Symposium | All

Sat. Nov 21, 2026 1:30 PM - 2:45 PM JST | Sat. Nov 21, 2026 4:30 AM - 5:45 AM UTC | Room 5 (1F 102)

Symposium 8 Cutting edge of endoluminal/ transanal surgery for colorectal cancer

Moderator: Kotaro Maeda (Himawari Seishinkai Izumi Clinic Medical Checkup Plaza, Japan), Motohiko Kato (Center for Diagnostic and Therapeutic Endoscopy, Keio University School of Medicine, Japan)

[SY8-2] Efficacy and Safety of the Water Pressure Method in Colorectal ESD: A Retrospective Comparative Study

*Yutaka Sato[1], Daisuke Minezaki[1], Koshiro Tsutsumi[1], Sotaro Ozaka[1], Masahide Fukuda[1], Yuka Hirashita[1], Kensuke Fukuda[1], Ryo Ogawa[1], Masaaki Kodama[2], Kazuhiro Mizukami[1] (1. Department of Gastroenterology, Oita University Faculty of Medicine, Japan, 2. Department of Advanced Medical Sciences, Oita University Faculty of Medicine)

[Introduction] Endoscopic submucosal dissection (ESD) is an established treatment for colorectal neoplasms but remains technically demanding and time-consuming. The water pressure method (WPM) has been introduced to improve submucosal visualization and facilitate dissection, but its clinical advantages in colorectal ESD remain unclear. This study aimed to evaluate the efficacy and safety of WPM compared with conventional ESD.
[Methods] We retrospectively analyzed 46 consecutive patients with colorectal lesions ≤50 mm who underwent ESD at our institution between January 2024 and April 2026. Patients were divided into a conventional group (n = 23) and a WPM group (n = 23), including cases with combined use of conventional and WPM techniques. Procedure time, dissection speed, resection outcomes, and adverse events were compared. A subgroup analysis based on operator expertise was also performed.
[Results] Lesion size was comparable between groups (23.0 [IQR 20.0–30.0] vs. 27.0 [22.0–35.0] mm, p = 0.233). The median resection area was 962 [618.5–1310.5] mm^2 in the conventional group and 1196 [899.5–1492.5] mm^2 in the WPM group (p = 0.153). Procedure time did not differ significantly between groups (89 [63–138.5] vs. 67 [38.5–116] min, p = 0.235). Dissection speed was significantly higher in the WPM group (16.20 [10.91–21.05] vs. 9.86 [7.07–11.75] mm^2/min, p = 0.0024). En bloc resection was achieved in all cases, and curative resection rates were comparable between groups (82.6% vs. 87.0%, p = 1.0). Regarding safety, intraoperative perforation and muscle layer injury each occurred in one case in both groups. Delayed adverse events occurred in one case in the conventional group and none in the WPM group, with no significant differences. In a subgroup analysis limited to board-certified endoscopists, dissection speed remained significantly higher in the WPM group (21.0 [15.6–30.8] vs. 10.89 [8.33–15.03] mm^2/min, p = 0.0014).
[Conclusion] WPM improves dissection speed while maintaining comparable efficacy and safety to conventional ESD.

©一般社団法人 日本大腸肛門病学会