Cutting-edge effective endoscopic technique to remove scarred polyps

Scarred polyps, especially those larger than 20 mm, are challenging to resect using conventional endoscopic mucosal and submucosal resection techniques. The EndoRotor (Interscope, Inc.) is a novel automated mechanical endoscopic resection system designed for use in the gastrointestinal tract for tissue dissection and resection [1]. Its use has been demonstrated to be a safe and effective technique in the management of scarred polyps [2].

We describe a case of an 80-year-old woman with a large recurrent polyp in the rectum. Three previous attempts at eradication had been made using endoscopic mucosal resection (EMR) plus argon plasma coagulation (APC).

Surveillance colonoscopy performed 1 year after the last EMR plus APC showed, 3 cm above the anal verge, a scarred granular laterally spreading tumor (LST-G) with a diameter of 40 mm, hemicircumferential and with an adenomatous pit pattern (Kudo IIIIL) on evaluation with digital chromoendoscopy (BLI/LCI) (▶ Fig. 1).

Because of the scar tissue, which represented 60% of the lesion and made mucosal or submucosal resection impossible, we decided to treat the patient with the EndoRotor technique. After circumferential marking with APC and submucosal injection (▶ Video 1, steps 1 and 2), the EndoRotor catheter was inserted into the instrument channel and the solid black line at the tip of the catheter was positioned directly above the lesion. Using the EndoRotor, complete resection was achieved without bleeding or other intraoperative or postoperative adverse events (▶ Fig. 2, ▶ Fig. 3; ▶ Video 1, step 3). PuraStat, a self-assembling peptide used for hemostasis, was applied prophylactically over the resection base at the end of procedure (▶ Fig. 4; ▶ Video 1, steps 4 and 5). The patient was discharged the same day.

The resected tissue fragments were collected and histological assessment identified a tubulovillous adenoma with low-grade dysplasia. The subsequent 6-month endoscopic follow-up did not show any recurrence or stricture (▶ Fig. 5; ▶ Video 1, step 6).

This case demonstrates the use of a novel nonthermal device, EndoRotor, as a safe and effective technique in challenging management of scarred polyps.

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▶ Fig. 1 Scarred granular laterally spreading tumor (LST-G) in rectum, diameter 40 mm, hemicircumferential, and with an adenomatous pit pattern (Kudo IIIIL).

▶ Fig. 2 Resection of scarred polyp with the EndoRotor.

▶ Fig. 3 Resection complete.

▶ Video 1 Endoscopic resection of a rectal scarred LST-G, hemicircumferential and with a diameter of 40 mm, using the EndoRotor.
Competing interests

The authors declare that they have no conflict of interest.

The authors

Gaia Pellegatta¹, Benedetto Mangiavillano², Roberta Maselli¹, Pradeep Bhandari³, Milena Di Leo¹, Matteo Badalamenti¹, Alessandro Repici³

¹ Digestive Endoscopy Unit, Division of Gastroenterology, Humanitas Research Hospital, Humanitas University, Rozzano (MI), Italy
² Gastrointestinal Endoscopy Unit, Humanitas Mater Domini, Castellanza, Varese, Italy
³ Queen Alexandra Hospital, Portsmouth, Hampshire, United Kingdom

Corresponding author

Gaia Pellegatta, MD
Digestive Endoscopy Unit, Division of Gastroenterology, Humanitas Research Hospital, Via Manzoni 56, 20089 Rozzano (Milano), Italy
gaia.pellegatta@humanitas.it

References


Bibliography

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