

Usefulness of Smart Shooter[®] for Colorectal Endoscopic Submucosal Dissection

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Abstract

Objectives: For safe and speedy ðth dy , ces mth

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Figure 2 Smart Shooter® with a treatment device attached is inserted into an endoscope

	Smart Shooter® group (N=13)	Conventional group (N=13)	
Average age, years (± SD)	68.6 ± 13.6	70.8 ± 12.7	N.S.
Sex (male/female)	8/5	10/3	N.S.
Lesion location (rectum/sigmoid to splenic flexure/splenic flexure to cecum)	2/3/8	2/5/6	N.S.
Long diameter of tumor, mm (±SD)	36.0 ± 14.1	36.4 ± 24.6	N.S.
Long diameter of resected specimen, mm	43.3 ± 13.1	43.6 ± 25.0	N.S.
Area of resected specimen, mm ² (±SD)	1184.6 ± 691.0	1315.4 ± 1299.6	N.S.
Pathological diagnosis (adenoma/ intramucosal cancer/ submucosal cancer)	3/10/0	6/6/2	N.S.

We are planning to conduct a multicenter, prospective, randomized study to verify the true usefulness of the device.

In conclusion, we noted no significant adverse event associated with the use of Smart Shooter® in colorectal ESD. The use of the device reduced the procedure time and improved the dissection speed. It also reduced the incidence of postoperative fever and improved adherence to the clinical path, suggesting that Smart Shooter® is a useful device that allows for more safe and speedy colorectal ESD.

Conflict

Smart Shooter® was developed jointly by TOP Corporation, Tokyo, Japan, and the author. After the device has been marketed, its patent royalty will be paid to the author.

1. Repici A, Hassan C, De Paula Pessoa D, Pagano N, Arezzo A, et al. (2012) Efficacy and safety of endoscopic submucosal dissection for colorectal neoplasia: A systematic review. *Endoscopy* 44: 137-150.
2. Saito Y, Uraoka T, Yamaguchi Y, Hotta K, Sakamoto N, et al. (2010) A prospective, multicenter study of 1111 colorectal endoscopic submucosal dissections (with video). *Gastrointest Endosc* 72: 1217-1225.
3. Oyama T (2012) Counter traction makes endoscopic submucosal dissection easier. *Clin Endosc* 45: 375-378.
4. Iizuka T, Kikuchi D, Hoteya S, Hoteya S, Takeda H, et al. (2012) A new technique for pharyngeal endoscopic submucosal dissection: peroral countertraction (with video). *Gastrointest Endosc* 76: 1034-1038.
5. Sakamoto N, Osada T, Shibuya T, Beppu K, Matsumoto K, et al. (2009) Endoscopic submucosal dissection of large colorectal tumors by using a novel spring-action S-O clip for traction (with video). *Gastrointest Endosc* 69: 1370-1374.
6. Hirota M, Kato M, Yamasaki M, Kawai N, Miyazaki Y, et al. (2014) A novel endoscopic submucosal dissection technique with robust and adjustable tissue traction. *Endoscopy* 46: 499-502.
7. Teoh AY, Chiu PW, Hon SF, Mak TWC, Ng EKW, et al. (2013) Ex vivo comparative study using the Endolifter® as a traction device for enhancing submucosal visualization during endoscopic submucosal dissection. *Surg Endosc* 27: 1422-1427.
8. Kikuchi D, Yamada A, Iizuka T, Nomura K, Kuribayashi Y, et al. (2014) A new device for simultaneous manipulation of an endoscope and a treatment device during procedures: An ex vivo animal study. *Endoscopy* 46: 977-980.
9. Kikuchi D, Yamada A, Iizuka T, Nomura K, Kuribayashi Y, et al. (2014) A new device for simultaneous manipulation of an endoscope and a treatment device during procedures: An ex vivo animal study. *Endoscopy* 46: 977-980.