Deep invasive mucinous adenocarcinoma without surface amorphous pattern on inflammatory bowel disease: specific disease with specific characterization

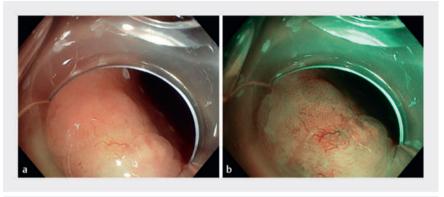




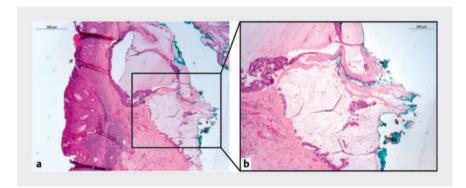
▶ Video 1 Invasive adenocarcinoma in inflammatory bowel disease lesion with slight mucosal changes.

Endoscopic characterization of deep invasive carcinoma using current classifications (CONECCT III, INET III, NICE III) is effective but was not developed for neoplasias associated with inflammatory bowel diseases (IBDs). In IBD, dysplastic lesions often present as flat, non-granular laterally spreading tumors (LST-NGs) [1,2]. However, mucosal distortion caused by chronic inflammation and regenerative changes can conceal dysplasia, making the detection and characterization of the colonic lesions challenging [3,4]. The present case illustrates that deep invasive adenocarcinoma can occur with very slight mucosal changes in an IBD lesion (► Video 1).

A 53-year-old woman was referred for endoscopic resection of a 15-mm IBD-related sigmoid lesion (previously diagnosed with high grade dysplasia on biopsy). The lesion was classified as LST-NG with a single and delineated area exhibiting a disorganized pattern (> Fig. 1). Endoscopic submucosal dissection (ESD) was indicated to ensure en bloc resection, and an adaptative traction strategy with A-TRACT was employed due to an expected strong fibrosis. The dissection phase proceeded smoothly until reaching the



▶ Fig. 1 Non-granular laterally spreading tumor with a single and well-defined area exhibiting a disorganized pattern. a White light endoscopy. b Narrow band imaging.



▶ Fig. 2 a Histopathological examination at low power of the endoscopic submucosal dissection specimen found mucosal inflammatory changes admixed with few adenocarcinoma glands invading the lamina propria. They were associated with deep submucosal infiltrating glands floating in mucin pools. **b** At higher magnification, the neoplastic glands presented typical characteristics of invasive mucinous adenocarcinoma and reached the endoscopic resection margin.

center of the lesion, where a pool of mucus emerged and spread out within the submucosal region. The procedure ended without adverse events facilitated by the use of an adaptative traction device and an underwater strategy during the dissection. The histopathology revealed an adenocarcinoma with submucosal invasion (R1 vertical margins and high risk features) and a mucinous lake within the lesion (> Fig. 2).

It can be inferred that the whitish cloudy appearance in the submucosa may signal

the presence of a mucinous component, implying a deeply invasive lesion with high risk features such as mucinous submucosal invasion. Consequently, it is frequently linked with a non-curative resection and could lead to stopping the dissection during the procedure. The challenge in characterizing IBD lesions should prompt the utilization of progressively advanced endoscopic technologies and techniques to ensure en bloc resection with an accurate histological evaluation.

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Conflict of Interest

Jérôme Rivory, Jean Grimaldi, Louis-Jean Masgnaux, Mathieu Pioche are co-founders of the ATRACT devices and co. Nothing to declare for the other authors.

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