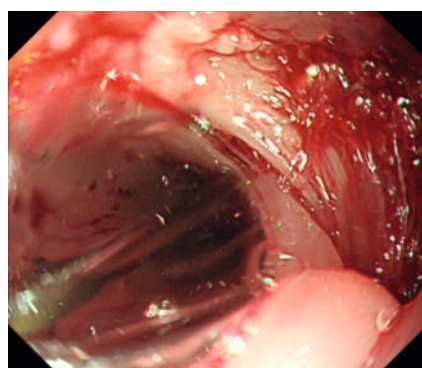
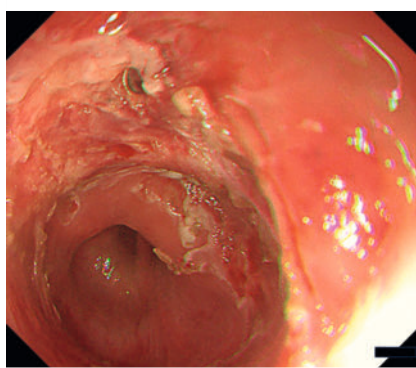


Radial incision and cutting for post-esophageal endoscopic submucosal dissection stricture with prior perforation during dilation

OPEN
ACCESS



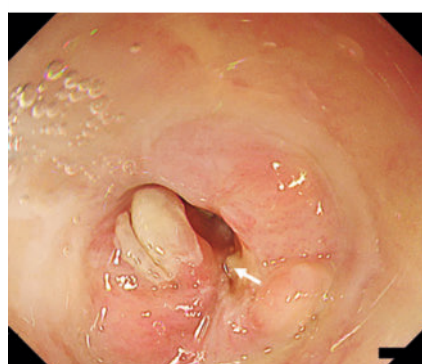
► **Fig. 1** Endoscopic image of the perforation during endoscopic balloon dilation.



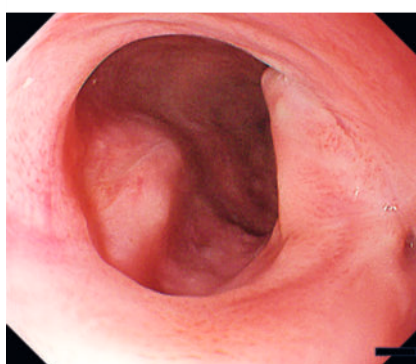
► **Fig. 3** Endoscopic image after radial incision and cutting reveals the head of a buried closing clip at the site of the prior perforation.



► **Video 1** Radial incision and cutting of refractory strictures with a prior perforation during balloon dilation after esophageal endoscopic submucosal dissection.



► **Fig. 2** Endoscopic image of the post-esophageal submucosal dissection stricture before radial incision and cutting. The previous perforation site was identified at the 4 o'clock position near the edge of the mouth (arrow).



► **Fig. 4** Endoscopic image after 2 months of incision and cutting, displaying a scarred treated region with no signs of restenosis.

Extensive mucosal resection by esophageal endoscopic submucosal dissection (ESD) can lead to strictures [1]. Oral or locoregional steroid injections are used to prevent stenosis, but they are not effective in all cases [2,3]. Endoscopic balloon dilation is the primary option for treating post-ESD strictures [4]; however, its applicability in previously perforated areas is challenging because of the risk of re-perforation. Herein, we present a valuable case of radial incision and cutting for managing a post-ESD esophageal

stricture with a prior perforation during endoscopic balloon dilation.

A 76-year-old man with widespread superficial esophageal squamous cell carcinoma underwent ESD, with resection extending over 80% of the esophagus. Despite locoregional steroid injection, a stricture developed. A perforation occurred during endoscopic balloon dilation for stricture management (► **Fig. 1**). Following clip closure and fastening, the perforation healed, but restenosis ensued. Considering the risk of re-perforation, endoscopic balloon dilation was

deemed unsuitable; therefore, we decided to perform radial incision and cutting to avoid surgical intervention.

The previous perforation site was at the 4 o'clock position near the mouth side edge (► **Fig. 2**); therefore, the incision was made from different directions using an electrosurgical knife (Dual-Knife J, KD-655Q; Olympus Optical Co., Tokyo, Japan). A cut was carefully made to avoid exposing the muscle layer. A fibrous tissue was removed and the lumen was enlarged until the anal edge of the stricture could be observed, allowing visualization of the direction for safe incision. The incision was advanced in a safe direction viewed from the anal side edge of the stricture to further enlarge the lumen. Finally, the stricture was sufficiently dilated to facilitate easy passage of the scope (► **Fig. 3**, ► **Video 1**). Additional oral and locoregional steroid injections were administered. After 2 months, a scarred radial incision and cutting region without restenosis was observed (► **Fig. 4**).

Endoscopy_UCTN_Code_TTT_1AO_2AH

Acknowledgement

We would like to thank Editage (www.editage.jp) for English language editing.

Conflict of Interest

The authors declare that they have no conflict of interest.

The authors

Jun Takada¹, **Yukari Uno¹**, **Kentaro Kojima¹**, **Sachiyo Onishi¹**, **Masaya Kubota¹**, **Takashi Ibuka¹**, **Masahito Shimizu¹**

¹ Department of Gastroenterology, Gifu University Graduate School of Medicine, Gifu, Japan

Corresponding author

Jun Takada, MD, PhD

Department of Gastroenterology, Gifu University Graduate School of Medicine, Yanagido 1-1, 501-1194 Gifu, Japan
takada.jun.h7@f.gifu-u.ac.jp

References

- [1] Tsujii Y, Nishida T, Nishiyama O et al. Clinical outcomes of endoscopic submucosal dissection for superficial esophageal neoplasms: a multicenter retrospective cohort

study. *Endoscopy* 2015; 47: 775–783. doi:10.1055/s-0034-1391844

- [2] Hanaoka N, Ishihara R, Uedo N et al. Refractory strictures despite steroid injection after esophageal endoscopic resection. *Endosc Int Open* 2016; 4: E354–E359. doi:10.1055/s-0042-100903
- [3] Zhou G, Yuan F, Cai J et al. Efficacy of prednisone for prevention of esophageal stricture after endoscopic submucosal dissection for superficial esophageal squamous cell carcinoma. *Thorac Cancer* 2017; 8: 489–494. doi:10.1111/1759-7714.12473
- [4] Yamamoto Y, Kikuchi D, Nagami Y et al. Management of adverse events related to endoscopic resection of upper gastrointestinal neoplasms: Review of the literature and recommendations from experts. *Dig Endosc* 2019; 31: 4–20. doi:10.1111/den.13388

Bibliography

Endoscopy 2023; 55: E1238–E1239

DOI 10.1055/a-2208-5744

ISSN 0013-726X

© 2023. The Author(s).

This is an open access article published by Thieme under the terms of the Creative Commons Attribution License, permitting unrestricted use, distribution, and reproduction so long as the original work is properly cited.

(<https://creativecommons.org/licenses/by/4.0/>)

Georg Thieme Verlag KG, Rüdigerstraße 14, 70469 Stuttgart, Germany



ENDOSCOPY E-VIDEOS

<https://eref.thieme.de/e-videos>



E-Videos is an open access online section of the journal *Endoscopy*, reporting on interesting cases

and new techniques in gastroenterological endoscopy. All papers include a high-quality video and are published with a Creative Commons CC-BY license. *Endoscopy E-Videos* qualify for HINARI discounts and waivers and eligibility is automatically checked during the submission process. We grant 100% waivers to articles whose corresponding authors are based in Group A countries and 50% waivers to those who are based in Group B countries as classified by Research4Life (see: <https://www.research4life.org/access/eligibility/>).

This section has its own submission website at

<https://mc.manuscriptcentral.com/e-videos>