

# Transgastrostomy retrograde endoscopic submucosal dissection of esophageal squamous cell carcinoma



Patients undergoing treatment for laryngeal cancer are often treated with total laryngectomy, with about 11% of patients developing a postoperative stricture [1]. Patients with head and neck tumors also develop esophageal squamous cell carcinoma (ESCC) in 5%–10% of cases [2]. Endoscopic submucosal dissection (ESD) is indicated for the treatment of early ESCC; however, transoral ESD is not possible in patients with recalcitrant pharyngoesophageal stricture [3]. In this case report, we demonstrate an alternative strategy for this situation.

A 60-year-old man with laryngeal squamous cell carcinoma (T4aN3bM0) underwent total laryngectomy with radical neck dissection and neopharyngeal reconstruction with a microvascular flap, followed by adjuvant radiotherapy. He developed a long stricture (8 cm) of the myocutaneous flap and a percutaneous endoscopic gastrostomy was performed. He underwent multiple endoscopic dilation sessions (using Savary–Gilliard and balloon dilators).

During these procedures, a pale flat lesion (Paris 0-IIb) with high grade dysplasia, measuring 15 mm, was diagnosed at 29 cm from the incisors. Even after multiple dilation sessions, only a slim scope (4.9 mm) could traverse the stenosis. Therefore, a retrograde ESD was performed, introducing the endoscope through the gastrostomy orifice (► **Video 1**). The orifice was balloon dilated to 12 mm. With the patient under general anesthesia, the procedure was performed using a 2.0-mm DualKnife (Olympus Inc.) with submucosal injection of a 6% hydroxyethyl starch (HES) solution with indigo carmine.

The procedure duration was 60 minutes and no adverse events occurred. Histology of the resected specimen revealed high grade dysplasia, an absence of invasive neoplasm, and tumor-free margins. The patient had an uneventful recovery.



**Video 1** Transgastrostomy retrograde endoscopic submucosal dissection of esophageal squamous cell carcinoma.

Endoscopy\_UCTN\_Code\_CPL\_1AH\_2AZ

## Competing interests

The authors declare that they have no conflict of interest.

## The authors

**Julia Mayumi Gregorio, Deborah Marques Centeno, Rafael Utimura Sueta, Pastor Joaquin Ortiz Mendieta, João Guilherme Ribeiro Jordão Sasso, Bruno Costa Martins, Fauze Maluf-Filho**

Department of Gastroenterology, Instituto do Câncer do Estado de São Paulo (ICESP), University of São Paulo, São Paulo, Brazil

## Corresponding author

**Julia Mayumi Gregorio, MD**

Department of Gastroenterology, Instituto do Câncer do Estado de São Paulo – ICESP, Av Dr Arnaldo 251, São Paulo, Brazil  
juliaendoscopia@gmail.com

## References

- [1] Thompson CSG, Asimakopoulos P, Evans A et al. Complications and predisposing factors from a decade of total laryngectomy. *J Laryngol Otol* 2020; 134: 256–262
- [2] Thakur K, Singh CA, Thakar A et al. Prevalence of synchronous ESCN in head and neck cancer: a single-institution perspective. *Laryngoscope* 2021; 131: E807–E814
- [3] Kobayashi Y, Nishikawa K, Akasaka T et al. Retrograde endoscopic submucosal dissection for early thoracic esophageal carcinoma. *Clin J Gastroenterol* 2021; 14: 434–438

## Bibliography

Endoscopy 2023; 55: E731  
DOI 10.1055/a-2068-7664  
ISSN 0013-726X  
© 2023. The Author(s).

This is an open access article published by Thieme under the terms of the Creative Commons Attribution-NonDerivative-NonCommercial License, permitting copying and reproduction so long as the original work is given appropriate credit. Contents may not be used for commercial purposes, or adapted, remixed, transformed or built upon. (<https://creativecommons.org/licenses/by-nc-nd/4.0/>)  
Georg Thieme Verlag KG, Rüdigerstraße 14, 70469 Stuttgart, Germany

