Dear Editor,

The treatment of submucosal lesions of the digestive tract has changed substantially in recent times. The difficult histological differentiation of the lesions on account of the covering of normal mucosa, makes them difficult to characterize by means of conventional endoscopic biopsies.

Although leiomyomas are rare in the general population, they are the most common benign oesophageal tumours (70%) (1). They represent 1% of all oesophageal tumours and are more common in the third distal (2). They normally present as single lesions, although cases of multiple lesions have been reported in up to 5% of patients.

Below we present the case of a young woman with symptoms of gastroesophageal reflux and functional dyspepsia with a submucosal lesion in the distal third of the oesophagus. The complete endoscopic resection of this lesion relieved her symptoms.

Case report

A fifty-nine year-old woman was admitted at our hospital. The patient claimed her main symptom was epigastric abdominal pain unrelated to dysphagia, odynophagia, weight loss or haematemesis. We carried out the following supplementary examinations including an oesophagogastroscopey was also performed, which showed a lesion in the distal third of esophagus and identified its probable submucosal origin, given the covering of normal-appearing mucosa (Fig. 1A). The echoendoscopic study of the distal oesophagus revealed a hypoechoic lesion of submucosal origin with a diameter of 15 mm, arising from the second echoic layer (muscular layer of the mucosa) and independent of the fourth echoic layer (muscularis propria) (Fig. 1B). Due to its characteristics, the lesion prompted differ-
ential diagnoses of oesophageal leiomyoma and granular cell tumour.

A decision was made to perform an endoscopic removal of the lesion as opposed to alternative surveillance strategies. The removal was carried out under deep sedation and the lesion was completely resected "in bloc" with a polypectomy snare and no complications occurred (Figs. 1C-E).

Histologically, it was a well-delimited non-encapsulated nodular lesion with low cellularity, the cells of which presented elongated nuclei with no pleomorphism, a low number of mitotic figures, and abundant poorly-defined eosinophilic cytoplasm. These cells were arranged in criss-crossing bundles. The immunohistochemistry techniques showed a strong positivity for actin and desmin (Fig. 1F), with negative S-100 and CD34 protein staining. All the results led to a diagnosis of oesophageal submucosal leiomyoma.

She was released with no complications. In follow-up examinations, the patient did not complain about any of the symptoms that led to the study in our hospital.

Discussion

The distinction between leiomyoma and leiomyosarcoma lies primarily in the high level of atypias and the greater number of mitoses per high power field with regard to the former. Thus, a greater amount of tissue than that of a single endoscopic biopsy would be advisable for an adequate differential diagnosis (3).

Diagnosis includes techniques such as endoscopy (which identifies a mobile submucosal mass) and EUS, which typically identifies a well-circumscribed hypoechoic mass, most commonly originating in the second echoic layer (4). It also makes it possible to identify whether the primary direction of the lesion's growth is endoluminal or extraluminal, and identifies its relationship with the nearby tissues, which will definitively influence the determination of a more favourable endoscopic approach in the case of the former rather than the latter. The differential diagnosis of these tumours is carried out with the rest of the hypoechoic lesions of the digestive tract such as retention cysts, carcinoids, lymphomas, metastases and granular cell myoblastoma (5). The histological yield of conventional endoscopic biopsies is around 25%.

Traditionally, the therapy of choice has been surgery characterized by different approaches, with laparoscopies and thorascopies the treatment of choice in centres with experience in minimally invasive surgery. Various endoscopic methods have been described for resecting submucosal lesions in recent years, such as resection with cap-fitted endoscopes, aspiration lumpectomy, conventional polypectomy, as in our case, and (especially with large lesions) incisional enucleation (6). The good results obtained make our technique a reasonable alternative in the case of small-sized leiomyomas with primarily intraluminal echoendoscopic growth.

In conclusion, we can say that the endoscopic approach to oesophageal submucosal lesions is the therapy of choice in the case of a certain set of characteristics. In the near future, and given the growing development of NOTES' own endoscopic therapies, the approach shall be increasingly common and feasible amongst endoscopy staffs.


References