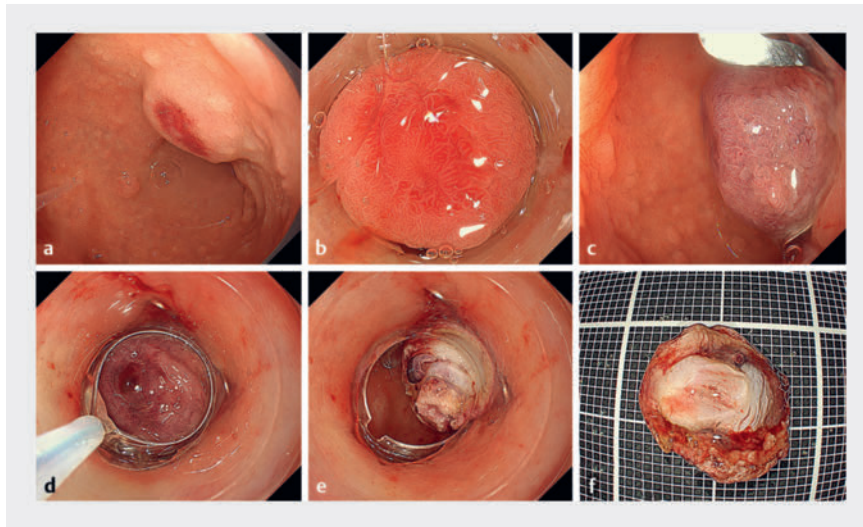


Novel endoscopic approach for safe and effective resection of duodenal neuroendocrine tumor

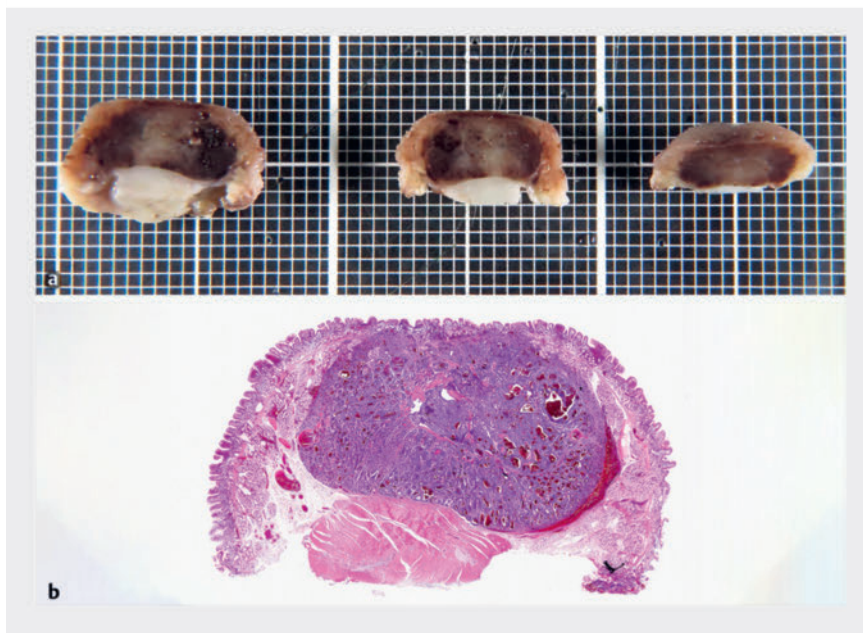
OPEN
ACCESS



► **Fig. 1** Cap-assisted endoscopic mucosal resection of a duodenal neuroendocrine tumor (d-NET) with an over-the-scope (OTS) clip. **a** The 10-mm d-NET. **b** Confirmation that the lesion could be suctioned into the distal cap attachment. **c** An OTS clip is deployed directly beneath the lesion, resulting in a pseudopolypoid elevation. **d, e** The lesion is resected by cap-assisted endoscopic mucosal resection with the OTS clip effectively preventing perforation. **f** Endoscopic full-thickness resection is achieved.



► **Video 1** Novel cap-assisted endoscopic mucosal resection of a duodenal neuroendocrine tumor (d-NET) with an over-the-scope (OTS) clip.



► **Fig. 2** **a** Resected specimen. **b** Hematoxylin–eosin staining (low magnification).

A 76-year-old woman presented with a 10-mm duodenal neuroendocrine tumor (d-NET) located in the duodenal bulb and confined to the submucosa (► **Fig. 1 a**). Conventional endoscopic mucosal resection (EMR) or endoscopic submucosal dissection (ESD) carries high risks of perforation and of obscuring the vertical margin. We have devised a method (► **Video 1**) to provide an equivalent treatment option in facilities where the full-thickness resection and closure device is unavailable.

Initially, a GIF-XZ1200 endoscope (Olympus, Tokyo, Japan) equipped with a distal cap attachment was employed to confirm that the lesion could be suctioned into such an attachment (► **Fig. 1 b**). The endoscope was then switched to a GIF-2TQ260M (Olympus), fitted with an over-the-scope (OTS) clip system (10mm; Ovesco Endoscopy); the clip was deployed directly beneath the lesion, resulting in a pseudopolypoid elevation of the lesion (► **Fig. 1 c**). The endoscope was switched back to the

GIF-XZ1200 with a distal attachment (MAJ-290, Olympus) and a snare (SD-221-L25) was positioned (► Fig. 1 d). The elevated lesion was resected under full suction into the attachment. Endoscopic full-thickness resection was achieved, with the OTS clip effectively preventing perforation (► Fig. 1 e, f). Histopathological examination confirmed an 8-mm NET (grade 1) limited to the submucosal layer, with negative margins, and without lymphovascular invasion (► Fig. 2 a, b).

In Japan, where the full-thickness resection device is not available, the EMR with OTS clip technique, termed EMRO, offers a promising method for treating d-NETs [1]. However, certain cases may pose challenges, particularly in those of snare resection. In the present case, using full suction with a transparent cap fitted over the OTS clip facilitated successful snaring, demonstrating the simplicity and reliability of this technique. This EMROC method is less costly than using the full-thickness resection device for lesions less than 10 mm, while effectively providing full-thickness resection for d-NETs.

Endoscopy_UCTN_Code_TTT_1AO_2AG_3AF

Conflict of Interest

The authors declare that they have no conflict of interest.

The authors

Shinpei Minami¹, Shuhei Fukunaga¹, Michita Mukasa¹, Daiki Ohzono¹, Hiroshi Tanaka¹, Tomoyuki Nakane¹, Hidetoshi Takedatsu¹

¹ Division of Gastroenterology, Department of Medicine, Kurume University School of Medicine, Kurume, Japan

Corresponding author

Shinpei Minami, MD

Division of Gastroenterology, Department of Medicine, Kurume University School of Medicine, 67 Asahi-machi, Kurume, Fukuoka 830-0011, Japan
minami_shinpei@kurume-u.ac.jp

Reference

- [1] Tashima T, Ryozaawa S, Tanisaka Y et al. Endoscopic resection using an over-the-scope clip for duodenal neuroendocrine tumors. *Endosc Int Open* 2021; 9: E659–E666. doi:10.1055/a-1374-6141

Bibliography

Endoscopy 2024; 56: E961–E962

DOI 10.1055/a-2440-6362

ISSN 0013-726X

© 2024. 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, Oswald-Hesse-Str. 50, 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>