New colorectal endoscopic submucosal dissection technique using a single tunnel: the “gateway” method

Recently, a single-tunnel endoscopic submucosal dissection (ESD) technique has been reported to be effective for large colorectal tumors [1–3]. However, even with this technique, ESD for a large colorectal tumor is sometimes difficult when working against gravity. We report a novel method that makes it possible to apply sufficient traction in the single-tunnel technique even when working against gravity (▶ Video 1).

The patient was a 55-year-old man who had a laterally spreading nongranular type tumor in the rectum (▶ Fig. 1). Submucosal fibrosis was predicted from the macroscopic appearance of the tumor; therefore, adequate traction was considered essential.

First, we created a single penetrated tunnel near the center of the lesion and confirmed that we could pass the scope (▶ Fig. 2a). Next, we passed a looped thread through the tunnel that was approximately 1.5-times the length of the tunnel. One end of the loop was secured with a clip to the anal side of the lesion (▶ Fig. 2b, ▶ Fig. 3a). We fixed the end with the clip to the opposite wall of the lesion, on the oral side (▶ Fig. 2c, ▶ Fig. 3b). After insufflating with air, the looped thread lifted the lesion during air insufflation, creating a “gateway.”

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Competing interests

None
The authors

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Video 1 This “gateway” method makes it possible to apply sufficient traction in the single-tunnel technique even when working against gravity.