TOOLS AND TECHNIQUES

Endoclip line-assisted traction to control cardial postpolypectomy bleeding



Ricardo Küttner-Magalhães, MD, Luís Maia, MD, Marta Lemos Rocha, MD, Isabel Pedroto, MD, PhD

Bleeding is the most common adverse event associated with gastric endoscopic resection. $^{1}\,$

A 63-year-old woman with multiple comorbidities, who was taking clopidogrel, underwent hot snare polypectomy after submucosal lifting of a 40-mm short pedicle polyp in the cardia (Figs. 1 and 2). Immediate

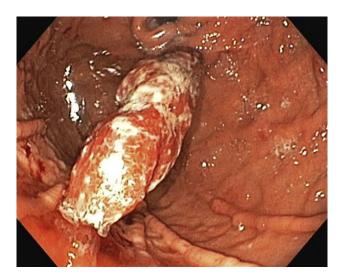


Figure 1. Polyp in the cardia.

retroflexion of the endoscope with the endoclip placed in the working channel, impeding access to the bleeding spot (Fig. 4) (Video 1, available online at www.VideoGIE. org). The clip-with-line method was used by withdrawing

postpolypectomy bleeding occurred (Fig. 3), and endoclip

application was not possible because of insufficient



Figure 3. Immediate postpolypectomy bleeding.

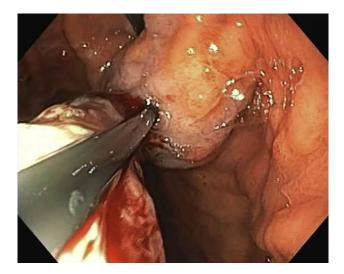


Figure 2. Submucosal lifting.



Figure 4. Insufficient retroflexion with the endoclip in the working channel.



Figure 5. Suture thread tied to 1 of the endoclip's prongs.

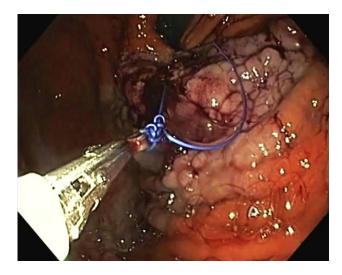


Figure 7. Traction to the suture thread, allowing the endoclip to be guided to the bleeding area.



Figure 6. Traction to the suture thread directing the endoclip to the area of interest.

the endoscope, introducing an endoclip into the working channel, externalizing it, and tying a suture to 1 of its prongs (Fig. 5). Afterward, the endoscope was reinserted into the gastric cavity, the endoclip was externalized in the retroflexioned position, and traction to the suture thread through the oral cavity allowed it to be guided to the bleeding area. Two endoclips were correctly applied by use of this method (Figs. 6-8).

There was no bleeding at the end of the procedure or on the following days. Histologic examination revealed a hyperplastic polyp with ulceration.

The clip-with-line method is used to facilitate endoscopic submucosal dissection under circumstances in which exposure of the submucosal layer is difficult. In this case it was impossible to access the cardia with the endoclip in the working channel, which rendered the endoscope to be stiffer, causing insufficient retroflexion.²⁻⁴

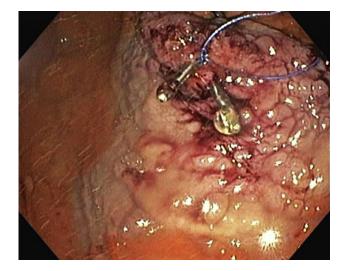


Figure 8. Final aspect.

This technique was used to create traction on the endoclips, directing them to the bleeding spot and allowing their correct placement.

We describe the successful application of this technique in this particular setting, with potentially severe bleeding. This procedure can be used to apply endoclips in locations that require extreme retroflexion of the endoscope.

DISCLOSURE

All authors disclosed no financial relationships relevant to this publication.

REFERENCES

 Ben-Menachem T, Decker GA, Early DS, et al. Adverse events of upper-GI endoscopy. Gastrointest Endosc 2012;76:707-18.

- 2. Yoshida M, Takizawa K, Ono H, et al. Efficacy of endoscopic submucosal dissection with dental floss clip traction for gastric epithelial neoplasia: a pilot study (with video). Surg Endosc 2016;30:3100-6.
- Tsuji K, Yoshida N, Nakanishi H, et al. Recent traction methods for endoscopic submucosal dissection. World J Gastroenterol 2016;22: 5917-26.
- 4. Jeon WJ, You IY, Chae HB, et al. A new technique for gastric endoscopic submucosal dissection: peroral traction-assisted endoscopic submucosal dissection. Gastrointest Endosc 2009;69:29-33.

Department of Gastroenterology, Santo António Hospital, Porto University Hospital Centre, Porto, Portugal.

Copyright © 2019 American Society for Gastrointestinal Endoscopy. Published by Elsevier Inc. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

https://doi.org/10.1016/j.vgie.2019.03.015

Submit to VideoGIE

VideoGIE is now indexed in PubMed Central.

VideoGIE is an Open Access, online-only journal indexed in PubMed Central. Submit video cases of endoscopic procedures used in the study, diagnosis, and treatment of digestive diseases.

VideoGIE publishes the following article types:

- *Case Reports:* Reports of the diagnosis and management of digestive diseases using a single case.
- *Case Series:* Reports of the diagnosis and management of digestive diseases using 3 or more cases.
- *Tools and Techniques:* Educational videos demonstrating the use of a particular endoscopic tool or technique. The goal of this section is to help trainees, endoscopy nurses, and technicians learn how best to use the tools of endoscopy for high-quality care.

All manuscripts must be submitted online at http://www.editorialmanager.com/vgie