Endoscopic band ligation plus single-incision needle knife biopsy for small subepithelial deep-layer tumor: easy and effective

A 61-year-old man was referred for an iron-deficiency anemia diagnostic process. Upper gastrointestinal endoscopy was performed and fortuitously revealed a small gastric subepithelial lesion. Endoscopic ultrasound (EUS) characterization revealed a solid lesion, with fusiform morphology, well-defined by smooth edges and an hypoechoic homogeneous internal pattern, measuring 12.3 x 5.8 mm, and originating in the muscularis propria layer, which confirmed a subepithelial tumor (Fig. 1). With the aim of avoiding EUS surveillance of the subepithelial tumor, a minimally invasive removal technique was planned [1–3]. Endoscopic band ligation of the subepithelial tumor was done using a Captiva Tor endoscopic mucosal resection standard gastroscope device (Boston Scientific, Quincy, Massachusetts, USA) combined with a single-incision needle knife (SINK) biopsy (XL Triple-lumen needle knife; Boston Scientific; and pure-cut 90-W, Beamer CE600; ConMed, Utica, New York, USA). A standard videoendoscopy was used, and four biopsy samples were obtained (Radial Jaw large capacity biopsy forceps; Boston Scientific) (Fig. 2). The patient remained in hospital for 24 hours and was called at 48 hours and 7 days after the procedure, with no incidents or adverse events being reported (Video 1).

Pathological and immunohistochemistry examination revealed a fascicular proliferation of fusiform eosinophilic cells, negative for CD117 (c-kit) and DOG1, and positive for desmin and caldesmon, corresponding to the diagnosis of a leiomyoma (Fig. 3).

The first EUS control, at 5 weeks after the procedure, revealed a complete disappearance of the subepithelial tumor features, showing a discreet eschar (simple biopsy with 4 samples, showing normal gastric mucosa). Long-term EUS control at 1 year showed that the subepithelial tumor had vanished, confirming the successful result and allowing discontinuation of endoscopic surveillance (Fig. 4).
Endoscopic band ligation combined with SINK biopsy seems to be an effective minimally invasive technique that is safer than endoscopic resection for treating a gastric subepithelial tumor originating in the muscularis propria [4, 5].

Competing interests

None

The authors

Francesc Bas-Cutrina 1, Claudia F. Consiglieri 1, Jan Bosch-Schips 2, Joan B. Gornals 1, 3

1 Endoscopy Unit, Department of Digestive Diseases, Hospital Universitari de Bellvitge-IDIBELL, University of Barcelona, Catalonia, Spain.
2 Department of Pathological Anatomy, Hospital Universitari de Bellvitge-IDIBELL, University of Barcelona, Catalonia, Spain.
3 Faculty of Health Sciences, Universitat Oberta de Catalunya, Barcelona, Catalonia, Spain.

Corresponding author

Joan B. Gornals, MD, PhD
Endoscopy Unit, Department of Digestive Diseases, Hospital Universitari de Bellvitge-IDIBELL (Bellvitge Biomedical Research Institute), Feixa Llonga s/n, 08907 L’Hospitalet de Llobregat, Barcelona, Catalonia, Spain
Fax: +34–93–2607681
jgornals@bellvitgehospital.cat

References


Bibliography

DOI https://doi.org/10.1055/a-0875-3958
Published online: 12.4.2019
Endoscopy 2019; 51: E191–E192
© Georg Thieme Verlag KG
Stuttgart · New York
ISSN 0013-726X

ENDOSCOPY E-VIDEOS
https://eref.thieme.de/e-videos

Endoscopy E-Videos is a free access online section, reporting on interesting cases and new techniques in gastroenterological endoscopy. All papers include a high quality video and all contributions are freely accessible online.

This section has its own submission website at https://mc.manuscriptcentral.com/e-videos