Underwater endoscopic mucosal resection (UEMR) is rapidly gaining popularity as a treatment that is easier than conventional EMR and endoscopic submucosal dissection (ESD) because submucosal injection is not necessary owing to the floating effect of tissue under water [1, 2]. However, it is currently unclear whether UEMR can ensure deep enough margins for pathological evaluation of early-stage colorectal cancer [3]. We present a case of modified UEMR with submucosal injection after underwater conditions have been established (UIEMR).

The patient was a 33-year-old woman with a 12 mm lesion in the sigmoid colon. On magnifying endoscopy with narrow-band imaging, the lesion was diagnosed as type 2B by Japan NBI Expert Team classification (Fig. 1) [4]. After indigo carmine dye spray, the lesion showed a well-defined depressed area with central elevation (Fig. 2). The diagnosis was a nonpolypoid lesion and macroscopic appearance was Paris type 0-IIa + IIc. Magnifying endoscopy with crystal violet staining showed an irregular pit pattern (Vı, noninvasive) in the lesion and type I pit at the margin, suggesting non-polypoid-type early cancer.

Video 1 Underwater endoscopic mucosal resection with submucosal injection.
The small arrows (yellow) indicate the muscularis mucosae, and the large arrows (orange) indicate the distance between the deepest invasive area and the resection margin (hematoxylin and eosin, ×2).

Acknowledgment

This work was partly supported in part by The National Cancer Center Research and Development Fund 29-A-13 and 2020-A-4.

Competing interests

The authors declare that they have no conflict of interest.

References


The authors

Shintaro Hirata1, Naoya Toyoshima1, Hiroyuki Takamara2, Masayoshi Yamada2, Nozomu Kobayashi3, Takahiro Kozu4, Yutaka Saito1

1 Endoscopy Division, National Cancer Center Hospital, Chuo-ku, Tokyo, Japan
2 Kozu Clinic, Tokyo, Japan

Corresponding author

Yutaka Saito, MD
Endoscopy Division, National Cancer Center Hospital, 5-1-1 Tsukiji, Chuo-ku, Tokyo 104-0045, Japan
ytsaito@ncc.go.jp

Bibliography

Endoscopy
DOI 10.1055/a-1930-6373
ISSN 0013-726X
published online 2022
© 2022. 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

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

Hirata Shintaro et al. Underwater endoscopic mucosal... Endoscopy | © 2022. The Author(s).