

Title:

Closure of a perforated endoscopic submucosal dissection eschar using three over-the-scope clips

Authors:

Maria Manuela Estevinho, Rolando Pinho, João Carlos Silva, Teresa Freitas

DOI: 10.17235/reed.2023.9546/2023

Link: [PubMed \(Epub ahead of print\)](#)

Please cite this article as:

Estevinho Maria Manuela, Pinho Rolando, Silva João Carlos, Freitas Teresa. Closure of a perforated endoscopic submucosal dissection eschar using three over-the-scope clips. Rev Esp Enferm Dig 2023. doi: 10.17235/reed.2023.9546/2023.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

CC 9546

Closure of a perforated endoscopic submucosal dissection eschar using three over-the-scope clips

Maria Manuela Estevinho, Rolando Pinho, João Carlos Silva, Teresa Freitas

Gastroenterology Service. Centro Hospitalar Vila Nova de Gaia Espinho. Vila Nova de Gaia, Portugal

Correspondence: Maria Manuela Estevinho

e-mail: mmestevinho@gmail.com

Author contributions: all authors were involved in patient management and approved the manuscript.

Patient consent: the patient provided informed and written consent for the anonymous publication of the clinical case, figures, and video.

Conflict of interest: the authors declare no conflict of interest.

Keywords: Endoscopic submucosal dissection. Over-the-scope clip. Perforation. Post-procedure complications. Therapeutic endoscopy.

Dear Editor,

A 77-year-old male with chronic gastritis and intestinal metaplasia (score 8 on endoscopic grading of gastric intestinal metaplasia [EGGIM] [1], stage III on operating link for gastric intestinal metaplasia [OLGIM] [2]) underwent endoscopic submucosal dissection (ESD) of a 14 mm Paris 0-IIa lesion located in the greater curvature of the proximal corpus. An IT-Knife-2 was used, intraprocedural bleeding was negligible and all visible vessels were coagulated (Fig. 1A). Proton pump inhibitors perfusion was started following the procedure, as generally recommended (4). Considering the

patient's characteristics, lesion's location and size, the estimated risk of post-procedure bleeding was low (2.0-3.7 %, corresponding to one point in the BEST-J score [3]). Notwithstanding, 16 hours later, the patient presented hematemesis and new-onset anemia (hemoglobin decreased from 13.6 to 9.5 g/dl), without hemodynamic repercussion. An urgent esophagogastroduodenoscopy (EGD) was performed, and a large blood clot covering the eschar was seen. After careful clot removal, using a water jet, a very deep eschar with no active bleeding was seen. Closure of the eschar was attempted with through-the-scope (TTS) clips, without success (Fig. 1B). During the first hour after the EGD, the patient developed new-onset abdominal pain, which prompted an urgent abdominal computed tomography (CT) scan. Free air was detected, suggesting eschar perforation. The patient remained stable and EGD was immediately repeated to attempt eschar closure. The previously placed TTS clips were removed with foreign body forceps and three partially overlapping over-the-scope clips (OTSC® 11/3 t) were placed, with the aid of Twin Grasper® (Fig. 1C and D). Subsequently, a CT scan with oral contrast was performed to complete eschar closure and patient evolution was uneventful in the six-month follow-up.

Discussion

This case illustrates the relevance of prompt action to ensure the safety of patients that undergo ESD and reinforces the feasibility of endoscopic treatment for challenging perforations, reducing the need for urgent surgery and its related morbidity and mortality.

References

1. Esposito G, Pimentel-Nunes P, Angeletti S, et al. Endoscopic grading of gastric intestinal metaplasia (EGGIM): a multicenter validation study. *Endoscopy* 2019;51:515-21. DOI: 10.1055/a-0808-3186
2. Lee JWJ, Zhu F, Srivastava S, et al. Severity of gastric intestinal metaplasia predicts the risk of gastric cancer: a prospective multicentre cohort study (GCEP). *Gut* 2022;71:854-63. DOI: 10.1136/gutjnl-2021-324057

3. Hatta W, Tsuji Y, Yoshio T, et al. Prediction model of bleeding after endoscopic submucosal dissection for early gastric cancer: BEST-J score. Gut 2021;70:476-84. DOI: 10.1136/gutjnl-2019-319926
4. Miao T, Zhang Y, Bai L, et al. Vonoprazan vs. lansoprazole for the treatment of endoscopic submucosal dissection induced gastric ulcer: a systematic review and meta-analysis. Rev Esp Enferm Dig 2022. DOI: 10.17235/reed.2022.8863/2022

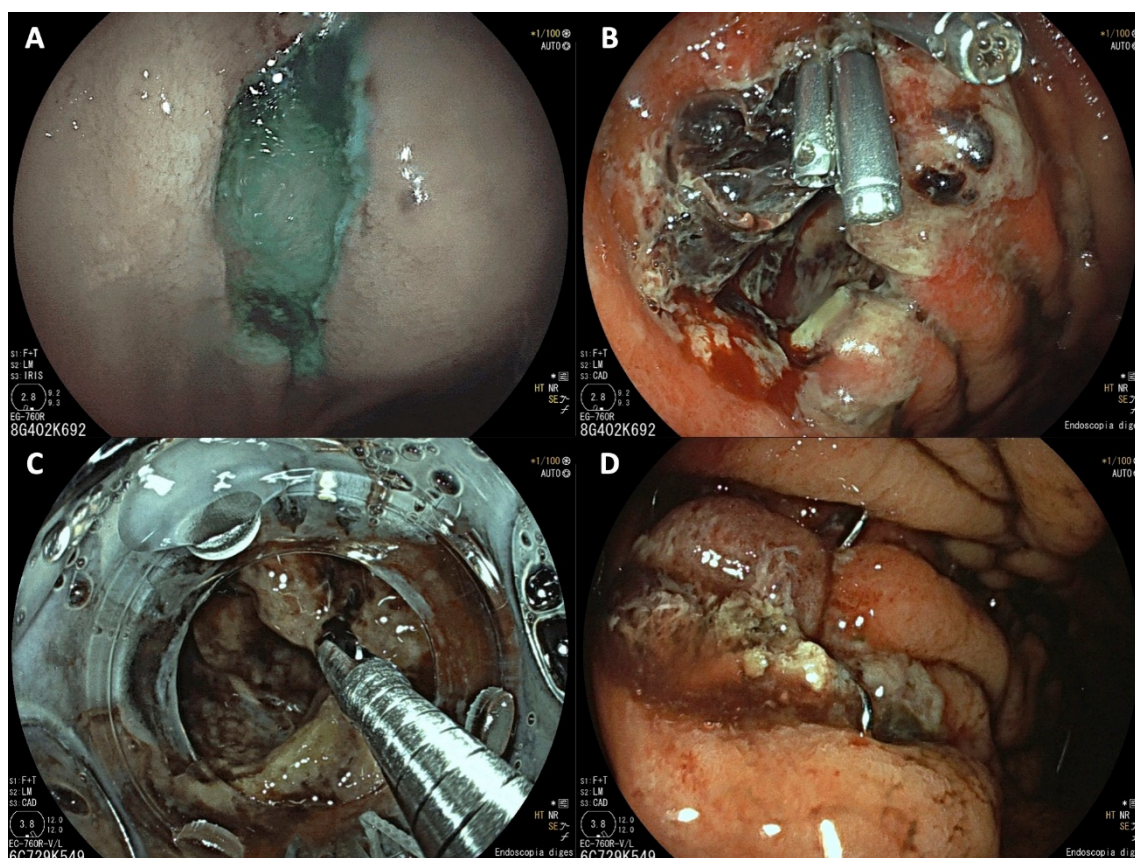


Fig. 1. A. Endoscopic submucosal dissection (ESD) eschar. B. Unsuccessful eschar closure with through-the-scope clips. C. Placement of three over-the-scope clips. D. Closed eschar.