

## Endoscopic submucosal dissection of intramucosal adenocarcinoma on Barrett's esophagus

A 63-year-old man was investigated because of long-standing pathological gastroesophageal reflux. Diagnostic endoscopy showed long-segment Barrett's esophagus associated with a flat lesion compatible with a granular laterally spreading tumor (LST-G), and endoscopic submucosal dissection was decided upon [1].

A Fujinon EG-590-ZW diagnostic endoscope was used for the procedure. A Fujinon transparent conical cup and Fujifilm 1.5-mm FlushKnife BT were used as the dissecting instruments.

The endoscope was advanced to the distal esophagus, where long-segment Barrett's esophagus (6 cm in length) was confirmed. In addition, a homogeneous flat lesion compatible with a LST-G of 4 cm maximum diameter was shown (►Fig. 1).

Flexible spectral imaging color enhancement (FICE) and magnification were used for exhaustive assessment of the surface and margins of the lesion, which presented a granular flat segment on its edges.

The edges of the lesion were marked with a safety margin of 5 mm (►Fig. 2).

The lesion was then raised by submucosal injection with a solution made up of 500 mL Voluven, 2.5 mL methylene blue, and 1 mg epinephrine. A complete perimeter mucotomy, external to the marking, was performed (►Fig. 3). Careful hemostasis was carried out, followed by endoscopic dissection of the submucosal layer adjacent to the muscularis propria (►Fig. 4) [2]. The entire submucosal layer of the lesion in the dissected specimen was included. The surgical bed was undamaged, with no signs of perforation and correct hemostasis (►Fig. 5; ►Video 1).

At 6-month post-procedure follow-up the wound had healed. Re-epithelialization with squamous mucosa without evidence of esophageal stenosis was



►Fig. 1 Granular laterally spreading tumor in the esophagus of a 63-year-old man.



►Fig. 2 The edges of the lesion were marked with a safety margin of 5 mm.



►Fig. 3 Perimeter mucotomy was performed external to the marking.



►Fig. 4 The submucosal layer adjacent to the muscularis propria was dissected.



►Fig. 5 The surgical bed was undamaged.

The pathological report was of well-differentiated, intramucosal adenocarcinoma without compromise of lateral or deep margins.

Carrying out ESD for incipient neoplastic lesions in Barrett's esophagus is feasible and safe [3] and achieves good oncological results. It should be followed by radiofrequency ablation of the remaining Barrett's esophagus [4, 5].

Endoscopy\_UCTN\_Code\_TTT\_1AO\_2AG

### Competing interests

The authors declare that they have no conflict of interest.

demonstrated. On this occasion, the remaining Barrett's esophagus was ablated using radiofrequency.



**Video 1** Endoscopic submucosal dissection of the distal esophagus.

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## Bibliography

*Endoscopy* 2022; 54: E329–E330

**DOI** 10.1055/a-1508-5273

**ISSN** 0013-726X

**published online** 19.7.2021

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