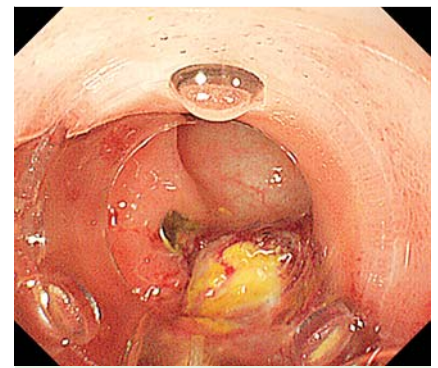


Fig. 5 Endoscopic image showing successful placement of the over-the-scope clip at the ulcer in the terminal ileum.

mounted with the OTSC was inserted safely toward the bleeding site (► **Fig. 4**). The entire ulcer was suctioned into the application cap, and the OTSC was deployed successfully (► **Fig. 5**). This guidewire-assisted delivery method is a valuable and safe method of OTSC delivery in the small and large intestine.

Endoscopy_UCTN_Code_TTT_1AQ_2AZ

Competing interests: None

Noriko Nishiyama, Hirohito Mori, Hideki Kobara, Shintaro Fujihara, Maki Ayaki, Tatsuo Yachida, Tsutomu Masaki

Department of Gastroenterology and Neurology, Faculty of Medicine, Kagawa University, Kagawa, Japan

References

- 1 Chan SM, Chiu PW, Teoh AY et al. Use of the Over-The-Scope Clip for treatment of refractory upper gastrointestinal bleeding: a case series. *Endoscopy* 2014; 46: 428–431
- 2 Nishiyama N, Mori H, Kobara H et al. Efficacy and safety of over-the-scope clip: including complications after endoscopic submucosal dissection. *World J Gastroenterol* 2013; 19: 2752–2760
- 3 Nishiyama N, Mori H, Kobara H et al. Over-the-scope clip system is effective for the closure of post-endoscopic submucosal dissection ulcer, especially at the greater curvature. *Endoscopy* 2014; 46: E130–131
- 4 Mensink PB, Haringsma J, Kucharzik T et al. Complications of double balloon enteroscopy: a multicenter survey. *Endoscopy* 2007; 39: 613–615
- 5 Dafnis G, Ekblom A, Pahlman L et al. Complications of diagnostic and therapeutic colonoscopy within a defined population in Sweden. *Gastrointest Endosc* 2001; 54: 302–309

Bibliography

DOI <http://dx.doi.org/10.1055/s-0034-1393382>
Endoscopy 2015; 47: E590–E591
 © Georg Thieme Verlag KG
 Stuttgart · New York
 ISSN 0013-726X

Corresponding author

Noriko Nishiyama, MD
 Department of Gastroenterology and Neurology
 Faculty of Medicine
 Kagawa University
 1750-1 Ikenobe, Miki, Kita
 Kagawa 761-0793
 Japan
 Fax: +81-87-8912158
 n-nori@med.kagawa-u.ac.jp