A 77-year-old woman was admitted to our Emergency Department for an iatrogenic sigmoid colon perforation that occurred during a diagnostic colonoscopy. The patient complained of moderate abdominal pain without signs of peritonitis. Considering the time since colonoscopy (<2 hours) and the excellent bowel preparation, an attempt was made to treat the perforation endoscopically. Therapeutic colonoscopy was performed under monitored anesthesia care using a single-channel therapeutic gastroscope (EG-3490K; Pentax Medical, Tokyo, Japan) and CO2 insufflation. A 6-cm large full-thickness wall defect at 25 cm from the anal verge, with active oozing bleeding, was detected (▶ Fig. 1). Bleeding was controlled with 1:10,000 adrenaline injection; thereafter an endoloop-assisted clip closure was performed. We opened a 30-mm endoloop (HX-400U-30; Olympus Medical Systems Corp., Tokyo, Japan) around the wall defect; the cable was anchored to the hole margins by launching, one by one, four 13-mm through-the-scope clips (MD-G-HR-230-13-135; Zhejiang Chuangxiang Medical Technology Co., Ltd., Hangzhou, China); then the endoloop was hooked, closed, and finally released (▶ Fig. 2). The contrastography showed a 6-mm residual wall defect that was treated deploying a 12-mm t-type over-the-scope clip (OTSC) (Ovesco, Tübingen, Germany), with no contrast agent extravasation at the end. A computed tomography (CT) scan after the procedure confirmed the absence of contrast extravasation on luminal contrastography. The patient was managed conservatively with bowel rest, intravenous fluids, and broad-spectrum antibiotic therapy. After 5 days, oral feeding was resumed and the patient was discharged. A CT scan with colonic contrast injection performed after 3 weeks showed a complete resolution (▶ Video 1).

The endoloop-assisted clip closure technique has been reported as a therapeutic solution for iatrogenic perforations. The timing since the perforation is crucial in order to effectively close the leak [1–5]. In conclusion, in selected cases, the combined endoscopic rescue therapy with endoloop-assisted clip closure and OTSC can be effective in conservative treatment of colonic perforations.

Competing interests

The authors declare that they have no conflict of interest.
The authors
Salvatore Russo1, Giuseppe Grande1, Raffaele Manta2, Santi Mangiafico1, Helga Bertani1, Flavia Pigò1, Rita Conigliaro1
1 Azienda Ospedaliero-Universitaria di Modena, Gastroenterology and Digestive Endoscopy Unit
2 Azienda Ospedaliera di Perugia, Gastroenterology and Digestive Endoscopy Unit
Corresponding author
Salvatore Russo, MD
Azienda Ospedaliero-Universitaria di Modena, Gastroenterology and Digestive Endoscopy Unit, Via Pietro Giardini 1355, 41126 Modena, Italy
russo.salvatore@aou.mo.it

References

Bibliography
Endoscopy 2021; 53: E433–E434
DOI 10.1055/a-1333-0620
ISSN 0013-726X
published online 27.1.2021
© 2021. Thieme. All rights reserved.
Georg Thieme Verlag KG, Rüdigerstraße 14, 70469 Stuttgart, Germany

ENDOSCOPY E-VIDEOS
https://eref.thieme.de/e-videos

Endoscopy E-Videos is a free access online section, reporting on interesting cases and new techniques in gastroenterological endoscopy. All papers include a high quality video and all contributions are freely accessible online.

This section has its own submission website at https://mc.manuscriptcentral.com/e-videos