

Title:

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Endoscopic submucosal dissection using an ultrathin endoscope for esophageal squamous cell carcinoma with anastomotic stenosis

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CASE REPORT

A 66-year-old male with hypopharyngeal carcinoma was referred to our department for preoperative upper gastrointestinal screening. Esophagogastroduodenoscopy showed advanced hypopharyngeal carcinoma and esophageal squamous cell carcinoma (ESCC) of 10 mm in diameter in the middle thoracic esophagus (Fig. 1A). Due to the progression of hypopharyngeal carcinoma, endoscopic treatment for ESCC was scheduled after pharyngolaryngoesophagectomy. In postoperative endoscopy, a conventional endoscope was unable to pass through the anastomosis (Fig. 1B). Therefore, endoscopic submucosal dissection (ESD) was performed with an ultrathin endoscope (EG-L580NW7; Fujifilm, Tokyo, Japan) using SOUTEN (Kaneka Medix, Osaka, Japan) as a small-caliber ESD device and a transparent hood (Nichendo; Fujifilm, Tokyo, Japan) to stabilize the endoscope (Fig. 2). Marking of the mucosal incision and submucosal dissection were all performed using the tip of SOUTEN. The lesion was

resected *en bloc* without procedural complications, and histopathology confirmed ESCC with muscularis mucosa invasion and negative horizontal and vertical margins (Fig. 3A-F).

DISCUSSION

In ESD for ESCC beyond the stricture, balloon dilation is commonly performed until a conventional endoscope may pass through. The ultrathin endoscope does not require balloon dilation, and the transparent hood mounted at the distal end of the ultrathin endoscope provides a more rapid approach to the submucosa than a conventional endoscope (1,2). Esophageal ESD with an ultrathin endoscope is a useful endoscopic treatment option for ESCC with stricture (1-3).

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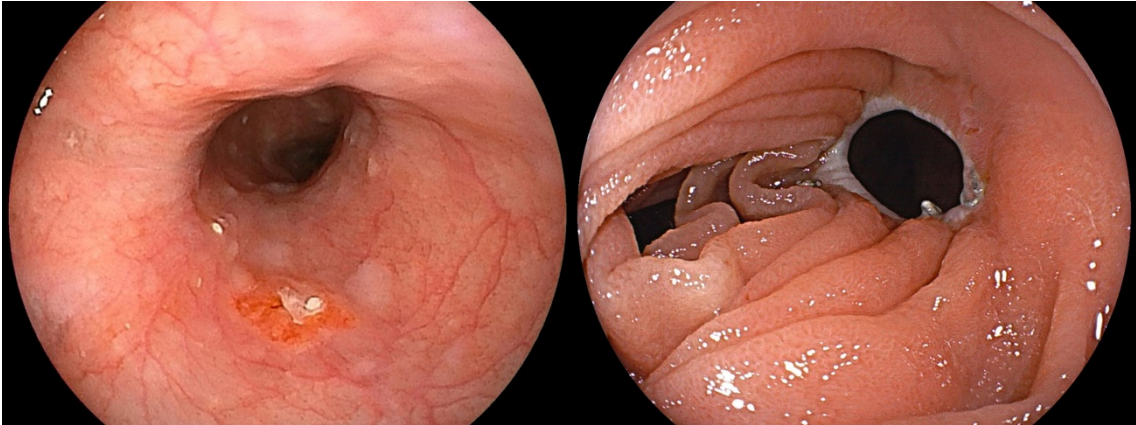


Fig. 1. Endoscopic findings of esophageal squamous cell carcinoma (A) and anastomosis (B).



Fig. 2. The ultrathin endoscope (EG-L580NW7; Fujifilm, Tokyo, Japan) mounted with a transparent hood (Nichendo; Fujifilm, Tokyo, Japan) and a small-caliber endoscopic submucosal dissection device (SOUTEN; Kaneka Medix, Osaka, Japan). The multifunctional snare SOUTEN has a T-shaped tip at the top of the snare loop that enables mucosal incision, submucosal dissection and the snaring of lesions.

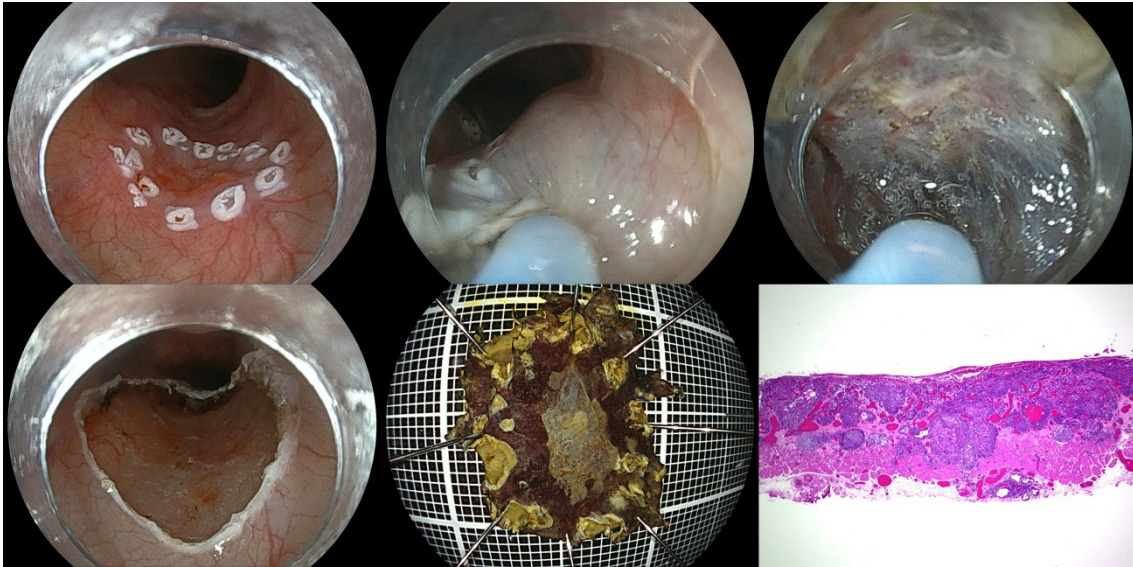


Fig. 3. Procedure for endoscopic submucosal dissection using an ultrathin endoscope with a transparent hood. A. Marking. B. Mucosal incision. C. Submucosal dissection. D. The ulcer floor after endoscopic submucosal dissection. E. Resected specimen after iodine staining. F. Histopathology of the resected specimen (hematoxylin-eosin stain, $\times 40$ magnification).