

PICTURES IN DIGESTIVE PATHOLOGY

Non granular laterally spreading tumor resected by endoscopic submucosal dissection: An unusual treatment for an atypical lesion

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CASE REPORT

We present the case of an 82 years old male, with a past medical history remarkable for colonic polypectomies until the year 2003 when, after being operated and radiated due to a prostate adenocarcinoma, the patient discontinued surveillance. He was referred for control colonoscopy in the year 2012, identifying a flat tumor with elevated margins and central depression (IIa + IIc Paris classification) (laterally spreading tumor: LST), measuring 35 mm and localized 15 mm from the anal verge (1) (Fig. 1 A and B). Biopsies from the lesion were diagnosed as tubular adenoma with high grade dysplasia. Careful examination of the lesion with magnification, chromoendoscopy (indigo carmine) and narrow band imaging/NBI, and lifting of the lesion with a mixture of glycerol/indigo/hyaluronic acid, determined that the lesion was not infiltrating the submucosa, and an endoscopic submucosal dissection (ESD) of the lesion was performed by experts in this technique (T.M./N.M.) as previously reported (2) (Fig. 2 A-C). For

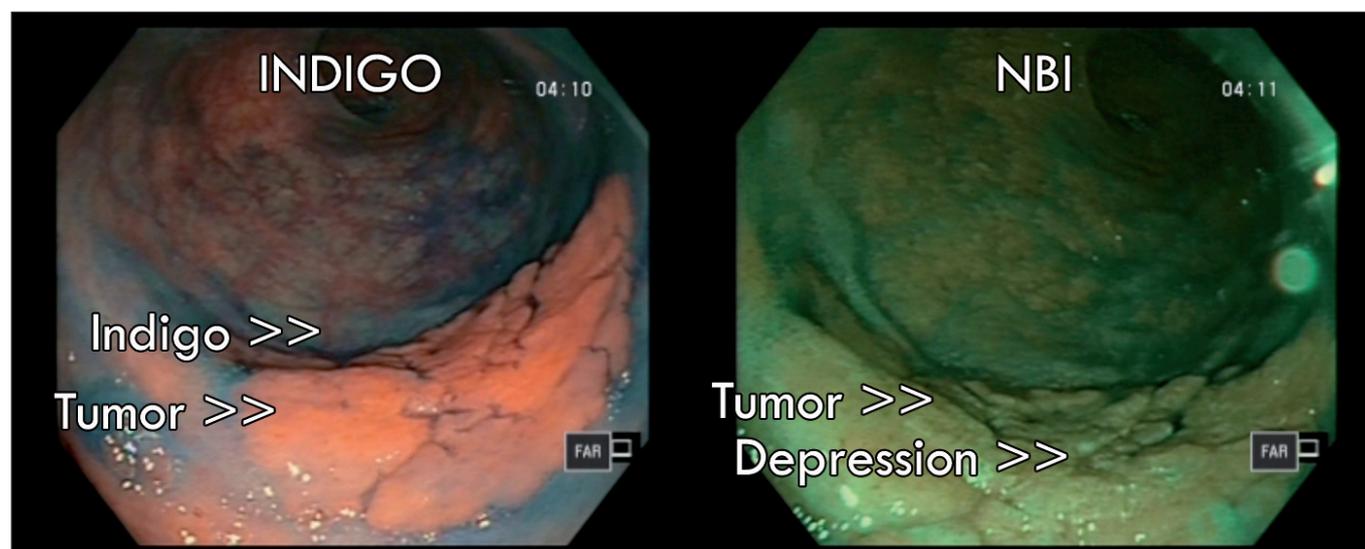


Fig. 1. Non granular laterally spreading tumor: "LST" in the rectum showing elevated margins and depressed center (IIa + IIc Paris classification). Chromoendoscopy with indigo carmine (A) and virtual chromoendoscopy with narrow band imaging (NBI) (B) was performed, enhancing margins and shape of the lesion, and facilitating the complete resection of the tumor.

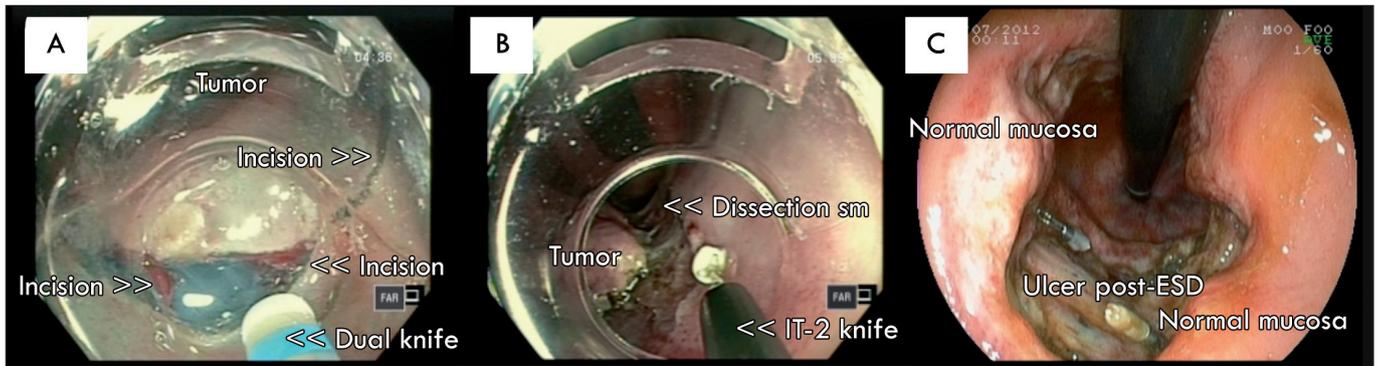


Fig. 2. Circumferential incision of the lesion was made with the Dual knife (Olympus®), leaving a 5 mm segment of normal mucosa as a lateral margin of security (A) and later dissection of the submucosal layer with the Dual knife and IT-2 knife (Olympus®) (B) until complete resection of the lesion was achieved (C).

such purpose, Dual knife and IT-2 knife Olympus® were employed, achieving a complete resection of the lesion in one piece (Fig. 3). Pathology report of the resected lesion demonstrated high grade dysplasia/in situ carcinoma with no residual tumor on the margins of resection (Fig. 4), therefore as the tumor was not infiltrating the submucosa (limit point for lymphatic spread) it was considered that ESD had been curative, and more aggressive surgery was avoided (3).

DISCUSSION

LST of the colon (lesions with a short vertical axis and > 10 mm of lateral spread), may be classified as

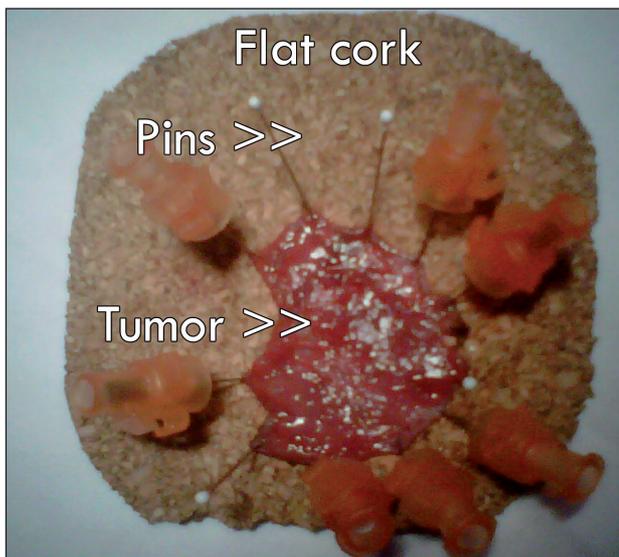


Fig. 3. The resected lesion was extended on a flat cork, fixed with pins, the mucosal surface facing the upper side, for later histological exam. The sample was fixed in formalin and sent for pathology study as shown in the image.

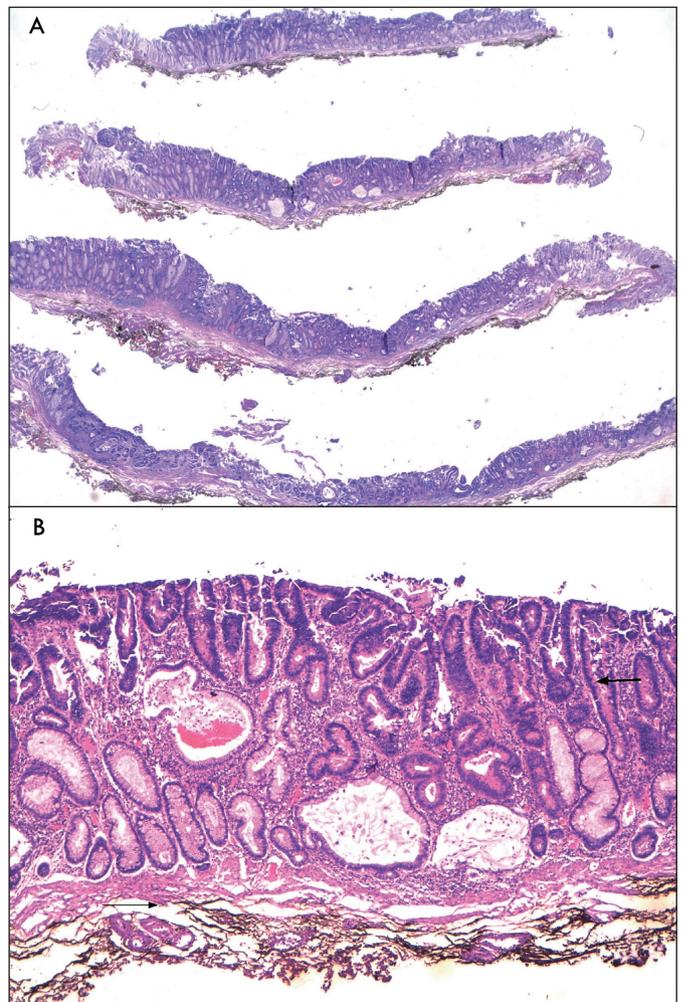


Fig. 4. A. Pathology detail (10x) of resected lesion showing a number of sections in which the tumor is visualized (hematoxylin/eosin stain: Dark purple color) confined to the superficial layers of the wall (mucosa). B. it can be observed on the microscope at a higher power resolution that the lesion does not invade the muscularis mucosae (thin arrow) and shows findings consistent with high grade dysplasia/carcinoma *in situ* (thick arrow) in the background of a tubular adenoma (epithelial cells located in the colorectal crypts and surface epithelium, showing a hyperchromatic appearance and a high nuclei-cytoplasm ratio).

granular type (multiple nodules and less invasive) and *non granular* type (flat/plane, higher potential for infiltration), being this last one localized in the rectum in only a few number of patients (4). ESD performance is anecdotal in our country, as the learning curve for this technique is large and complicated, being necessary in our opinion to organize a teaching program for this difficult technique (5).

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