

## A transnasal traction method using a novel traction device in pharyngeal endoscopic submucosal dissection

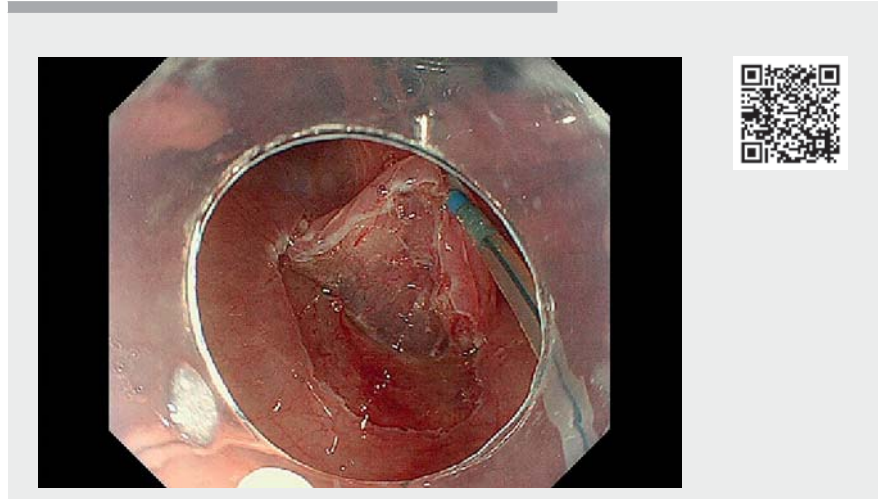
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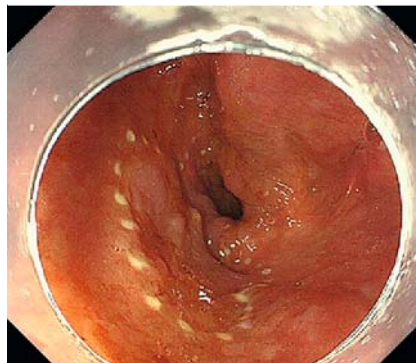
► **Fig. 1** The EndoTrac.

Pharyngeal endoscopic submucosal dissection (ESD) is technically challenging because of the narrow and complex space involved in endoscopic maneuverability. Thus, the traction technique is important for completing the procedure. The transnasal endoscope method or transoral forceps method was useful for creating good countertraction during pharyngeal ESD [1,2]. However, the former method requires another endoscope, and the latter method may interfere with the transoral endoscopic maneuver. The EndoTrac (Top Corporation, Tokyo, Japan) can improve the submucosal layer's visibility by changing the traction direction during ESD (► **Fig. 1**) [3–5].

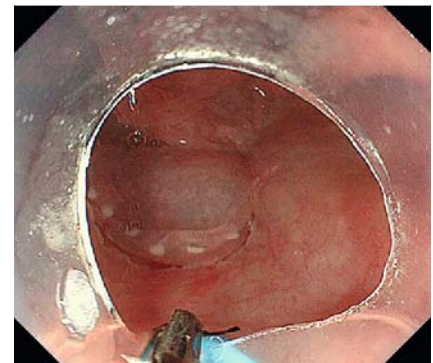
A 71-year-old man with a history of endoscopic resection for superficial esophageal cancer underwent follow-up endoscopy, which detected a superficial hypopharyngeal cancer extending from the posterior hypopharynx to the esophageal orifice. ESD was performed under general anesthesia (► **Video 1**). The lesion was marked circumferentially (► **Fig. 2**), and a circumferential mucosal incision was made. Subsequently, the EndoTrac was inserted nasally into the mouth, and the device tip was grasped and drawn out of the mouth using a transoral endoscope. The EndoTrac was then tied to an endoclip and re-inserted into the mouth. The tip with an endoclip was deployed on the oral side of the lesion margins (► **Fig. 3**),



► **Video 1** A transnasal traction method using a novel traction device in pharyngeal endoscopic submucosal dissection.



► **Fig. 2** The lesion was marked circumferentially.



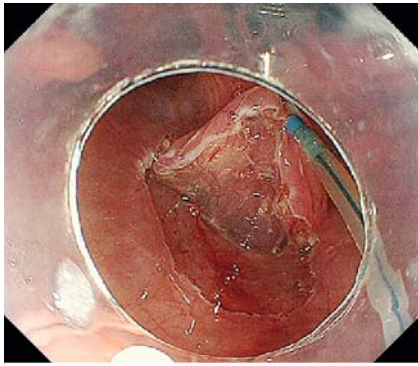
► **Fig. 3** Endoscopic view before deploying the EndoTrac.

and the device end was pulled nasally to optimize visibility of the subepithelial layer. Good countertraction was obtained, and the endoscopic maneuver did not interfere with the EndoTrac (► **Fig. 4**). The lesion was resected en bloc within 100 minutes without adverse events (► **Fig. 5**). The resected specimen pathologically revealed squamous cell carcinoma in situ (WHO classification). Curative resection was achieved, and endoscopic follow-up was performed without further

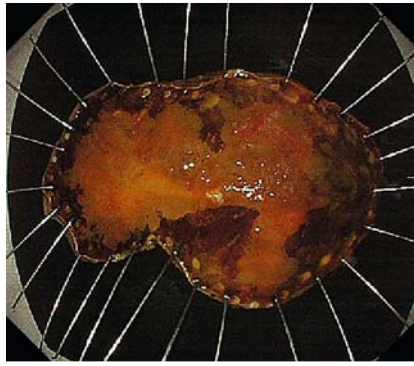
treatments. Post-procedural stenosis and cancer recurrence were not observed 6 months after the ESD.

Transnasal traction using the EndoTrac can create good countertraction and facilitates a well-visualized cutting layer without interference from transoral endoscopic maneuvers during pharyngeal ESD.

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► **Fig. 4** The EndoTrac facilitated adequate traction and improved the visibility of the cutting line.




► **Fig. 5** The lesion was resected en bloc without adverse events. The resected specimen measured 60 × 25 mm, with a lesion size of 40 × 15 mm.

## Competing interests

The authors declare that they have no conflict of interest.

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## References

- [1] Yoshio T, Tsuchida T, Ishiyama A et al. Efficacy of double-scope endoscopic submucosal dissection and long-term outcomes of endoscopic resection for superficial pharyngeal cancer. *Dig Endosc* 2017; 29: 152–159
- [2] Iizuka T, Kikuchi D, Hoteya S et al. A new technique for pharyngeal endoscopic submucosal dissection: peroral countertraction (with video). *Gastrointest Endosc* 2012; 76: 1034–1038
- [3] Tanaka S, Toyonaga T, Kaku H et al. A novel traction device (EndoTrac) for use during endoscopic submucosal dissection. *Endoscopy* 2019; 51: E90–E91
- [4] Sakaguchi H, Toyonaga T, Kaku H et al. The crane technique: a novel traction method for use during rectal endoscopic submucosal dissection. *Endoscopy* 2019; 51: E88–E89
- [5] Kaku H, Toyonaga T, Tanaka S et al. Endoscopic submucosal dissection using EndoTrac, a novel traction device. *Digestion* 2021; 102: 714–721

## Bibliography

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