Delayed successful treatment of iatrogenic colon perforation using an over-the-scope clip

Fig. 1 Colon perforation with visualization of the epiploon.

Fig. 2 Perforation orifice and 11/6t over-the-scope clip.

Fig. 3 Over-the-scope in place.

Fig. 4 Watertight closure with no extravasation of contrast medium.

Fig. 5 CT scan with bowel opacification confirmed a sealed clip.

Over-the-scope clip closure of iatrogenic gastrointestinal tract perforations has been successfully demonstrated, and is usually performed in the immediate perioperative setting [1,2]. We report the first case, to our knowledge, of delayed successful treatment of an iatrogenic colon perforation using an over-the-scope clip. An 80-year-old woman underwent routine colonoscopy. Her medical history was unremarkable apart from unex-

plained thrombocytopenia (40 000 platelets/dL). During endoscopy, a perforation occurred at the level of the sigmoid junction with the left colon (● Fig. 1). At that time, after multidisciplinary discussion, and in view of the successful colonic preparation and the thrombocytopenia, a mini-invasive endoscopic treatment was proposed (the patient being on antibiotics). Two and a half hours later the patient was transferred to our unit for an attempt at clip closure. Using a gastroscope and CO₂ insufflation, a 7-mm perforation orifice was visualized. An OTSC 11/6t clip (Ovesco Endoscopy GmbH, Tübingen, Germany) was then delivered,

with aspiration of the edges of the orifice (● Fig. 2, ● Fig. 3). Contrast medium study through the endoscope performed at that time did not show any fluid extravasation (● Fig. 4).

The day after the procedure, the patient presented localized peritoneal irritation and fever (38°C). Lab tests showed no hyperleukocytosis, but the C-reactive protein level had increased to 204 U/L. Spiral CT with bowel opacification performed then confirmed a sealed clip closure with no free fluid or air in the peritoneal cavity (● Fig. 5). The patient was kept fasting until bowel transit was re-established 2 days later. She was symptom-free by the

postoperative third day. On day 5, she was discharged from the hospital. She is clinically well and symptom-free. Delayed treatment of an iatrogenic colonic perforation with an over-the-scope clip is a feasible and effective technique that should be considered by expert endoscopists. However, the peritoneal cavity may become contaminated during the delay between perforation and definitive treatment.

Endoscopy_UCTN_Code_TTT_1AQ_2AG

Competing interests: None

Gianfranco Donatelli¹, Bertrand M. Vergeau¹, Jean-Loup Dumont¹, Claude Altmann¹, Stravros Dritsas², Parag Dhumane³, Thierry Tuszynski¹, Bruno Meduri¹

¹ Unité d'Endoscopie Interventionnelle, Hôpital Privé des Peupliers, Générale de Santé, Paris, France

² Service d'Hépatologie, Hôpital Minjoz, Besançon, France

³ Department of General and Laparoscopic Surgery, Lilavati Hospital and Research Center, Bandra (W), Mumbai, India

References

- 1 Donatelli G, Vergeau BM, Dritsas S et al. Closure with an over-the-scope-clip allows therapeutic ERCP to be safely performed after acute duodenal perforation during diagnostic endoscopic ultrasound. *Endoscopy* 2013; 45: E392–393
- 2 Díez-Redonod P, Bianco JL, Lorenzo-Pelayo S et al. A novel system for endoscopic closure of iatrogenic colon perforations using the Ovesco clip and omental patch. *Rev Esp Enferm Dig* 2012; 104: 550–552

Bibliography

DOI <http://dx.doi.org/10.1055/s-0034-1365796>
Endoscopy 2014; 46: E285–E286
 © Georg Thieme Verlag KG
 Stuttgart · New York
 ISSN 0013-726X

Corresponding author

Dr. Gianfranco Donatelli

Hôpital Privé des Peupliers, Générale de Santé
 8 Place de l'Abbé G. Hénocque
 75013 Paris
 France
donatelligianfranco@gmail.com