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| Citation          | Aihara, Hiroyuki, Matthew J. Skinner, and Christopher C. Thompson. 2018. "Endoscopic submucosal dissection pocket technique for removal of recurrent colonic lesion." VideoGIE 3 (2): 63-64. doi:10.1016/j.vgie.2017.10.005. <a href="http://dx.doi.org/10.1016/j.vgie.2017.10.005">http://dx.doi.org/10.1016/j.vgie.2017.10.005</a> .           |
| Published Version | <a href="https://doi.org/10.1016/j.vgie.2017.10.005">doi:10.1016/j.vgie.2017.10.005</a>  |
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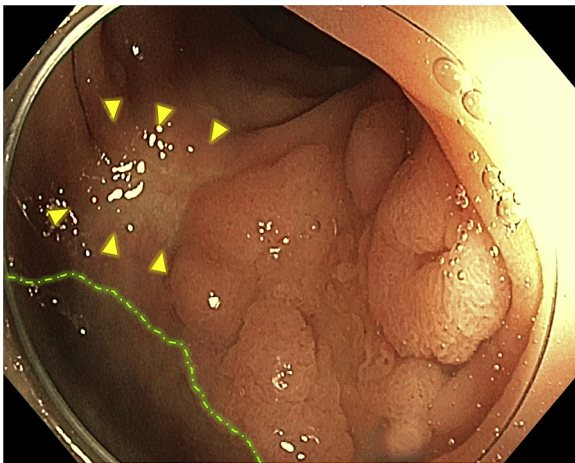
# Endoscopic submucosal dissection pocket technique for removal of recurrent colonic lesion



Hiroyuki Aihara, MD, PhD, Matthew J. Skinner, MD, Christopher C. Thompson, MD

A 78-year-old woman had undergone a screening colonoscopy in 2010, which revealed an 11-mm flat lesion in the sigmoid colon. This was removed by EMR in a piecemeal fashion, and the area was tattooed. A subsequent colonoscopy in 2016 revealed a 30-mm flat lesion at the previous EMR site. She was referred to our hospital for endoscopic submucosal dissection (ESD).

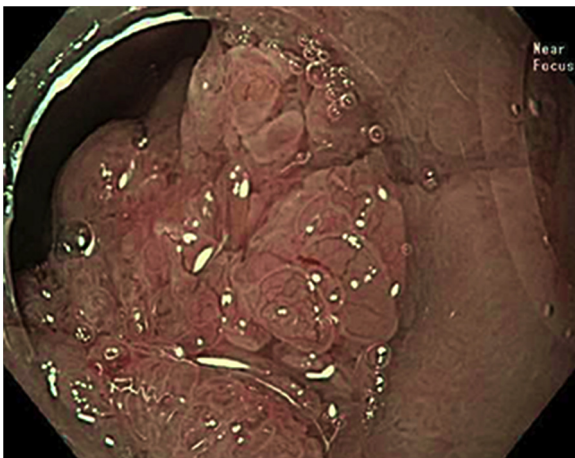
Under white light, the EMR scar and tattooed area were observed at the left side of the lesion (Fig. 1). Magnified narrow-band imaging demonstrated dilated but regular capillaries, suggestive of a noninvasive pattern (Fig. 2).<sup>1</sup>



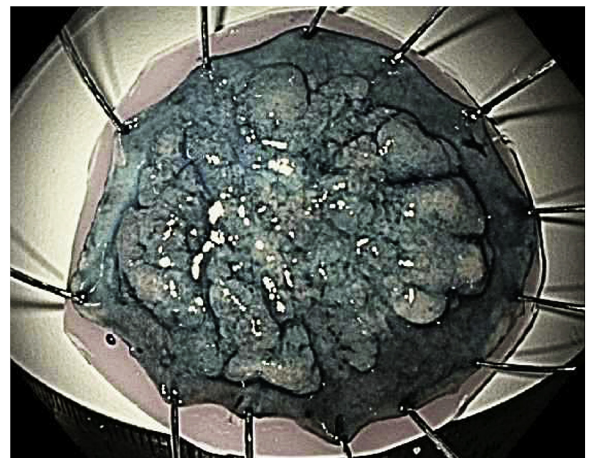
**Figure 1.** Under white light, EMR scar and tattooed area were observed at the left side of the lesion.



**Figure 3.** A significantly fibrotic area was observed at the center of the lesion; however, the dissection plane was successfully identified by a submucosal injection with 6% hydroxyethyl starch solution.

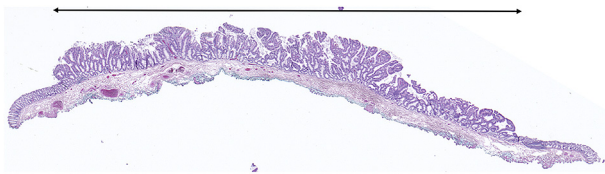


**Figure 2.** Magnified narrow-band imaging demonstrating dilated but regular capillaries, suggestive of a noninvasive pattern.



**Figure 4.** The lesion was removed in en-bloc fashion.

Written transcript of the video audio is available online at [www.VideoGIE.org](http://www.VideoGIE.org). This video was awarded the “Best of the Best Video Award” at Digestive Disease Week 2017.



**Figure 5.** Histopathology showing the lesion to be an adenoma, 3.2 × 3.0 cm, with negative horizontal and vertical margins (H&E).

The pocket creation technique was chosen for the removal of this lesion (Video 1, available online at [www.VideoGIE.org](http://www.VideoGIE.org)).<sup>2-7</sup> In the pocket creation technique, maintenance of the peripheral mucosa helps avoid fluid leakage, which is common in fibrotic lesions, and maintenance of the submucosal bleb. Furthermore, the pocket maintains ideal countertraction during dissection.

A significantly fibrotic area was observed at the center of the lesion (Fig. 3); however, this area was successfully dissected without muscle injury by the injection of additional solution to identify the dissection plane. Despite significant fibrosis, this technique allowed the ESD to be completed safely (Fig. 4).

Pathologic examination showed the lesion to be an adenoma measuring 3.2 × 3.0 cm with negative horizontal and vertical margins (Fig. 5).

## DISCLOSURE

*Dr Aihara and Dr Thompson are consultants for Olympus America. The other author disclosed no financial relationships relevant to this publication.*

Abbreviation: ESD, endoscopic submucosal dissection.

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<https://doi.org/10.1016/j.vgie.2017.10.005>