Salvage endoscopic submucosal dissection for recurrent invasive Barrett neoplasia after endoscopic resection and radiofrequency ablation

Endoscopic resection is indicated for visible lesions in Barrett's esophagus (BE) for either curative treatment or optimal histopathological staging [1]. Endoscopic submucosal dissection (ESD) should be considered only for lesions larger than 15 mm [2]. Even in larger lesions, it still offers a moderate rate of cure [3].

We report the case of an 82-year-old man with a 40 × 30-mm visible lesion in an area of BE (C8M8), which was removed R0 by ESD, with the histological diagnosis being high grade dysplasia (> Fig. 1). Subsequent high definition endoscopy found no suspicious visible lesions. Radiofreguency ablation (RFA) was scheduled for the remaining BE. However, on the second session of RFA, two suspicious lesions were detected and biopsies confirmed the presence of an adenocarcinoma component within high grade dysplasia. It was decided to perform salvage endoscopic resection to manage these recurrent lesions.

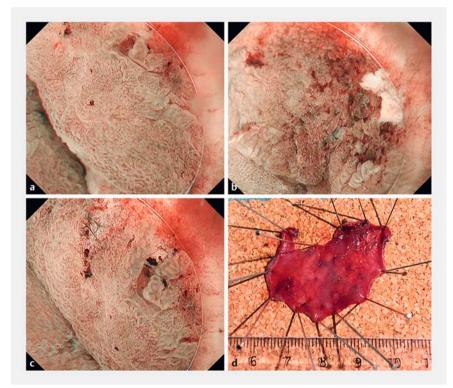
We performed ESD with the "tunnel+ clip" strategy [4] (> Fig. 2). In spite of severe fibrosis, we were able to remove the lesions endoscopically en bloc, without any adverse events, in 1 hour (> Video 1). Two specimens measuring 55×40mm and 12×10mm were submitted for pathological analysis, which confirmed an R0 resection of moderately differentiated adenocarcinoma with budding and submucosal invasion less 200 µm (pT1b) (Lesion #1) and an intramucosal adenocarcinoma (Lesion #2) (>Fig.3). A shared discussion of the choice between salvage surgery and endoscopic surveillance took place with the patient.

This is the first case reported so far of recurrent invasive BE neoplasia within a period of only 7 months from the initial curative endoscopic resection. Regardless of severe fibrosis following the previous resection and RFA, complete resection by endoscopy remained feasible and safe with the "tunnel+clip" strategy.

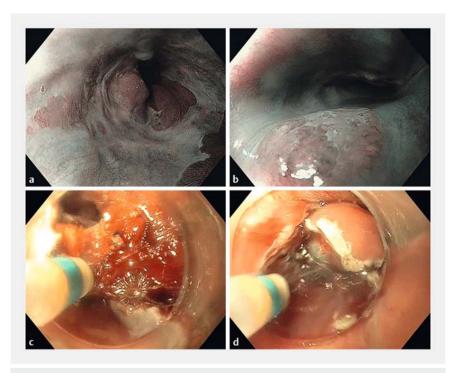




Video 1 An initial high grade dysplastic lesion in an area of Barrett's esophagus (BE) is resected by endoscopic submucosal dissection (ESD), with subsequent radiofrequency ablation (RFA) of the remaining BE. Two recurrent lesions identified 7 months later are successfully treated by ESD with the "tunnel+clip" strategy despite severe fibrosis.



▶ Fig. 1 Endoscopic views of the initial high grade dysplastic lesion in an area of Barrett's esophagus (C8M8) on: a high definition endoscopic examination; b examination with acetic acid and narrow-band imaging (NBI) with magnification; c examination with NBI with magnification. d The 40 × 30-mm specimen that was resected by endoscopic submucosal dissection.



▶ Fig. 2 Views of the two recurrent lesions found after the initial resection and radiofrequency ablation showing: **a** a protruded lesion on the anterior wall of esophagus; **b** another small visible lesion; **c** endoscopic submucosal dissection being performed with line traction assistance; **d** endoscopic submucosal tunnel dissection being performed.

Although the recurrence rate after curative resection is reported to be low [5], we should not overlook visible lesions during follow-up. ESD is still a preferable and effective management in this situation.

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Competing interests

The authors declare that they have no conflict of interest.

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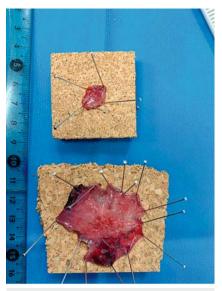
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► Fig. 3 Macroscopic appearance of the two resected lesions, measuring 55×40 mm and 12×10 mm, stretched on cork boards.

Bibliography

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