Utility of under-gel endoscopic mucosal resection with partial submucosal injection for a laterally spreading tumor

Conventional endoscopic mucosal resection (EMR) is a widely used technique in the treatment of colorectal tumors. When resecting laterally spreading tumors (LSTs) with conventional EMR, the distal edge is difficult to dissect and tends to be piecemealed. However, the nongranular pseudodepressed type (LST-NG-PD) has a high risk of malignancy, requiring en bloc resection [1]. Endoscopic submucosal dissection (ESD) can ensure high en bloc resection rates, but it also has drawbacks such as high perforation rates, high cost, and long procedure times. Binnmoeller et al. introduced underwater EMR (UEMR) as a useful alternative to ESD for LSTs [2]; however, treating the distal end remains a challenge and could cause segmental resection. In addition, the use of water in UEMR may impair clarity of view if bleeding occurs. Partial submucosal injection improves visualization of the distal edge [3], and gel immersion improves the endoscopic visual field [4, 5]. Here, we report that under-gel EMR with partial submucosal injection is an effective means of achieving en bloc resection of LST-NG-PD (▶ Video 1).

A 43-year-old woman was referred to our hospital for treatment of a colonic tumor. The lesion was observed in the rectosigmoid (▶ Fig. 1). Because of poor scope maneuverability and difficulty visualizing the distal edge, a partial submucosal injection was performed along the distal edge of the lesion (▶ Fig. 2). Initially, UEMR was considered, but the rapid mixing of fresh blood with water compromised visibility; therefore, we used Viscoclear gel (Otsuka Pharmaceuticals Factory, Inc., Japan). The lesion was successfully captured by an electrocautery snare (▶ Fig. 3) and resected without remnant (▶ Fig. 4). The histopathological diagnosis was well-differentiated tubular adenocarcinoma, and the histopathology was negative for vertical and horizontal margins (▶ Fig. 5). In this case, under-gel EMR with partial submucosal injection was effective for LST.

Endoscopy_UCTN_Code_TTT_1AQ_2AD

Competing interests

The authors declare that they have no conflict of interest.
The authors

Kazuki Yamamoto¹, Naoki Kanomata², Takashi Ikeya¹
¹ Department of Gastroenterology, St. Luke’s International Hospital, Tokyo, Japan
² Department of Pathology, St. Luke’s International Hospital, Tokyo, Japan

Corresponding author

Kazuki Yamamoto, MD
Department of Gastroenterology, St. Luke’s International Hospital, 9-1 Akashi-cho, Chuo-ku, Tokyo 104-8560, Japan
kazuyama@luke.ac.jp

References


[4] Yano T, Nemoto D, Ono K et al. Gel immersion endoscopy: a novel method to secure the visual field during endoscopy in bleeding patients (with videos). Gastrointest Endosc 2016; 83: 809–811


Bibliography

Endoscopy 2022; 54: E88–E89
DOI 10.1055/a-1381-6915
ISSN 0013-726X
published online 15.3.2021
© 2021. Thieme. All rights reserved.
Georg Thieme Verlag KG, Rüdigerstraße 14, 70469 Stuttgart, Germany

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

Endoscopy E-Videos is an open 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. Processing charges apply (currently EUR 375), discounts and waivers acc. to HINARI are available.

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

Yamamoto Kazuki et al. Utility of under-gel... Endoscopy 2022; 54: E88–E89 | © 2021. Thieme. All rights reserved.