

Endoscopic mucosal resection with a dedicated bipolar soft snare for large flat colonic polyps

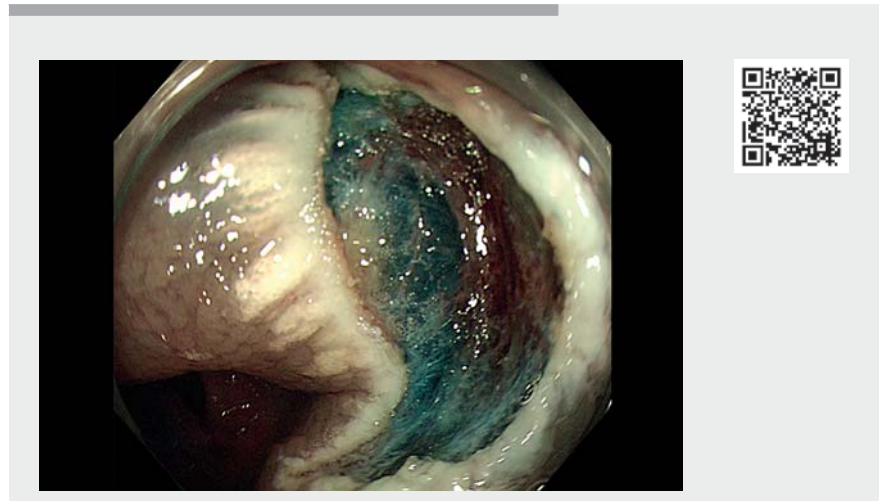
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When removing large flat colonic polyps (LFCPs) en bloc endoscopic submucosal dissection (ESD) may be suitable; however, it requires significant expertise and a long procedural time. The use of a conventional monopolar snare for endoscopic mucosal resection (EMR) of large lesions increases the risk of deep mural injury [1]. Bipolar snares are safer than monopolar snares because the current passes only through the tissue between the two electrodes, so causing minimal damage to the muscle layer [2].

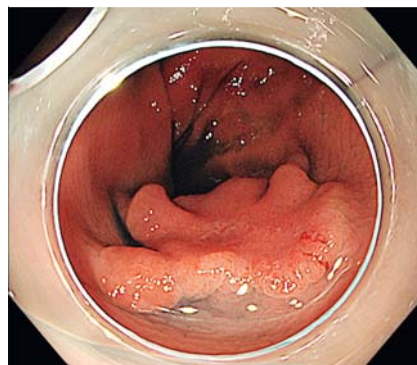
The Dragonare dedicated bipolar soft snare (Zeon Medical Inc., Japan) has a unique mechanism where one electrode is at the tip of the snare and the other at the sheath, which allows uniform cauterization of the tissue. The soft nature of the snare allows stabilization of its tip at the distal margin of the lesion while opening the snare, thereby enabling en bloc resection of LFCPs. This requires a slower cutting technique compared with monopolar devices. Herein, we report two cases in which EMR was performed using the bipolar soft snare (26 mm) for LFCPs (▶ **Video 1**).

The first patient was a 78-year-old man who had a 25-mm nongranular laterally spreading tumor (LST) found in his descending colon (▶ **Fig. 1**). Although submucosal invasion was suspected, the patient wanted to undergo endoscopic treatment. Underwater bipolar EMR (BEMR) was performed and the lesion was completely removed, without the occurrence of any adverse events (▶ **Fig. 2**). Pathological examination confirmed the lesion was a submucosal invasive adenocarcinoma (▶ **Fig. 3**); however, the patient chose not to undergo an additional surgical resection.

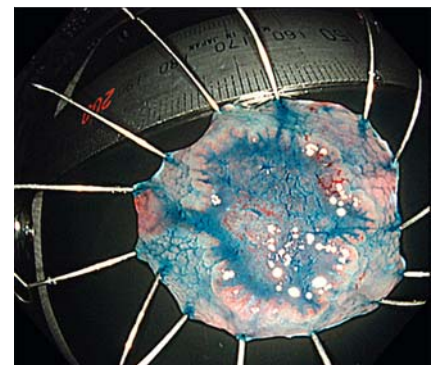
The second patient was an 86-year-old man who had a 30-mm granular-type LST found in his ascending colon (▶ **Fig. 4 a**). Injection-based BEMR was performed, and the lesion was completely removed,



▶ **Video 1** Two cases in which endoscopic mucosal resection is performed using a dedicated bipolar soft snare (26 mm) for large flat colonic polyps.



▶ **Fig. 1** Endoscopic image showing a 25-mm nongranular-type laterally spreading tumor (LST) in the descending colon.

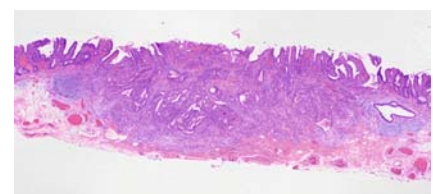


▶ **Fig. 2** Macroscopic appearance of the specimen obtained by underwater bipolar endoscopic mucosal resection.

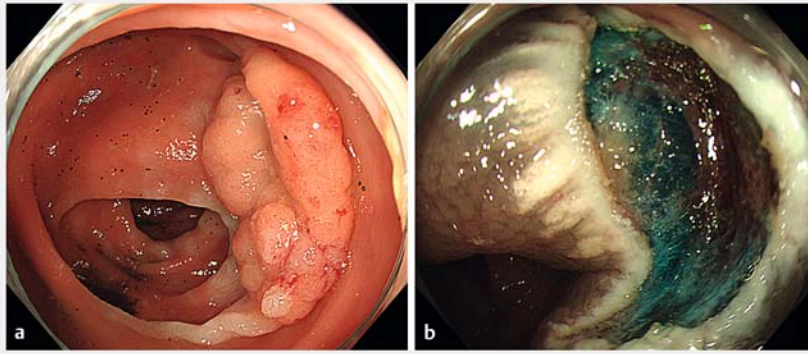
without the occurrence of any adverse events (▶ **Fig. 4 b**). Pathological examination revealed a focally high grade tubulovillous adenoma.

BEMR with dedicated snares could be a new alternative when treating LFCPs. ESD can be replaced with BEMR for eligible polyps.

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▶ **Fig. 3** Microscopic appearance showing submucosal invasion of the tumor.



► **Fig. 4** Endoscopic images showing: **a** a 30-mm granular-type laterally spreading tumor (LST) in the ascending colon; **b** the appearance following injection-based bipolar endoscopic mucosal resection.



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Competing interests

The authors declare that they have no conflict of interest.

The authors

Shunsuke Yamamoto , **Miho Kozuki**, **Kensuke Matsushima**, **Yuko Sakakibara**, **Ryotaro Sakamori** , **Eiji Mita**
Department of Gastroenterology and Hepatology, National Hospital Organization Osaka National Hospital, Osaka, Japan

Corresponding author

Shunsuke Yamamoto, MD, PhD, FJGES
2-1-14 Houenzaka, Chuo-ku, Osaka 540-0006, Japan
shun0515suke@gmail.com

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