Complete resection of a giant tumor in the ultralow rectum by a combination of transanal local excision and endoscopic submucosal dissection

Local recurrence is the main problem after ultralow rectal surgery [1]. Transanal local excision provides an adequate visual field at the anus and allows for good hemostasis of hemorrhoidal veins, but may leave residual lesions and cause perforation for lesions with severe fibrosis [2, 3]. Endoscopic submucosal dissection is difficult for ultralow rectal lesions owing to the poor visual field at the dentate line and frequent bleeding from the hemorrhoidal veins, but residual lesions and perforation can be avoided by setting accurate resection lines [4]. Herein, we present a hybrid technique combining transanal local excision and endoscopic submucosal dissection for a giant tumor in the ultralow rectum, with the technique helping to achieve complete resection, prevent perforation, and preserve anal function.

An 80-year-old man presented with anal tumor prolapse for 3 months. He had undergone intersphincteric resection for a rectal tumor 2 years previously. Endoscopy revealed a giant tumor, with its anal side invading the dentate line and its oral side straddling the anastomotic site (Fig. 1). Endoscopic ultrasound indicated fuzzy stratification between the mucosa and muscularis propria. Computed tomography showed a clear serosal layer and several anastomotic nails. After multidisciplinary consultation and with the patient’s informed consent, we performed the hybrid procedure (Fig. 2; Video 1).

A surgeon initially excised the tumor from the anal side after adequate exposure of the anus, but submucosal fibrosis near the anastomotic site interrupted the procedure. An endoscopist then took over the procedure and dissected the tumor from the oral side using a retroflexed endoscope, during which the whole tumor edge was excised and the nails were removed. Finally, the endoscopist changed to dissect the tumor from the anal side with the assistance of external traction provided by the surgeon. The tumor was completely resected, without any bleeding or perforation (Fig. 3). Deeply damaged areas in the wound were closed using sutures. Pathology demonstrated a villous tubular adenoma with high grade intraepithelial neoplasia. The patient recovered uneventfully. At follow-up after 3 months, the wound had healed and no tumor recurrence was detected (Fig. 4). In addition, the patient’s bowel movements returned to normal.

Endoscopy_UCTN_Code_TTT_1AQ_2AD
Competing interests

The authors declare that they have no conflict of interest.

Funding

Chengdu Science and Technology 2021-YF05-00230-SN

The authors

Tingfa Peng1,2, Liansong Ye1,*, Jianchuan Chen3, Huiping Li3, Rongmei Gao4, Bing Hu1
1 Department of Gastroenterology, West China Hospital, Sichuan University, Chengdu, China
2 Department of Gastroenterology, Armed Police Forces Hospital of Sichuan, Leshan, China
3 Department of General Surgery, Armed Police Forces Hospital of Sichuan, Leshan, China
4 Department of Pathology, Armed Police Forces Hospital of Sichuan, Leshan, China

* Joint first authors

Corresponding author

Bing Hu, MD
Department of Gastroenterology, West China Hospital, Sichuan University, No.37, Guo Xue Alley, Wuhou district, Chengdu City, Sichuan Province, China
hubingnj@163.com

References


Bibliography

Endoscopy
DOI 10.1055/a-1882-5282
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

Fig. 2 Views during the hybrid procedure showing: a the lesion being excised from the anal side with an ultrasonic scalpel; b the lesion being dissected from the oral side with a Dual-Knife; c dissection of the lesion from the anal side with a DualKnife; d suturing of the deeply damaged areas in the wound.

Fig. 3 Macroscopic appearance of the completely resected lesion, which was 2.8 × 5.2 cm in size.

Fig. 4 Endoscopic view after 3 months showing a healed wound, without any tumor recurrence.