Article published online: 2023-04-11

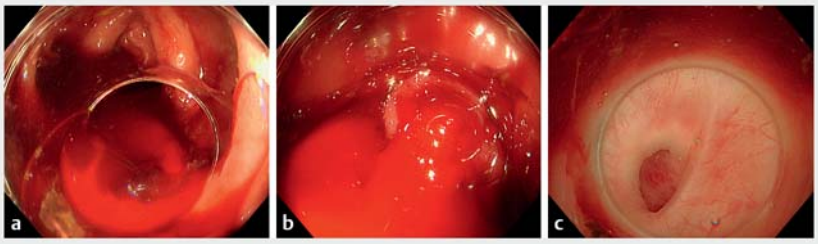
Successful direct clipping of the bleeding source of a colonic diverticular hemorrhage using the "long-hood gel-filling" method

OPEN ACCESS

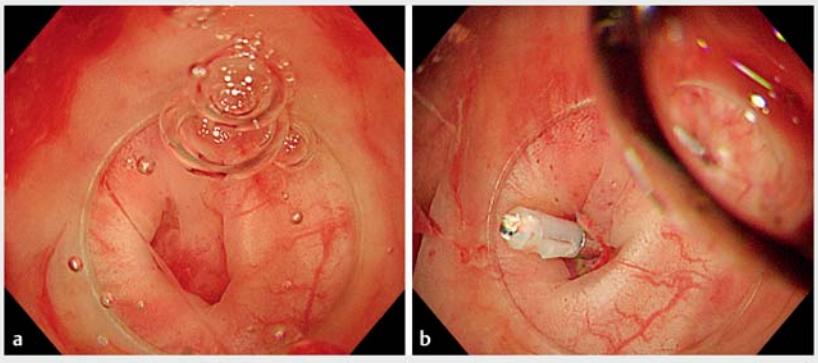
Although various endoscopic hemostasis techniques for colonic diverticular bleeding have recently been reported [1], identifying the bleeding diverticulum among other diverticula is difficult [2], and identifying the bleeding vessels within the diverticulum is even more difficult. The usefulness of a long hood (MAJ663; Olympus) [3] and endoscopic-viewing gel (VISCOCLEAR) [4, 5] when identifying the bleeding diverticulum has recently been reported. Here, we report successful direct clipping of the bleeding source for a colonic diverticular hemorrhage using a long hood and gel (the "long-hood gel-filling method").

A 53-year-old man with a large volume of hematochezia was transferred to our hospital. The ascending colon was carefully examined using an endoscope, and a large volume of clotted blood and severe active bleeding were observed (▶ **Fig. 1 a**). We performed clipping on the opposite side of the bleeding site so as not to lose its position. We then identified the bleeding diverticulum, but were unable to identify the bleeding vessels within the diverticulum because of the severe active bleeding (▶ **Fig. 1 b**). Compression hemostasis was performed using the long-hood gel-filling method (the lumen of the long hood being filled with the endoscopic-viewing gel) and we were able to identify the bleeding vessel in the diverticulum (▶ **Fig. 1 c**). Direct clipping of the bleeding vessel located in the diverticulum was then performed using hemoclips (HX-610-135XS; Olympus) (▶ **Fig. 2**) and further clips were then added to ensure hemostasis (▶ **Video 1**). No further hemorrhage was observed after clipping.

The merit of the long-hood gel-filling method is that only a small amount of gel is needed to fill the lumen of the long hood and a clear view can then be obtained. Compression hemostasis can also be performed using this method. Because hemoclips can be deployed through the lumen of the long hood, the endoscope can be fixed in place and visibility can be maintained during the clipping procedure.



▶ **Fig. 1** Endoscopic views showing: **a** a large volume of clotted blood and severe active bleeding in the ascending colon; **b** the diverticulum from which the bleeding was coming, although it was not possible to identify the bleeding vessels within the diverticulum because of the severity of the bleeding; **c** the bleeding vessel in the diverticulum, which was clearly visible once compression hemostasis had been performed using the long-hood gel-filling method.

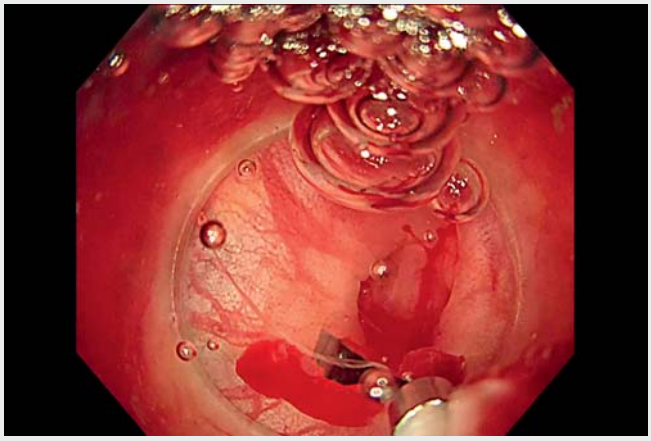


▶ **Fig. 2** Endoscopic images showing successful direct clipping of the bleeding source within the colonic diverticulum, with hemoclips applied once compression hemostasis had been achieved using the long-hood gel-filling method.

Endoscopy_UCTN_Code_CCL_1AD_2AF

Acknowledgments

We thank Katsuma Nakajima, Erina Ishibe, and Takatsugu Tanaka in the Department of Gastroenterology and Hepatology, Hakodate Municipal Hospital for their kind support and advice. We are very grateful to the wonderful staff in the endoscopy room, outpatient department, and ward of Hakodate Municipal Hospital.



Video 1 Successful direct clipping of the bleeding source within the colonic diverticulum using the long-hood gel-filling method.

Competing interests

The authors declare that they have no conflict of interest.

The authors

Satoshi Abiko, Koji Hirata, Kazuharu Suzuki, Kenji Kinoshita, Kazuteru Hatanaka, Yoshiya Yamamoto, Hirohito Naruse
Department of Gastroenterology and Hepatology, Hakodate Municipal Hospital, Hakodate, Japan

Corresponding author

Satoshi Abiko, MD, PhD
Department of Gastroenterology and Hepatology, Hakodate Municipal Hospital, 1-10-1, Minato-cho, Hakodate, 041-8680, Japan
abiko1982@gmail.com

References

[1] Kaise M, Nagata N, Ishii N et al. Epidemiology of colonic diverticula and recent advances in the management of colonic diverticular bleeding. Dig Endosc 2020; 32: 240–250
[2] Jensen DM, Machicado GA, Jutabha R et al. Urgent colonoscopy for the diagnosis and treatment of severe diverticular hemorrhage. NEJM 2000; 342: 78–82
[3] Kobayashi K, Furumoto Y, Narasaka T. "Long-hood method" for identification of the bleeding site in colonic diverticular hemorrhage. Dig Endosc 2020; 32: e28–e29
[4] Kobayashi Y, Ando K, Sasaki T et al. Usefulness of endoscopic band ligation with gel immersion endoscopy for colonic diverticular bleeding and hemorrhoidal bleeding. Endoscopy 2022; 54: E384–E385
[5] Yamamoto K, Shiratori Y, Ikeya T. Utility of the gel immersion method for treating massive colonic diverticular bleeding. Clin Endosc 2021; 54: 256–260

Bibliography

Endoscopy 2023; 55: E606–E607
DOI 10.1055/a-2048-6071
ISSN 0013-726X

Georg Thieme Verlag KG, Rüdigerstraße 14, 70469 Stuttgart, Germany