Precut esophageal endoscopic mucosal resection for cervical esophageal cancer to minimize mucosal defect

A 72-year-old man underwent esophagogastroduodenoscopy (EGD) for heartburn. Two adjacent, iodine-unstained, shallow depressed lesions, 25 mm and 8 mm in size, were found in the cervical esophagus (▶Fig. 1). Biopsies revealed squamous cell carcinoma (SCC). The patient opted for endoscopic resection. Peripheral endoscopic markings were performed using the tip of a DualKnife J (KD-655; Olympus Tokyo, Japan) (▶Fig. 2). En bloc resection was achieved for the first lesion after standard endoscopic submucosal dissection (ESD). Precut endoscopic mucosal resection (EMR) was performed for the second lesion (▶Video 1). A circumferential mucosal incision was performed using the DualKnife J (▶Fig. 3), followed by cap-assisted EMR (EMR-C) using a single-channel endoscope (Q260J; Olympus). Saline with diluted indigo carmine was injected into the submucosa. The gastroscope was withdrawn, and a crescent-shaped electrocautery snare (SD-221L-25; Olympus) was opened within the oblique transparent cap with an internal circumferential ridge (MAJ-290; Olympus). The area within the mucosal incision was suctioned into the cap and captured by tightening the snare. This procedure allowed for en bloc resection of both lesions while preserving non-neoplastic mucosa between the two (▶Fig. 4). The resected specimens revealed SCC, with deepest invasion to the lamina propria mucosa without lymphovascular invasion, and free margins. No dysphagia occurred post-procedure and follow-up EGD 8 weeks later revealed no post-procedure stricture (▶Fig. 5).

Extensive ESD is a high-risk procedure for post-ESD stricture, particularly in the cervical esophagus [1]. Standard EMR-C is straightforward and time-saving for small esophageal cancers [2,3]. However, in this case it would have been challenging to maintain optimal non-neoplastic mucosa between the two lesions. ESD for small esophageal cancer is arduous as it is technically difficult to enter the submucosal space. Precut EMR-C was effective in our patient to achieve R0 resection with minimal lateral margin, hence avoiding extensive resection with potential post-procedure stricture.
Competing interests
The authors declare that they have no conflict of interest.

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References

Bibliography
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Video 1 Precut cap-assisted endoscopic mucosal resection (EMR-C) was performed for the cervical esophageal squamous cell carcinoma. Circumferential mucosal incision was performed using a DualKnife J (KD-655; Olympus Tokyo, Japan), followed by EMR-C.