Jejunal endoscopic submucosal dissection is feasible using the pocket-creation method and balloon-assisted endoscopy

Endoscopic submucosal dissection (ESD) is widely used for the resection of superficial gastrointestinal neoplasms. Previously, we reported that the pocket-creation method (PCM) overcomes difficulties in ESD, such as in duodenal lesions [1] and subpedunculated neoplastic lesions [2]. Here, we describe the use of the PCM to facilitate ESD of a jejunal lesion.

A 54-year-old woman with familial adenomatous polyposis was referred for resection of a large adenoma in the proximal jejunum. Laparotomy would have been difficult owing to adhesions from previous surgery. Good maneuverability was confirmed in the vicinity of the lesion by double-balloon endoscopy (▶ Fig. 1), and we performed ESD using the PCM and balloon-assisted endoscopy (BAE). An endoscope with a 3.2-mm working channel (EI-580BT; Fujifilm, Tokyo, Japan) and a small-caliber-tip transparent hood (ST hood; DH-15GR; Fujifilm) were used. The endoscope tip balloon was not attached because the lesion was located in the upper jejunum. The Hook knife (Olympus, Tokyo, Japan) was used for most of the dissection. The key feature of the PCM is entering and dissecting the submucosal layer to make a pocket using an ST hood after a minimal mucosal incision (▶ Fig. 2). After creation of the submucosal pocket under the entire tumor, an additional mucosal incision was made and submucosal dissection performed. Use of the PCM for ESD with BAE safely achieved an en bloc resection of the tumor (▶ Video 1).

The PCM has four main advantages including: (i) maintaining a thick submucosal layer with a minimal incision; (ii) obtaining good traction by using an ST hood; (iii) conquering the vertical approach by adjusting the direction of the endoscope tip; and (iv) stabilizing the endoscope tip by synchronizing the endoscope and the pocket [1]. By using BAE, the overtube with a balloon prevents...
formation of a redundant loop, enabling accurate and stable operation without paradoxical movements (Fig. 1) [3].

Endoscopy_UCTN_Code_TTT_1AP_2AD

Competing interests

Hironori Yamamoto has patents for ESD devices and double-balloon endoscopy produced by Fujifilm Corporation. He also has a consultant relationship with the Fujifilm Corporation and has received honoraria, grants, and royalties from the company. Yoshimasa Miura, Tomonori Yano, and Yoshikazu Hayashi have received honoraria from Fujifilm Corporation.

Corresponding author

Hironori Yamamoto, MD, PhD
3311-1 Yakushiji, Shimotsuke, Tochigi 329-0498, Japan
Fax: +81-285-406598
ireef@jichi.ac.jp

References


The authors

Mizuho Iida¹, Hirotugu Sakamoto¹, Yoshimasa Miura¹, Tomonori Yano¹, Yoshikazu Hayashi¹, Alan Kawarai Lefor², Hironori Yamamoto¹
¹ Department of Medicine, Division of Gastroenterology, Jichi Medical University, Shimotsuke, Japan
² Department of Surgery, Jichi Medical University, Shimotsuke, Japan

Bibliography

DOI https://doi.org/10.1055/a-0626-6893
Published online: 2018
Endoscopy
© Georg Thieme Verlag KG
Stuttgart · New York
ISSN 0013-726X

ENDOSCOPY E-VIDEOS
https://eref.thieme.de/e-videos

Endoscopy E-Videos is a free access online section, reporting on interesting cases and new techniques in gastroenterological endoscopy. All papers include a high quality video and all contributions are freely accessible online.

This section has its own submission website at
https://mc.manuscriptcentral.com/e-videos

Iida Mizuho et al. Jejunal ESD with pocket-creation method and balloon-assisted endoscopy ... Endoscopy