Duodenal endoscopic submucosal dissection (ESD) is difficult due to insufficient mucosal elevation, because of the coarse submucosal layer [1]. We report on the “water pressure method” for duodenal ESD.

We perform duodenal ESD with a small-caliber-tip transparent (ST) hood and DualKnifeJ (Olympus, Tokyo, Japan). Insertion of the ST hood under the mucosal flap is a crucial step, as it provides good countertraction to the submucosal layer and good visualization of the operative field. Water pressure by waterjet function of the endoscope helps insertion of the ST hood under the mucosal flap (Fig. 1; Video 1). Normal saline with a minimum amount of dimethicone is used for the waterjet, rather than water, because normal saline includes electrolytes. With carbon dioxide insufflation, the visual field at the tip of ST hood is small and far. However, water immersion increases the visual field and acts as a magnifier (Fig. 2). This improved visualization allows the tissue to be cut more precisely. In conclusion, the “water pressure method” is simple and useful for duodenal ESD.

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Competing interests

None
The Authors

Naohisa Yahagi1, Toshihiro Nishizawa1,2,3, Motoki Sasaki1, Yasutoshi Ochiai1, Toshio Uraoka1,3
1 Division of Research and Development for Minimally Invasive Treatment, Cancer Center, Keio University School of Medicine, Tokyo, Japan
2 Department of Gastroenterology and Hepatology, Keio University School of Medicine, Tokyo, Japan
3 Department of Gastroenterology, National Hospital Organization, Tokyo Medical Center, Tokyo, Japan

Corresponding author

Naohisa Yahagi, MD, PhD
Division of Research and Development for Minimally Invasive Treatment, Cancer Center, Keio University School of Medicine, 35 Shinanomachi, Shinjuku-ku, Tokyo 160-8582, Japan
Fax: 81-3-53633967
yahagi-tky@umin.ac.jp

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Fig. 2. Water immersion during duodenal endoscopic submucosal dissection. a With carbon dioxide insufflation, the visual field at the tip of the small-caliber-tip transparent hood is small and far. b Water immersion increases the visual field and acts as a magnifier.

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