Circumferential rectal laterally spreading tumor resected by endoscopic submucosal dissection in a Western center

► **Fig. 1** A 15 cm circumferential rectal laterally spreading tumor, mixed granular type.

► **Fig. 2** Endoscopic submucosal dissection of the rectal laterally spreading tumor.

► **Fig. 3** Resected tumor, corresponding to the entire circumferential rectal mucosa.

A 78-year-old patient without relevant past medical history underwent colonoscopy for chronic diarrhea. Examination identified a laterally spreading tumor (LST), mixed-granular-type (nodules up to 1 cm) in the rectum, from the pectin line to the rectosigmoid transition. The LST covered 100% of the circumference of this segment (► **Fig. 1**). Endoscopic evaluation was compatible with an adenomatous lesion with preserved pit pattern (Kudo III/IV classification), without unequivocal endoscopic suspicion of invasive lesion (NICE 2; JNET 2B). After multidisciplinary evaluation, endoscopic resection by endoscopic submucosal dissection (ESD) was decided.

The procedure was performed with the patient under general anesthesia. A gastroscope (GIF-HQ190; Olympus, Tokyo, Japan) and carbon dioxide insufflation were used. The lesion was gradually elevated with a colloid solution (Volumen [Fresenius Kabi Norge AS, Halden, Norway]+indigo carmine+adrenaline), and the excision was performed by ESD using the FlushKnife (Fujifilm Corp., Tokyo, Japan) and the IT Knife nano (Olympus) (► **Fig. 2**). En bloc resection was achieved, obtaining a circumferential specimen with a length of 15 cm, corresponding to the entire rectal mucosa

► **Fig. 4** Endoscopic balloon dilation at the endoscopic submucosal dissection site.

(► **Fig. 3**, ► **Video 1**). The procedure time was 420 minutes. Antimicrobial prophylaxis with a single dose of ceftriaxone (2 g) was given. There were no immediate complications and the patient was discharged 24 hours after the procedure. Histological examination revealed a tubulovillous adenoma with high grade dysplasia.

Although the patient remained asymptomatic, endoscopic evaluation after 2 months revealed stenosis at the ESD site. Balloon dilation up to 15 mm (diameter) was performed in a single session (► **Fig. 4**).

ESD is an organ-sparing endoscopic technique that allows en bloc resection of superficial gastrointestinal lesions regardless of their size, optimizing the histological evaluation [1]. This is particularly important in the rectum because of the high morbidity associated with the alternative surgical approaches [2]. Although described in Asian case reports [3,4], to our knowledge this is the first report showing endoscopic treatment by ESD of a giant circumferential colorectal LST in a Western center.

Endoscopy_UCTN_Code_TTT_1AQ_2AD

Competing interests

None

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Video 1 Endoscopic submucosal dissection for the treatment of a 15 cm circumferential rectal laterally spreading tumor.

noma by endoscopic submucosal dissection. *Endoscopy* 2016; 48 : E161 – E162

- [4] Kure K, Kawai M, Ishiyama S et al. Complete endoscopic submucosal dissection of a giant rectal villous adenocarcinoma with electrolyte depletion syndrome. *Case Rep Gastroenterol* 2015; 9: 126 – 131

Bibliography

DOI <https://doi.org/10.1055/s-0043-119347>

Published online: 9.10.2017

Endoscopy 2017; 49: E305–E306

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Stuttgart · New York

ISSN 0013-726X

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References

- [1] Kantsevov SV, Adler DG, Conway JD et al. Endoscopic mucosal resection and endoscopic submucosal dissection. *Gastrointest Endosc* 2008; 68: 11 – 18
- [2] Gruen RL, Pitt V, Green S et al. The effect of provider case volume on cancer mortality: systematic review and meta-analysis. *CA Cancer J Clin* 2009; 59: 192 – 211
- [3] Takahashi H, Hayashi Y, Sunada K et al. Complete resection of a 225-mm circumferential rectosigmoid intramucosal carcinoma by endoscopic submucosal dissection.