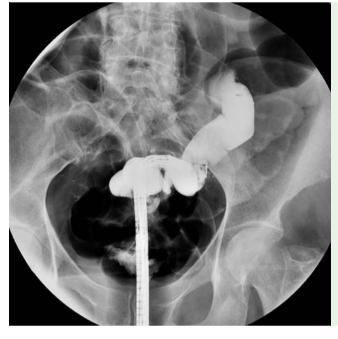
# Delayed successful treatment of iatrogenic colon perforation using an over-the-scope clip



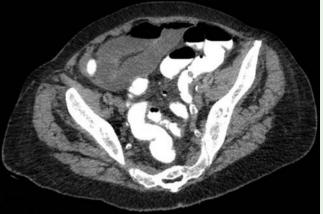
**Fig. 1** Colon perforation with visualization of the epiploon.



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



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



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



**Fig. 3** Over-the-scope in place.

Over-the-scope clip closure of iatrogenic gastrointestinal tract perforations has been successfully demonstrated, and is usually performed in the immediate peroperative 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 (40000 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

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### **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

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