A novel triple-anchoring technique for hybrid endoscopic mucosal resection



▶ Fig. 1 Endoscopic images showing: **a** a large flat colonic polyp in the cecum suitable for endoscopic mucosal resection by the triple-anchoring technique; **b** the polyp after submucosal injection; **c** small incisions on the top and on the lateral margins of the lesion, which were made using the tip of the snare in Endocut mode; **d** the 25-mm snare grasping the lesion with the triple-anchoring technique; **e** the resected area following en bloc capture of the entire large polyp, consistent with macroscopic complete resection.

Superficial colorectal lesions smaller than 20 mm in size can be safely removed en bloc by endoscopic mucosal resection (EMR). Bigger lesions (≥20 mm) usually require piecemeal EMR, which is associated with a lower curative rate [1] and a higher risk of recurrence [2]. Endoscopic submucosal dissection (ESD) was developed to allow en bloc resection of early stage gastrointestinal lesions. ESD is a technically difficult procedure, which requires specialized training, a longer procedure time, and is associated with a

higher risk of perforation compared with EMR [3,4].

ESD and EMR are not mutually exclusive and a hybrid technique may be a reasonable compromise that makes EMR more reliable by enabling the resection of larger polyp specimens, obtaining clear lateral margins, and reducing procedure times [5]. Here we report a new hybrid EMR technique that is aimed at facilitating mucosal resection of colonic and rectal lesions between 20 mm and 30 mm in size.

After the submucosal injection has been performed, small incisions are made on the top and on the lateral margins of the lesion using the tip of the snare (25-mm SnareMaster; Olympus, Tokyo, Japan), which must be protruding 2 mm out of the catheter. The small incision on the top of the lesion allows the snare to be anchored as it is opened, while the lateral incisions allow the lesion to be grasped as the snare is being closed, thereby avoiding slippage during the resection (**> Fig. 1**; **> Video 1**). Before cutting is





▶ Video 1 Endoscopic mucosal resection of a large flat polyp in the cecum using the triple-anchoring technique.

carried out, the lumen is inflated so as to avoid injuries to the muscular layer. At the end of the resection, clips are placed to reduce the risk of complications.

Pathological analysis in the case shown revealed a 20×21-mm low grade tubular adenoma with clear margins (R0 resection).

This hybrid technique might be routinely indicated for borderline and/or very flat lesions. Studies are needed in order to understand the safety of the procedure and the risks of residue and/or recurrence.

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Competing interests

None

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References

- [1] Saito Y, Fukuzawa M, Matsuda T et al. Clinical outcome of endoscopic submucosal dissection versus endoscopic mucosal resection of large colorectal tumors as determined by curative resection. Surg Endosc 2010; 24: 343 352
- [2] Briedigkeit A, Sultanie O, Sido B et al. Endoscopic mucosal resection of colorectal adenomas > 20 mm: Risk factors for recurrence. World J Gastrointest Endosc 2016; 8: 276 – 281
- [3] Yahagi N, Fujishiro M, Omata M. Endoscopic submucosal dissection of colorectal lesion. Dig Endosc 2004; 16: S178 – S181
- [4] Saito Y, Uraoka T, Yamaguchi Y et al. A prospective, multicenter study of 1111 colorectal endoscopic submucosal dissections (with video). Gastrointest Endosc 2010; 72: 1217 1225
- [5] Toyonaga T, Man-I M, Morita Y et al. Endoscopic submucosal dissection (ESD) versus simplified/hybrid ESD. Gastrointest Endosc Clin N Am 2014; 24: 191 – 199

Bibliography

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