REVISTA ESPAÑOLA DE
ENFERMEDADES DIGESTIVAS
The Spanish Journal of Gastroenterology

Title:
Endoscopic submucosal dissection with an SB Knife® for the treatment of subcardial gastric leiomyoma

Authors:
Ana Sanahuja, María Jesús Segura, María Carmen Azorín, Víctor Merino, Cristina Fernández, José Ramón Moles, Andrés Peña

DOI: 10.17235/reed.2021.7998/2021
Link: PubMed (Epub ahead of print)

Please cite this article as:
Sanahuja Ana, Segura María Jesús, Azorín María Carmen, Merino Víctor, Fernández Cristina , Moles José Ramón, Peña Andrés. Endoscopic submucosal dissection with an SB Knife® for the treatment of subcardial gastric leiomyoma. Rev Esp Enferm Dig 2021. doi: 10.17235/reed.2021.7998/2021.

REVISTA ESPAÑOLA DE
ENFERMEDADES DIGESTIVAS
The Spanish Journal of Gastroenterology

CC 7998

Endoscopic submucosal dissection with an SB Knife® for the treatment of subcardial gastric leiomyoma

Ana Sanahuja[2], María Jesús Segura[1], María del Carmen Azorín[1], Víctor Merino[2], Cristina Fernández[1], José Ramón Moles[3], Andrés Peña[2]

Departments of [1]General and Digestive Surgery and [3]Digestive Medicine. Hospital de Sagunto. Sagunto, Valencia. Spain. [2]Department of Digestive Medicine. Hospital Clínico Universitario de Valencia. Valencia, Spain

Correspondence: María del Carmen Azorín
e-mail: mcazosam16@gmail.com

Keywords: Leiomyoma. Subepithelial tumor. Endoscopic submucosal dissection.

Author contributions: all authors read and approved the final version of the manuscript, and met the authorship criteria.
Funding: the authors received no financial support for the research, authorship, and/or publication of this article.
Conflicts of interest: the authors have no conflicts of interest to declare.

Dear Editor,

Surgery has been considered the main treatment for submucosal tumors (SMTs). However, endoscopic resection is currently accepted for gastric SMTs smaller than 3 cm (1). Endoscopic submucosal dissection (ESD) is considered the technique of choice, and submucosal tunneling endoscopic resection has successful results with low complication

rates according to the recent meta-analysis by Cao et al. (2). The major limitation of these methods is the technical difficulty associated with certain anatomic locations (3,4).

CASE REPORT

A 48-year-old female was incidentally diagnosed with a 3-cm subcardial submucosal tumor (SMT). Endoscopic ultrasound evaluation confirmed the existence of a well-defined, hypoechoic, submucosal lesion. After fine-needle aspiration the histopathological diagnosis was compatible with leiomyoma.

ESD was performed using a therapeutic gastroscope (Olympus GIF-1TQ160®) with a distal attachment cap (Reveal™, US Endoscopy®) and access in a retroflexed view. Ten percent glycerin, diluted adrenaline (1/100,000) and indigo carmine were injected into the submucosa to raise the lesion. After resection of the upper mucosa with a polypectomy snare (Sensation™, Boston Scientific®) ESD was performed using an SB Knife™/Junior (Sumitomo®) with 60-W forced coagulation (effect 2), achieving en-bloc resection. Visible vessels were coagulated with a hemostatic grasper (Coagrasper™, Olympus®) and a solution of hemostatic synthetic peptides (PuraStat®) was placed on the scar, which was closed with an Endoloop™ (Olympus®) and 8 clips using a "tobacco pouch" suture. No signs of perforation were detected (Fig. 1).

The clinical course was favorable and imaging studies revealed pneumomediastinum and retropneumoperitoneum with no clinical significance.

DISCUSSION

The use of an SB Knife® has several advantages. It allows the application of traction and targeted resection, facilitates the approach to tumors in difficult-to-access locations, and applies cut with coagulation for hemostasis. We consider that ESD with an SB Knife® can be recommended for SMTs in difficult locations due to its reliability and relatively easy application. It allows a safe resection and avoids the need for major surgery.

REFERENCES

1. Tan Y, Tan L, Lu J, et al. Endoscopic resection of gastric gastrointestinal stromal tumors. Transl Gastroenterol Hepatol 2017;2:115. DOI: 10.21037/tgh.2017.12.03
2. Cao BDX, Lu JX, Tan YY, et al. Efficacy and safety of submucosal tunneling endoscopic resection for gastric submucosal tumors: a systematic review and meta-analysis. Rev Esp Enferm Dig 2021;113(1):52-9. DOI: 10.17235/reed.2020.6989/2020
3. Abe S, Wu SYS, Ego M, et al. Efficacy of current traction techniques for endoscopic submucosal dissection. Gut Liver 2020;14(6):673-84. DOI: 10.5009/gnl19266
4. An W, Sun PB, Gao J, et al. Endoscopic submucosal dissection for gastric gastrointestinal stromal tumors: a retrospective cohort study. Surg Endosc 2017;31(11):4522-31. DOI: 10.1007/s00464-017-5511-3

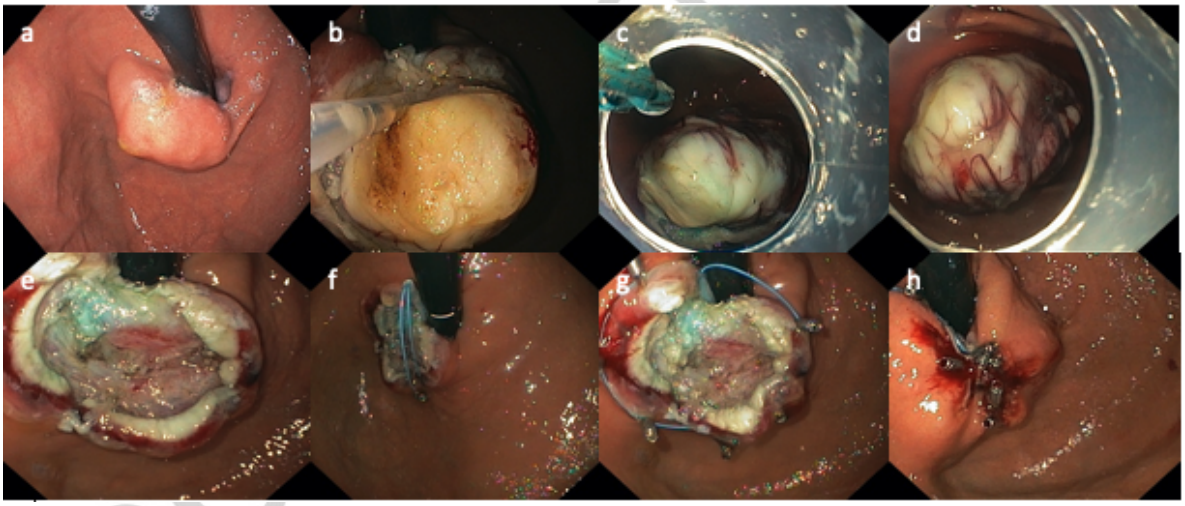

Fig. 1. A) A 3-cm subcardial submucosal tumor detected by retroflexion. B) Resection of the upper mucosa with a polypectomy snare. C and D) En-bloc resection by ESD using an SB Knife™. E) Scar after resection. F and G) Endoloop™ and clips around the scar. H) Closure with a “tobacco pouch” suture.