A 71-year-old woman was found to have a laterally spreading tumor (non-granular type) adjacent to a previous surgical anastomosis (▶ Fig. 1a). Endoscopic submucosal dissection (ESD) with carbon dioxide insufflation was attempted using an esophagogastrroduodenoscope (GIF-H180; Olympus Co., Tokyo, Japan) and a FlushKnife BT (DK2618JB15; Fujifilm Medical, Tokyo, Japan) during the fourth edition of International ESD Live Madrid 2016, endorsed by the European Society of Gastrointestinal Endoscopy. Severe fibrosis was found during the procedure and it was very difficult to approach the appropriate submucosal plane. While a switch to snare removal was being considered, a large perforation occurred as a result of the colonoscope being pushed in a retroflexed position (▶ Fig. 1b). As a result, the lesion was removed en bloc using an electrosurgical snare (so-called “hybrid ESD”), because it was essential to complete the procedure immediately. As the perforation was large, we used the line-assisted complete closure (LACC) technique [1–3]. The closure was successfully completed using 30 endoclips (HX-610-090 and HX-202UR; Olympus Co.) without decompressing the pneumoperitoneum (▶ Fig. 1c; ▶ Video 1). A contrast-enhanced computed tomography (CT) scan immediately after the procedure showed the presence of the pneumoperitoneum but the absence of leaking contrast agent (▶ Fig. 2). The patient was kept fasted and treated with intravenous antibiotics for 24 hours, before being given oral antibiotics for an additional 8 days. She was hospitalized for 4 days without further complications. Histological examination showed low grade dysplasia, with clear lateral and vertical margins. The patient was followed up 5 months later, at which time she was...
asymptomatic. A surveillance colonoscopy will be performed after 1 year.

Several suturing methods for colonic perforation have been previously reported [4, 5]; however, these methods require special devices, whereas LACC needs no special devices. Furthermore, aborting the procedure or cautious maneuvering when in retroflexion should be considered to avoid perforation during ESD for lesions with fibrosis.

Endoscopy_UCTN_Code_CPL_1AJ_2AD

Competing interests

None

The authors

Hiroko Nakahira1, Yoji Takeuchi1, Jose Santiago Garcia2, Yoshinori Morita2, Noriya Uedo1, Ryu Ishihara1, Alberto Herreros de Tejada2

1 Department of Gastrointestinal Oncology, Osaka International Cancer Institute, Osaka, Japan
2 Department of Gastroenterology, Puerta de Hierro University Hospital, Autonoma University Medical School, Madrid, Spain
3 Division of Gastroenterology, Department of Internal Medicine, Graduate School of Medicine, Kobe University, Japan

Corresponding author

Yoji Takeuchi, MD
Department of Gastrointestinal Oncology, Osaka International Cancer Institute, 3-1-69, Otemae, Chuo-ku, Osaka 541-8567, Japan

takeuti-yo@mc.pref.osaka.jp

References


Bibliography

DOI https://doi.org/10.1055/s-0043-121137
Published online: 10.11.2017
Endoscopy 2018; 50: E32–E33
© Georg Thieme Verlag KG
Stuttgart · New York
ISSN 0013-726X

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

Fig. 2 Computed tomography (CT) images immediately after the procedure showing the presence of a pneumoperitoneum, the absence of leaking contrast at the perforation site, and the endoclips that were placed during the procedure in: a coronal view; b sagittal view.