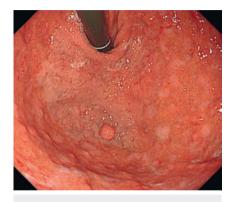
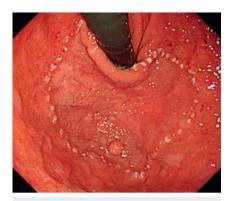
Endoscopic submucosal dissection using the tunneling method for early gastric cancer occupying the entire fornix

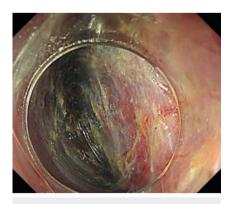




► Fig. 1 A large, superficially elevated lesion with a small nodule occupying the whole fornix.



► Fig. 2 A large, superficially elevated lesion with a small nodule occupying the whole fornix after marking.



▶ Fig. 3 Creating the submucosal tunnel.

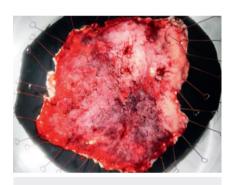
The location of the fornix is challenging for endoscopic submucosal dissection (ESD) because of its difficult access, tendency to face vertically, and submersion in the gastric fluid and blood. To overcome these issues, the use of a multi-bending scope, multiple clip-line tractions, and right lateral position have been reported [1-3]. However, even with these strategies, treating lesions occupying the entire fornix remains challenging because adverse events such as perforation have been reported [4]. We describe a successful ESD for early gastric cancer occupying the entire fornix using the tunneling method, allowing us to approach the most difficult-to-reach area from a tangential direction and achieve resection without adverse events.

An 82-year-old woman with a history of rheumatoid arthritis, hypertension, and hyperlipidemia was referred to our hospital following the detection of a lesion in the fornix during an esophagogastroduodenoscopy performed previously. Endoscopic examination at our institution revealed a large, superficially elevated lesion with a small nodule occupying the entire fornix, which was diagnosed as early gastric cancer (▶ Fig. 1, ▶ Fig. 2). No obvious signs of submucosal invasion were observed and endoscopic resection was considered.

ESD was performed using a therapeutic scope (GIF-H290T; Olympus, Tokyo, Japan) and a multi-bending endoscope (GIF-2TQ260M; Olympus) with an ITknife nano (KD-612Q; Olympus) and a Clutch Cutter (DP2618DT-35; Fujifilm, Tokyo, Japan). We first made a mucosal incision and trimmed the side of the greater curvature in the right lateral position to create an endpoint. Subsequently, the tunnel entrance was made through the cardia, followed by the creation of the submucosal tunnel (**Fig. 3**). After a circumferential incision was created, a submucosal dissection was performed in



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



▶ Fig. 5 En bloc resection was achieved.



▶ Video 1 Endoscopic submucosal dissection using the tunneling method for early gastric cancer occupying the entire fornix.

retroflexion using multiple dental floss clip tractions [5], resulting in en bloc resection with a specimen size of 100 × 83 mm without adverse events (▶ Fig. 4, ▶ Fig. 5; ▶ Video 1). A well-differentiated intramucosal adenocarcinoma measuring 75 × 68 mm without ulceration and negative margins was diagnosed, indicating curative resection.

Endoscopy_UCTN_Code_TTT_1AO_2AG_3AD

Conflict of Interest

The authors declare that they have no conflict of interest.

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References

- [1] Fukuda H, Tsujii Y, Kato M et al. Endoscopic submucosal dissection in the right lateral position for early gastric cancer in the fornix. VideoGIE 2022; 7: 327–330. doi:10.1016/j. vqie.2022.06.002
- [2] Matsumoto K, Konuma H, Ueyama H et al. Multibending scope use for reduction of perforation risks in endoscopic submucosal dissection. Minim Invasive Ther Allied Technol 2021; 30: 72–80. doi:10.1080/ 13645706.2019.1688352
- [3] Abe S, Oda I, Suzuki H et al. A challenging case of gastric endoscopic submucosal dissection: removal of a sizable cancer through altering patient's position and multiple clipline traction. VideoGIE 2019; 4: 558–560
- [4] Shichijo S, Takeuchi Y, Fukuda H et al. Whole-fornix endoscopic submucosal dissection for gastric mucosal adenocarcinoma. Endoscopy 2020; 52: E243–E244. doi:10.1055/a-1085-9472
- [5] Yoshida M, Takizawa K, Suzuki S et al. Conventional versus traction-assisted endoscopic submucosal dissection for gastric neoplasms: a multicenter, randomized controlled trial (with video). Gastrointest Endosc 2018; 87: 1231–1240

Bibliography

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