A novel strategy to perform endoscopic full-thickness resection at the ileocecal valve and securing the orifice with a double-pigtail catheter



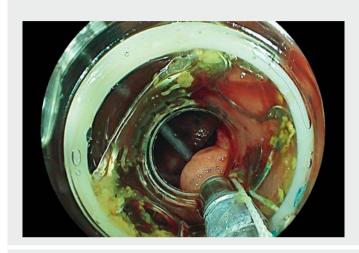
A 68-year-old woman was referred to our clinic for evaluation of endoscopic resection of a flat polyp on the ileocecal valve. The initial colonoscopy showed a flat colonic adenoma, Paris Ila 2×2cm, on the distal lip of the ileocecal valve (**Fig. 1**). Owing to the non-lifting character after endoscopic submucosal injection, we decided to perform endoscopic full-thickness resection (EFTR). Colorectal endoscopic submucosa dissection (ESD) is an effective alternative to EFTR; however, ESD in the cecum is associated with a higher risk of perforation and delayed bleeding [1,2].

During EFTR we used a novel stenting technique in order to secure the ileocecal valve orifice (IVO), and to optimize orientation and visualization.

We first placed a Jagwire (Boston Scientific, Marlborough, Massachusetts, USA) through the working channel of a colonoscope, which allowed insertion of a double-pigtail catheter (7 Fr; MTW-Endoskopie W Haaq Kq, Wesel, Germany) into the IVO (Video 1). After marking the resection boarders with coagulation current (Erbe, Tuebingen, Germany), the resection was performed using the EFTR System (Ovesco, Tuebingen, Germany) by using the high cut mode (Erbe Endo Cut Q; effect: setting 1; cutting duration: setting 4; cutting interval: setting 1). The 3×3 cm resected specimen was pinned onto a cork plate and sent for pathological assessment. At the end of the procedure (▶ Fig. 2), the double-pigtail catheter was extracted from the ileocecal valve using the biopsy forceps.

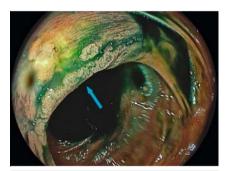
The histopathological evaluation revealed an adenoma with low grade intraepithelial neoplasia and microscopic complete resection (R0).

After endoscopic resection, no complications occurred, and the patient could be discharged from the hospital after 3 days.





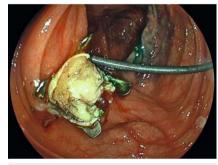
▶ Video 1 Endoscopic full-thickness resection of a flat colonic adenoma at the ileocecal valve, using a double-pigtail catheter to secure the orifice.



► Fig. 1 Colonic adenoma (arrow), Paris Ila 2×2 cm, on the distal lip of the ileocecal valve.

In conclusion, this new technique can be considered a safe procedure for EFTR close to the ileocecal valve region to optimize visibility [3,4] and prevent accidental closure of the IVO by the macroclip.

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► Fig. 2 Macroclip and double-pigtail stent in the ileocecal valve orifice following endoscopic full-thickness resection.

Competing interests

The authors declare that they have no conflict of interest.

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References

- [1] Kim E, Chang D. Management of complications of colorectal submucosal dissection. Clin Endosc 2019; 52: 114–119
- [2] Falt P, Zapletalová J, Urban O. Endoscopic full-thickness resection versus endoscopic submucosal dissection in the treatment of colonic neoplastic lesions ≤30 mm – a single-center experience. Surg Endosc 2021; 36: 2062–2069
- [3] Wedi E, Orlandini B, Gromski M et al. Fullthickness resection device for complex colorectal lesions in high-risk patients as a last-resort endoscopic treatment: initial clinical experience and review of the current literature. Clin Endosc 2018; 51: 103–108

[4] Kuellmer A, Mueller J, Caca K et al. Endoscopic full-thickness resection for early colorectal cancer. Gastrointest Endosc 2019; 89: 1180–1189

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Bibliography

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