

Successful *en bloc* endoscopic submucosal dissection of early gastric cancer and rectal lateral spreading tumor in a Greek hospital

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Basioukas S. and Xinopoulos D. [1] previously reported successful endoscopic submucosal dissection (ESD) of early gastric cancer, type '0-IIa', in a Greek hospital. We would also like to add our experience from gastric and rectal ESD and one-year follow up. Although, narrow band imaging (NBI) magnification endoscopy is a prerequisite, for detailed evaluation of NBI magnifying patterns of mucosal cancer, according to Japanese experts [2], we managed to successfully complete two ESD cases, despite the absence of NBI magnification endoscopy, as was also the case in Basioukas' and Xinopoulos' [1] report. Furthermore, we report sufficient follow up in our cases (no local recurrence at one year), necessary for curable ESD.

We herein report a successful, curable, *en bloc* ESD resection of early gastric cancer, type '0-IIa', 2 cm in diameter, at the middle posterior gastric body along the lesser curvature, in a 77-year-old male (Fig. 1 A, B) and mucosal lateral spreading rectal tumor (LST), >4 cm in diameter, type '0-IIa+IIc' tumor, at <1 cm distance from the dentate line, in a 65-year-old male, (Fig. 2 A, B), performed at our endoscopy department, in September 2012.

In view of severe co-morbidities the first patient was a poor candidate for surgery, and, after detailed explanation, he agreed and signed to undergo ESD. In the second patient, colonoscopy due to hematochezia, revealed an LST, granular non-homogenous rectal tumor, type '0-IIa+IIc', according to [3] the Paris classification, 1 cm from the anal merge, on posterior wall, and more than 4 cm in diameter (Fig. 2A). Due to size, location and morphology, it was decided to resect the tumor by ESD, with the patient's agreement. Both gastric and rectum ESDs were performed at our endoscopy department under conscious sedation. Cup-technique and dual knife was used for marking of the tumor border, circumferential cutting and ESD in both patients (Fig. 1B, 2B). Coagulation spray was used for hemostasis. No short- or long-term complications were reported and the patient was discharged after a three-day in-hospital stay. Procedure time was more than 6 h.

Control endoscopy on the day of discharge revealed a normal ESD ulcer without signs of bleeding or perforation (Fig. 1C, 2C). No blood transfusions were necessary. Histological examination of gastric ESD specimen (46x25x3 mm in dimensions) (Fig. 1D) showed low- and locally high-grade dysplasia (20x20 mm), corresponding to mucosal cancer, type IV according to the revised [4] Vienna classification of

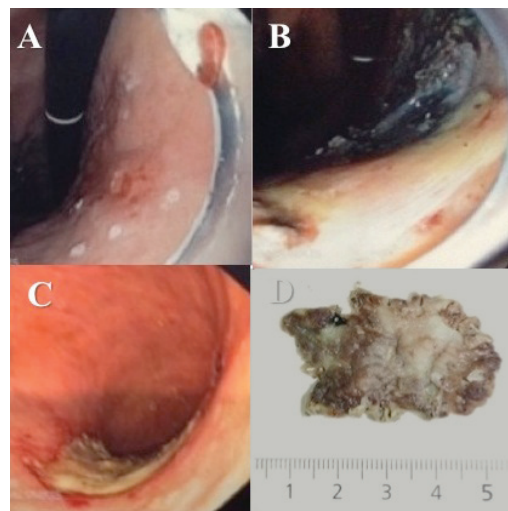


Figure 1 (A) Marking of early gastric cancer at the middle body along lesser curvature type '0-IIa' before endoscopic submucosal dissection (ESD) (B) ESD bodem (C) ESD ulcer (D) Gastric ESD specimen

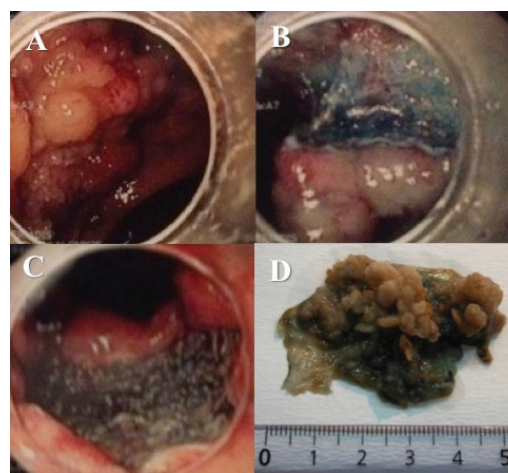


Figure 2 (A) Rectal lateral spreading rectal tumor granular, non-homogeneous, type '0-IIa+IIc', 1 cm from anal merge. (B) Submucosal space during endoscopic submucosal dissection (ESD) (C) ESD ulcer after completion of ESD (D) Rectal ESD specimen

gastrointestinal epithelial neoplasia, resected *en bloc* within normal margins (horizontal and vertical margins normal). Histology of the rectal ESD specimen (Fig. 2D) showed villous rectal adenoma with low-grade dysplasia (46x37x14 mm) [14] (Vienna classification type III) resected within normal margins. Control endoscopy one year later showed normal scar at the site of ESDs, no residual tumor, while random biopsies from the ESDs scar were normal.

According to our cases, although only two, and in absence of NBI magnification endoscopy, we consider ESD feasible for curable *en bloc* resection of early gastric cancer and rectal LST in a Greek hospital. However, further expertise is necessary.

References

1. Basioukas S, Xinopoulos D. Endoscopic submucosal dissection in the west: difficult but not impossible. *Ann Gastroenterol* 2014;**27**:1.
2. Yokoyama A, Inoue H, Minami H, et al. Novel narrow-band imaging magnifying endoscopic classification for early gastric cancer. *Dig Liver Dis* 2010;**42**:704-708.
3. The Paris endoscopic classification of superficial neoplastic lesions: esophagus, stomach, and colon: November 30 To December 1, 2002. *Gastrointest Endosc* 2003;**58**:S3-S43.
4. Schlemper R, Kato Y, Stolte M. Review of histological classifications of gastrointestinal epithelial neoplasia: differences in diagnosis of early carcinomas between Japanese and Western pathologists. *J Gastroenterol* 2001;**36**:445-456.

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Conflict of Interest: None

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