Endoscopic submucosal dissection combined with endoscopic hand suturing for a laterally spreading tumor spanning the anastomosis after radical resection of a rectal carcinoma

Precancerous lesions or early cancers located at the anastomosis after radical resection of a rectal carcinoma are relatively rare [1, 2]. Recently, several studies have suggested that endoscopic submucosal dissection (ESD) is a favorable treatment for such lesions [3–5]; however, because of severe adhesion in the submucosa of lesions that are located at the anastomosis, partial excision of the circular muscle layer may be required to prevent positive margins. We report a novel measure combining endoscopic hand suturing (EHS) with ESD, to close the postoperative defect following this, which is expected to be an ideal endoscopic method for precancerous lesions or early cancers that span the anastomosis after radical resection of a rectal carcinoma.

A 50-year-old man who underwent radical surgery for rectal cancer 1 year previously was diagnosed on follow-up with a 1.5 × 1.2-cm laterally spreading tumor (LST) spanning the anastomosis (about 5 cm from the anal verge) (▶ Fig. 1a). Although the biopsy of lesion showed low grade intraepithelial neoplasia (LGIN), given its malignant potential, the patient underwent ESD. The lesion was removed en bloc with partial muscularis propria to ensure the negative margin (▶ Fig. 1b). We sutured the defect with EHS (▶ Video 1). The muscularis propria was also partially sutured to avoid submucosal dead space (▶ Fig. 1c). Clips were used to fix the tail and head of the suture (▶ Fig. 1d). The resection and suture times were 41 and 30 minutes, respectively. No adverse events occurred. Histologically, complete resection of the LGIN was obtained.

The use of ESD combined with EHS to treat an LST spanning the anastomosis has not been previously reported. Despite severe submucosal adhesion at the anastomotic site, it was still possible to remove the lesions en bloc with ESD, thereby preventing the patient needing to undergo further surgery, while EHS effectively prevented any wound-related adverse events. Further clinical experience with this technique is desirable.

Funding Information

CAM5 Innovation Fund for Medical Sciences (CIFMS)
2021-I2M-1-015, 2021-I2M-1-010, 2021-I2M-1-061, 2021-I2M-1-013, 2022-I2M-C&T-B-054

Sanming Project of Medicine in Shenzhen Municipality
http://dx.doi.org/10.13039/501100012151
SZSM201911008
Beijing Hope Run Special Fund of Cancer Foundation of China
LC2021A03
Capital’s Funds for Health Improvement and Research
CRF2020-2-4025
Conflict of Interest

The authors declare that they have no conflict of interest.

The authors

Shibo Song1, Yi Liu2‡, Lihou Dou1, Guiqi Wang1
1 Department of Endoscopy, National Cancer Center/National Clinical Research Center for Cancer/Cancer Hospital, Chinese Academy of Medical Sciences and Peking Union Medical College, Beijing, China
2 Endoscopic Center, The First Affiliated Hospital of Xiamen University, Xiamen, China

Corresponding author

Guiqi Wang, MD
Department of Endoscopy, National Cancer Center/National Clinical Research Center for Cancer/Cancer Hospital, Chinese Academy of Medical Sciences and Peking Union Medical College, 17 Panjiayuan Nanli, Chaoyang District, Beijing, 100021, China
wangguiq@126.com

References


Bibliography

Endoscopy 2024; 56: E249–E250
DOI 10.1055/a-2248-0634
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, Rüdigerstraße 14, 70469 Stuttgart, Germany

‡ Co-first authors