Endoscopic submucosal dissection of a solitary gastric plasmacytoma: “third space oddity”

Although well established for classic indications [1–3], the use of endoscopic submucosal dissection (ESD) can help to solve rare clinical situations [4–5].

A 35-year-old woman without medical history underwent an esophagastroduodenoscopy for progressive epigastricalgia that was unresponsive to proton pump inhibitors (PPIs) for 12 months. A 10-mm subepithelial lesion in the antrum was reported (▶Fig. 1). Biopsies revealed an extramedullary plasmacytoma, confirmed by expert pathology. Apart from weight loss, attributed to epigastricalgia, no other B symptoms were present. Diagnostic work-up disclosed a unique gastric hypermetabolic focus on positron emission tomography (▶Fig. 2). There were no biological anomalies. Bone marrow biopsy was normal.

Endoscopic evaluation 1 month after radiotherapy, administered with curative intent (40Gy), suggested a non-responding lesion (▶Fig. 3). Endosonography evaluation showed a homogeneous, hypoechoic mass (12.0 × 5.7 mm) limited to the submucosa (▶Fig. 4). ESD was proposed as a treatment option in a multidisciplinary team.

Lesion delineation was obtained using narrow-band imaging (NBI) and texture and color enhancement imaging. ESD was performed by expert hands (▶Video 1) with a GIF-HQ-190 gastroscope, using an electrosurgical knife and glycerol solution. The conventional ESD technique was applied, taking 1-cm lateral margins, dissecting alongside the proper gastric muscular layer under near focus and texture and color enhancement. En bloc resection (60 × 40 mm) was obtained in 150 minutes. No post-radiotherapy fibrosis was noted. Pathology confirmed the presence of a 21-mm submucosal lambda monoclonal plasmacytoma infiltrating up to 1071 micrometers. Lateral and vertical margins were free, even though free deep submucosa was only 50 micrometers on the specimen (▶Fig. 5). Endoscopic evaluation at 6 months showed post-ESD scarring without signs of relapse (▶Video 1), while the patient reported minor residual epigastricalgia but regained normal weight. Albeit the outcome is reassuring, close endoscopic and imaging follow-up is proposed.

Although rare, ESD (alone or complementary to other treatment modalities) can serve as an adequate treatment for digestive plasmacytoma beyond the scope of its classic indications.
Competing interests

The authors declare that they have no conflict of interest.

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Video 1 Endoscopic submucosal dissection of a solitary gastric plasmacytoma: "third space oddity".

Fig. 5 Pathology images. a Macroscopic picture of the resected specimen showing the subepithelial lesion (red dotted circle) and 1-cm margins. b Inflammatory infiltrate located mainly in the mucosa and submucosa. c At higher magnification, histopathological aspect of inflammatory cells (eccentric nucleus with coarse chromatin and cart wheel pattern) suggests diffuse infiltration by plasma cells. d Anti-CD138 immunostaining confirms inflammatory nature of plasma cells. e, f In situ hybridization shows lambda monoclonality.
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