

Strategies to successfully complete complex ESD in the colon

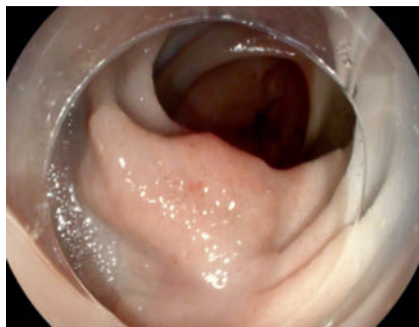
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Introduction

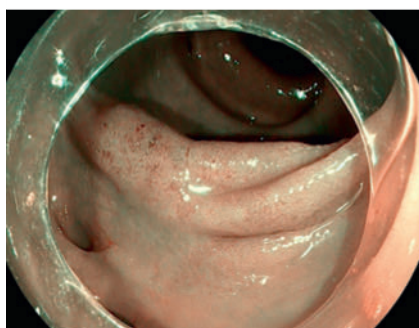
Endoscopic submucosal dissection (ESD) is challenging in the colon. Lesions with fibrosis and located in diverticular areas add extra technical difficulty [1, 2, 3]. We describe the case of a 71-year-old woman with a sigma 20-mm nongranular, laterally spreading tumor (LST NG) with a type Vi pit pattern and NICE 2, surrounded by diverticula and in contact with a tattoo (**► Fig. 1** and **► Fig. 2**). A tattoo close to a lesion can make its resection even harder [4].

Endoscopy

The procedure was performed with a Pentax gastroscope (EPI-i 7010 processor) with a straight cap and a Type-T HybridKnife connected to the ERBEJET system and combined with VIO3 electro-surgery equipment (endoCUT Q and preciseSECT).



► Fig. 1 Lesion.



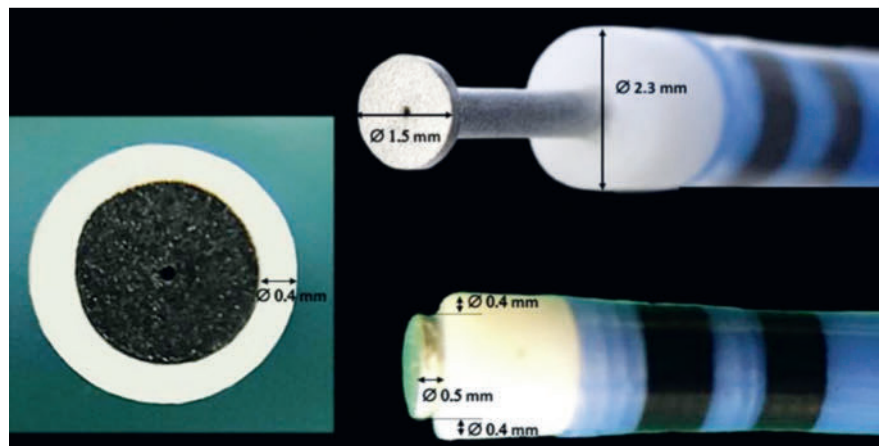
► Fig. 2 Lesion i-Scan.

Due to the anatomical difficulty and the presence of fibrosis secondary to the tattoo, an immersion dissection with bottled water was performed with creation of a pocket for greater stability and safety. Fibrosis was managed with the knife in "probe mode," which consists of using the knife in a closed position that offers a cutting diameter of 1.5 mm and a cutting depth of 0.5 mm, offering security and precision [5] (**► Fig. 3**). The dissection was largely performed in preciseSECT

mode, which offers a perfect balance between cutting ability and hemostasis (**► Video 1**).

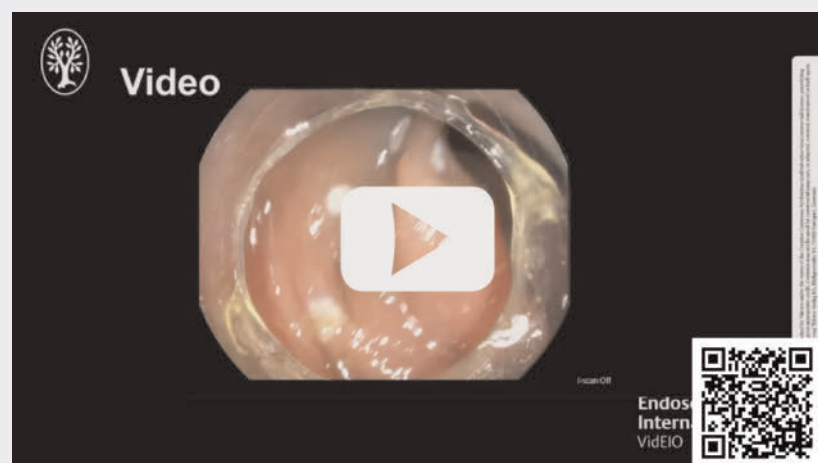
The ESD was performed and an en-bloc specimen measuring 30 × 28 mm was obtained. Histologic examination revealed an adenoma with high-grade dysplasia and extensive areas of intramucosal adenocarcinoma. The lateral and deep margins were disease-free (> 1 mm).

Review 6 months later showed a clean scar with normal biopsies (**► Fig. 4**).



► Fig. 3 The "probe mode". Courtesy of MD, PhD F. Ramos-Zabala.

VIDEO



► Video 1 Complex ESD in colon.



► Fig. 4 Scar at 6 months.

Conclusions

Immersion dissection with pocket creation may be useful when treating challenging lesions. Using the HybridKnife in “probe mode” and preciseSECT is effective and safe in fibrotic areas.

We recommend evaluating the need for tattooing prior to dissection due to the risk of extension into the submucosa with consequent secondary fibrosis.

Conflict of Interest

The authors declare that they have no conflict of interest.

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