Usefulness of a clutch cutter combined with an S-O clip in improving stability when opening the pocket in the pocket-creation method

The pocket-creation method (PCM) is a useful resection technique that has been developed to overcome difficulties in colorectal endoscopic submucosal dissection (ESD) [1, 2]. However, this technique itself poses certain challenges in resection when opening the pocket, particularly when there are considerable respiratory changes. Here, we report the usefulness of combining a clutch cutter [3] – a scissor-type knife – with an S-O clip [4] for overcoming instability when opening the pocket in the PCM.

A 76-year-old man underwent ESD for a 23-mm type IIa tumor on the cecum. Marked respiratory changes were observed. We first created a pocket using a clutch cutter. Next, adequate dissection directly beneath the lesion was performed under a stable visual field. When opening the pocket, marked respiratory changes were observed again. An S-O clip was attached to the anal side of the lesion, and once traction was obtained (▶Fig. 1), the surrounding normal mucosa and submucosa were cut in a manner similar to cutting paper (paper cutting technique [PCT]), and the tumor was removed (▶Fig. 2). Even with respiratory changes, resection could be safely performed because the lesion was anchored by the S-O clip, as well as by the clutch cutter, and the procedure was completed without any complications (▶Video 1).

Previously, a tip-type knife was used for PCM; however, for lesions beyond the sigmoid colon with major respiratory changes, instability when opening the pocket was frequently experienced despite the use of an S-O clip. This problem was subsequently overcome by the combined use of a clutch cutter only when opening the pocket. We present this video report of the PCT as an aid for novice surgeons performing colorectal ESD.

Competing interests

None
Fig. 2 The normal mucosa and submucosa surrounding the lesion were cut in a manner similar to cutting paper (paper cutting technique). a Cutting on the left side. b, c Cutting on the right side.