Endoscopic mucosectomy of the normal mucosa facilitates exposure of the submucosal layer at the commencement of colorectal endoscopic submucosal dissection

Endoscopic submucosal dissection (ESD) is the treatment of choice for superficial gastrointestinal neoplasms but is technically very difficult, challenging, and time-consuming. It should only be performed by experts. Good exposure of the submucosal layer is key in terms of procedural efficiency and safety [1]. Many have sought to optimize exposure of the submucosal layer using countertraction [2], creation of a pocket, or by tunneling beneath the lesion [3,4].

The mucosal incision is performed blind at the beginning of the procedure and can be very challenging. Indeed, an incision that is too deep carries the risk of perforation, but one that is too superficial slows the procedure considerably because persisting submucosal or mucosal fibers grip the lesion, making it very difficult to position the tip of the scope beneath the lesion. In addition, bleeding is common during this step because the submucosal vessels cannot be identified beforehand. This phase is particularly challenging for physicians at the beginning of their learning curves, and when the lesion lies in front of and perpendicular to the scope – a tangential position being ideal.

We report a new way in which to facilitate exposure of the submucosal layer at the commencement of a colorectal ESD. After marking around the lesion, we perform mucosectomy of the normal mucosa surrounding the lesion using a 10-mm stiff snare (Olympus, Japan) and endocut current. Several contiguous mucosectomies are performed outside the marks. This allows immediate exposure of the submucosal space without any bleeding (● Fig. 1; ● Video 1) and direct exposure of the submucosal vessels, which can now be immediately and prophylactically coagulated. Next, a pocket is easily and safely created with constant good exposure of the submucosal fibers. The mucosal incision is easily enlarged, with minimal (dangerous) blind dissection and more accurate knife positioning because the mucosal incision is relatively deep. This new “tip” may be helpful, particularly when a colonic ESD is difficult, or when the physician is inexperienced.

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Competing interests: None

Video 1

Mucosectomy in normal mucosa to help with access into the submucosal space during a colonic endoscopic submucosal dissection.

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Fig. 1 Colonoscopic views showing: **a** a laterally spreading tumor of the left colon; **b** marks made around the lesion; **c** submucosal injection of glycerol near the lesion; **d, e** mucosectomy of the normal mucosa with a 10-mm snare; **f** the end of the contiguous mucosectomy of the normal mucosa; **g, h** immediate good exposure of the submucosa.

References

- 1 Oyama T. Esophageal ESD: technique and prevention of complications. *Gastrointest Endosc Clin N Am* 2014; 24: 201–212
- 2 Oyama T. Counter traction makes endoscopic submucosal dissection easier. *Clin Endosc* 2012; 45: 375–378
- 3 Pioche M, Mais L, Guillaud O et al. Endoscopic submucosal tunnel dissection for large esophageal neoplastic lesions. *Endoscopy* 2013; 45: 1032–1034
- 4 Linghu E, Feng X, Wang X et al. Endoscopic submucosal tunnel dissection for large esophageal neoplastic lesions. *Endoscopy* 2013; 45: 60–62

Bibliography

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