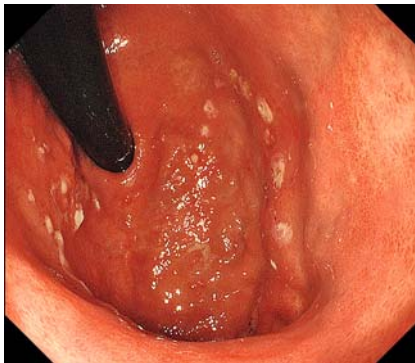
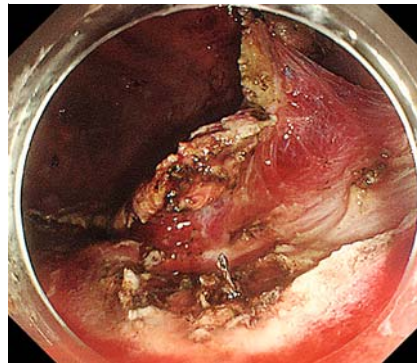


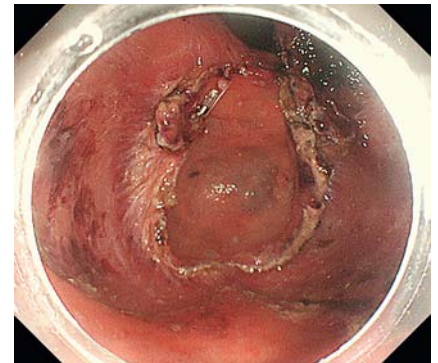
## Whole-fornix endoscopic submucosal dissection for gastric mucosal adenocarcinoma



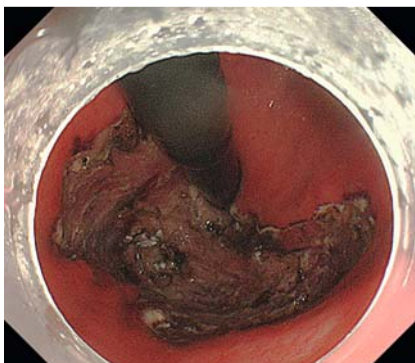
► **Fig. 1** A huge superficial elevated lesion was observed in the entire fornix, after marking.



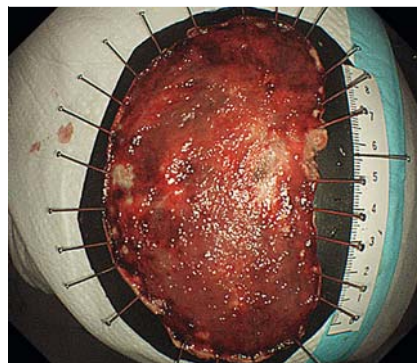
► **Fig. 2** The dissecting plane of the submucosal layer was distinctly observed by pulling the clip-and-line system.



► **Fig. 3** The use of multiple clip-and-line procedures facilitated submucosal dissection from both the anterior and posterior sides.



► **Fig. 4** Mucosal defect after endoscopic submucosal dissection.



► **Fig. 5** The lesion was resected en bloc.

A 69-year-old man with a history of radiation therapy for gastric malignant lymphoma had undergone follow-up esophagogastroduodenoscopy (EGD) at a previous institution, and a superficial elevated lesion was found at the fornix. Examination of a biopsied specimen revealed well-differentiated adenocarcinoma. Endoscopic submucosal dissection (ESD) was attempted, but the procedure was stopped because Mallory–Weiss syndrome occurred in and around the lesion during endoscopic observation immediately before starting ESD. The patient was then referred to our hospital for fur-

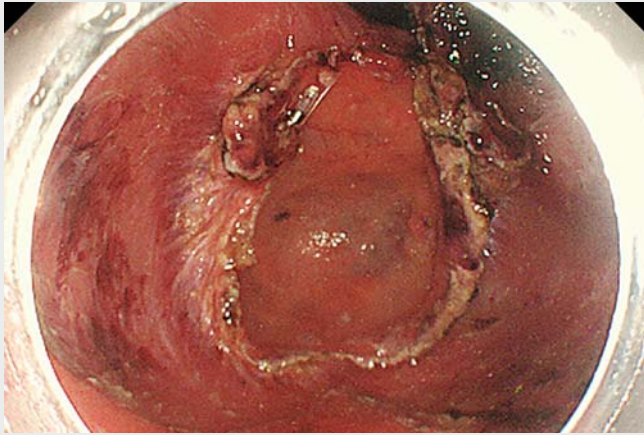
ther treatment. EGD at our institution revealed a huge superficial lesion occupying the whole fornix (► **Fig. 1**). As no evidence of invasive cancer was found, we performed endoscopic resection. A multi-bending two-channel scope (GIF-2TQ260M; Olympus Medical Systems, Tokyo, Japan) was used because this device can closely approach the fornix. We performed traction-assisted ESD using the clip-and-line technique [1–4]. After performing a mucosal incision on the anterior side of the lesion using a FlushKnife BT (DK2618JB15; Fujifilm Medical, Tokyo, Japan) and an

ITknife2 (KD-611L; Olympus Medical Systems), we grasped the anterior side of the specimen with the clip-and-line technique. The dissecting plane of the submucosal layer was distinctly observed by pulling the line (► **Fig. 2**), and submucosal dissection was then easily performed. After creating a circumferential incision, a second clip-and-line procedure was applied to facilitate submucosal dissection of the anterior wall [5] (► **Fig. 3**). Perforation occurred during dissection, but the defect was promptly closed by endoscopic clipping. Using a third clip-and-line procedure on the greater curvature side of the specimen, the specimen was resected en bloc (► **Fig. 4**, ► **Fig. 5**). The pathological diagnosis of the resected specimen was an intramucosal adenocarcinoma with a diameter of 110×48 mm.

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**Video 1** Whole-fornix endoscopic submucosal dissection for gastric mucosal adenocarcinoma.

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## Bibliography

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## Competing interests

The authors declare that they have no conflict of interest.

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