

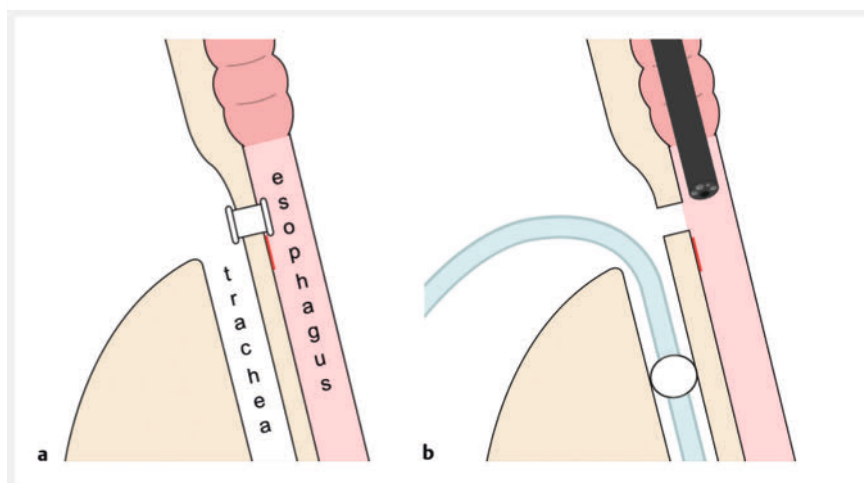
## Endoscopic submucosal dissection for esophageal cancer behind a tracheoesophageal voice prosthesis

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A tracheoesophageal voice prosthesis is used to restore vocal communication after a total laryngectomy [1, 2]. This device may interfere with the endoscope during endoscopic treatment of an esophageal lesion. However, its removal poses a risk of aspiration because it is located in a tracheoesophageal fistula. We successfully performed endoscopic submucosal dissection (ESD) for superficial esophageal squamous cell carcinoma behind a tracheoesophageal voice prosthesis.

A 65-year-old man was diagnosed, by means of upper gastrointestinal endoscopy, as having a superficial lesion on his upper thoracic esophagus. The oral part of the lesion was behind a tracheoesophageal voice prosthesis, which was placed after total laryngectomy and jejunal interposition for hypopharyngeal cancer. ESD was planned to be performed under general anesthesia to reduce the risk of aspiration when the tracheoesophageal voice prosthesis was removed.

The patient underwent tracheal intubation, and the intubation balloon was placed caudally to the lesion (► Fig. 1). After the voice prosthesis was removed, the endoscope was inserted, and markings were made around the lesion (► Video 1). ESD was performed using a FlushKnife BT-S (1.5 mm, DK2620; Fujifilm Medical, Tokyo, Japan) and the lesion was resected en bloc. After replacement of the voice prosthesis, extubation was performed. Histopathological examination revealed squamous cell carcinoma confined to the epithelium. As the lesion was completely removed endoscopically, the patient was followed up without additional treatment. After 8 months, no local recurrence was detected on surveillance endoscopy.



► **Fig. 1** Schematic diagrams. **a** The oral part of the superficial esophageal lesion behind a voice prosthesis. **b** The intubation balloon was placed caudally to the lesion and the voice prosthesis was removed.

ESD was successfully performed without any adverse events under general anesthesia by adjusting the cuff position of the intubation tube.

Endoscopy\_UCTN\_Code\_TTT\_1AO\_2AG

### Acknowledgement

We would like to thank Editage ([www.editage.jp](http://www.editage.jp)) for English language editing.

### Conflict of Interest

T. Kanesaka has received honoraria from Olympus, AstraZeneca, and AI Medical Service. R. Ishihara has received honoraria from Olympus, FUJIFILM Medical, Daiichi-Sankyo, Miyarisan Pharmaceutical, AI Medical Service, Astra Zeneca, MSD, and Ono Pharmaceutical. Y. Tani, K. Higashino, K. Aoki, T. Fujii, and T. Michida declare that they have no conflict of interest.



► **Video 1** Endoscopic submucosal dissection for a superficial esophageal lesion, the oral side of which was behind a tracheoesophageal voice prosthesis.

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Endoscopy 2024; 56: E156–E157

DOI 10.1055/a-2254-7503

ISSN 0013-726X

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