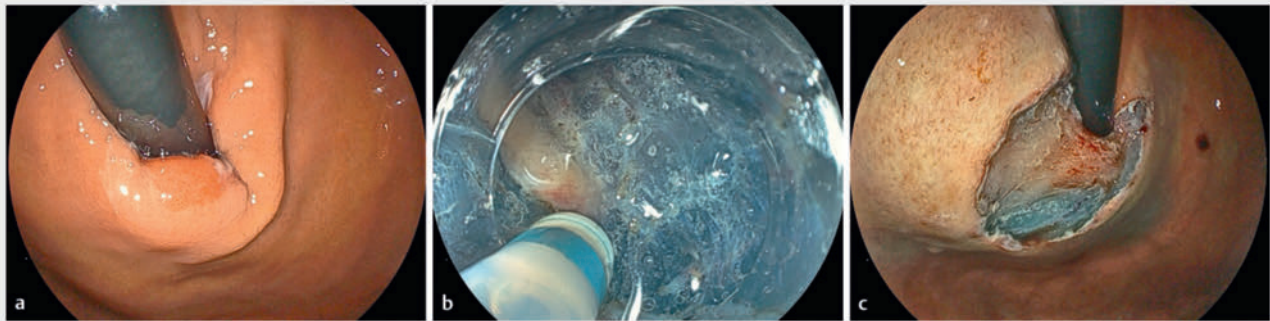


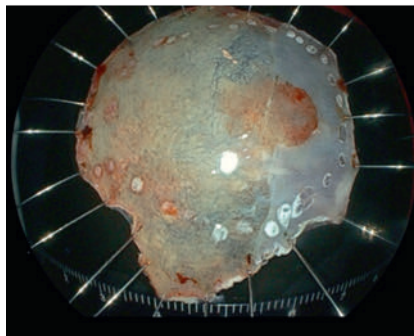
## Novel therapeutic endoscope facilitates endoscopic submucosal dissection of adenocarcinoma at the esophagogastric junction

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► **Fig. 1** Endoscopic views showing: **a** an elevated lesion that is located at the esophagogastric junction, extending to the fornix; **b** endoscopic submucosal dissection (ESD) being carried out with an antegrade approach; **c** the post-ESD ulcer.

Endoscopic submucosal dissection (ESD) of lesions at the esophagogastric junction (EGJ) presents technical difficulties, with resection on the anal side presenting particular difficulties because of the steepness of the fornix [1]. Recently, a novel therapeutic endoscope has been reported as being useful for the treatment of lesions in the rectum and pharynx, organs with steep areas similar to those of the EGJ [2,3]. Here, we report an endoscopic resection performed using the novel endoscope for a lesion at the EGJ extending into the fornix (► **Video 1**). A 68-year-old woman was referred to our hospital for treatment of an adenocarcinoma at the EGJ. The lesion was 15 mm in diameter and the distal side of the lesion extended to the fornix (► **Fig. 1 a**). We anticipated difficulties incising the fornix side of the lesion because the shallow downward angle of conventional therapeutic endoscopes hinders an antegrade approach. Furthermore, the steepness of the fornix can result in a perpendicular configuration between the endoscope and the fornix, even when using a retrograde approach. A novel thin therapeutic endoscope (EG-840TP; Fujifilm, Tokyo, Japan) has recently become commercially available in Japan, which has an



► **Fig. 2** Photograph of the successfully excised en bloc resection specimen.

outer diameter of 7.9 mm, a working channel diameter of 3.2 mm, and an adjustable downward angle of up to 160°. We initiated submucosal injection and a mucosal incision on the fornix side of the lesion; the downward angle of the endoscope enabled a smooth and successful antegrade approach. Next, we made a mucosal incision on the oral side of the lesion and continued the submucosal dissection without difficulties, still using only an antegrade approach (► **Fig. 1 b**). Finally, we achieved en bloc resection without any adverse events (► **Fig. 1 c** and ► **Fig. 2**).



► **Video 1** An adenocarcinoma at the esophagogastric junction extending into the fornix is removed by endoscopic submucosal dissection using a novel thin therapeutic endoscope that facilitates the antegrade approach.

The pronounced downward angle of the novel endoscope resulted in an uncomplicated procedure, which was completed in 40 minutes. This novel endoscope may aid advancements in ESD technique, particularly in anatomically complex areas.

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## Conflict of Interest

The authors declare that they have no conflict of interest.

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