Complete removal of a colonic neoplasm extending into a diverticulum with hybrid endoscopic submucosal dissection–mucosal resection and endoscopic band ligation

Intramucosal neoplasm is a good indication for endoscopic treatment [1]; however, resection should be avoided when the lesion has spread into a diverticulum because of the high risk for perforation. The usefulness of endoscopic band ligation (EBL) for hemostasis in cases of hemorrhage from a colonic diverticulum has been reported [2, 3], and the “resect and discard strategy” has been used for adenomatous polyps [4]. Therefore, we hypothesized that EBL could be used to entrap an adenomatous lesion spreading into a diverticulum.

A 73-year-old woman was referred for the treatment of a colonic neoplasm extending into a diverticulum. Colonoscopy showed a flat, elevated, 30-mm lesion in the sigmoid colon. Magnification with Fujinon Intelligent Color Enhancement (FICE; Fujinon, Tokyo, Japan) showed a regular or slightly irregular surface and vessel pattern without demarcation, indicating an intramucosal neoplasm (Fig. 1). The lesion was resected in a triple approach consisting of a hybrid technique (endoscopic submucosal dissection [ESD] followed by endoscopic mucosal resection [EMR] with snaring) [5], then endoscopic band ligation (EBL) of the remainder after suction (Video 1).

First, we initiated a circumferential incision from the side opposite the diverticulum, then continued with ESD. Following sufficient dissection, EMR with snaring was used to resect the part of the lesion outside the diverticulum. The endoscope was reinserted after a band ligator device (MD-48710 EVL; Sumitomo Bakelite, Tokyo, Japan) had been attached to the tip of the endoscope. The remnant of neoplastic tissue within the diverticulum was suctioned into the attachment cap, and an elastic O-band was released, successfully entrapping the tissue (Video 1).

At 4 days after treatment, colonoscopy performed to observe the ulcer bed revealed prolapse of the ligated portion. No adverse events were associated with the endoscopic treatment (Fig. 2a). At 3 months after treatment, colonoscopy revealed absence of the diverticulum and the formation of a scar at the site that
included a tiny residual lesion, which was successfully ablated by hot biopsy (Fig. 2b).
The use of a triple approach (hybrid ESD–EMR followed by EBL) to treat a neoplastic lesion in a high risk location (i.e., extending into a diverticulum) may be considered an alternative method for the endoluminal treatment of complex lesions.

Endoscopy_UCTN_Code_TTT_1AQ_2AD

Competing interests: None

Taku Sakamoto1, Seiichiro Abe1, Takeshi Nakajima1, Takahisa Matsuda1, Fumihiko Nakamura2, Hironori Kowazaki2, Yutaka Saito1

1 Endoscopy Division, National Cancer Center Hospital, Tokyo, Japan
2 Gastroenterological Medicine, Kohsei Chuo General Hospital, Tokyo, Japan

References
3 Ishii N, Hirata N, Omata T et al. Location in the ascending colon is a predictor of refractory colonic diverticular hemorrhage after endoscopic clipping. Gastrointest Endosc 2012; 76: 1175–1181

Bibliography
DOI http://dx.doi.org/10.1055/s-0034-1392030
Endoscopy 2015; 47: E295–E296
© Georg Thieme Verlag KG Stuttgart · New York
ISSN 0013-726X

Corresponding author
Taku Sakamoto, MD
Endoscopy Division, National Cancer Center Hospital
5-1-1 Tsukiji Chuo-ku
Tokyo, 104-0045
Japan
Fax: +81-3-3542-3815
tasakamo@ncc.go.jp

Sakamoto Taku et al. Complete removal of a colonic neoplasm extending into a diverticulum... Endoscopy 2015; 47: E295–E296