

Endoscopic aspiration mucosectomy and closure assisted by outside CCD camera

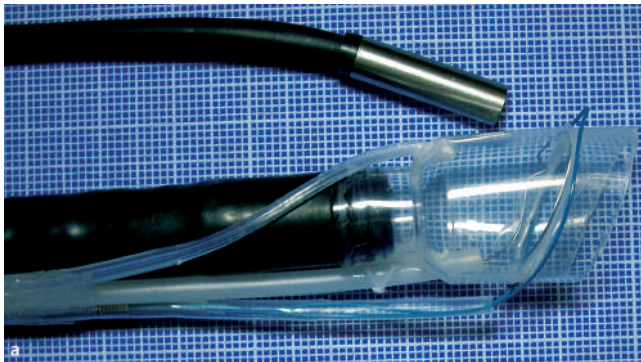
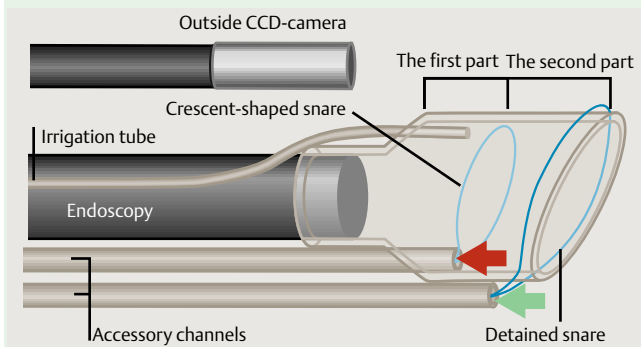


Figure 1 **a** Endoscopic aspiration mucosectomy and closure (EAMC) hood being placed at the tip of the endoscope and outside CCD camera. **b** Schema of endoscope with EAMC hood.



The endoscopic aspiration mucosectomy (EAM) procedure is simple and requires no special endoscope [1–5]. However, delayed bleeding may occur from a gastric ulcer after EAM. If this problem is solved, day surgery may be possible. We have therefore developed a novel endoscopic aspiration mucosectomy and closure (EAMC) hood that facilitates the EAM procedure, simultaneously allowing endoscopic closure.

We have recently developed a two-channel prelooped hood that was constructed by drilling two side holes in the cap portion of a conventional prelooped soft hood (D-206-02-06, Olympus, Tokyo, Japan); after this an irrigation tube and an accessory channel were attached [5]. The EAMC hood was produced by attaching an additional hood of short length and an another accessory channel to the top of the two-channel prelooped hood (Figure 1). Then, two types of snares are set. The crescent-shaped snare (SD-221L-25, Olympus) is inserted through the accessory channel tube of the first part of the hood, and prelooped into the groove of the rim of the hood. The detained snare (HX-20L-1, Olympus) is passed through

and tightened around the outer circumference of the second part of the hood.

The EAMC procedure using the EAMC hood is carried out as follows (Figure 2). After marking the periphery of the lesion and injecting saline solution into the submucosa, we placed the EAMC hood at the tip of the endoscope. Aspiration was released and the hood was then used to aspirate the lesion by high-power vacuum into the hood. We confirmed aspiration of the lesion with the outside CCD camera, and then snared the lesion using the detained and crescent-shaped snares. We used the former to tightly strangle the lesion, and resected the lesion by means of blend electrosurgical current closing the latter snare.

Two specimens were resected in an animal model (pigs). The average diameter of the resected specimens was 15 mm.

Endoscopy_UCTN_Code_TTT_1AO_2AG

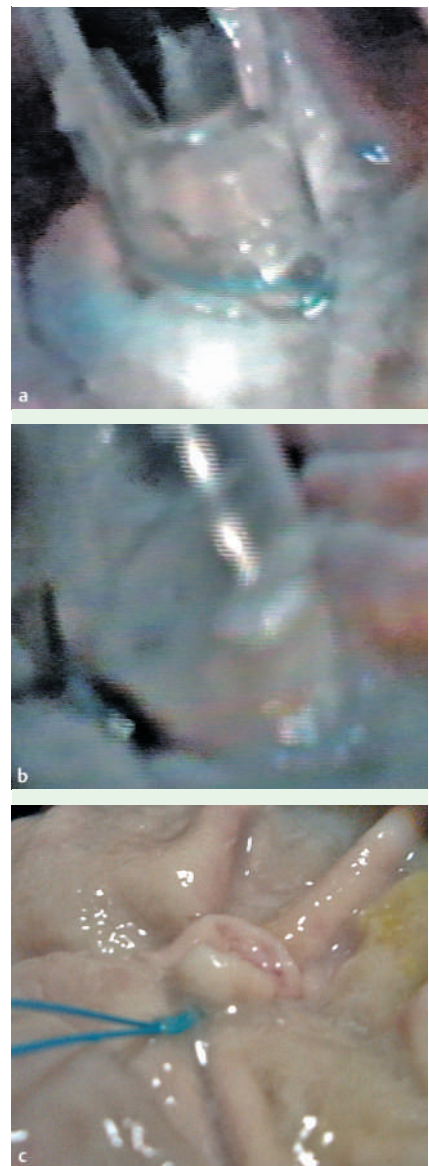


Figure 2 EAMC. After confirming aspiration of the lesion with the outside CCD camera (a), the lesion was snared using detained snares (b). Next, the lesion was resected by means of blend electrosurgical current closing crescent-shaped snares (c). (a, b Photographed by the outside CCD camera, c photographed by endoscopy without the EAMC hood.)

K. Kume, M. Yamasaki, I. Yoshikawa, M. Otsuki

The Department of Gastroenterology and Metabolism, University of Occupational and Environmental Health, Japan, School of Medicine, Kitakyushu, Japan

References

- 1 Inoue H, Takeshita K, Hori H *et al.* Endoscopic mucosal resection with a cap-fitted panendoscope for esophagus, stomach and colon mucosal lesions. *Gastrointest Endosc* 1993; 39: 58–62
- 2 Salameh FS. A new device for endoscopic mucosal resection. *Endoscopy* 2004; 36: 667
- 3 Kume K, Yamasaki M, Kubo K *et al.* EMR of upper GI lesions when using a novel soft, irrigation, prelooped hood. *Gastrointest Endosc* 2004; 60: 124–128
- 4 Kume K, Yamasaki M, Kanda K *et al.* Endoscopic procedure under irrigation. *Dig Endosc* 2005; 17: 241–245
- 5 Kume K, Yamasaki M, Kanda K *et al.* Grasping forceps-assisted endoscopic mucosal resection of early gastric cancer with a novel 2-channel prelooped hood. *Gastrointest Endosc* 2006; 64: 108–112

Bibliography

DOI 10.1055/s-2007-966334
Endoscopy 2007; 39: E214–E215

© Georg Thieme Verlag KG Stuttgart · New York ·
ISSN 0013-726X

Corresponding author

K. Kume, MD, PhD

The Department of Gastroenterology and Metabolism

University of Occupational and Environmental Health, Japan

School of Medicine

1–1, Iseigaoka, Yahatanishi-ku

Kitakyushu City, 807–8555, Japan

Fax: +81-93-692-0107

k-kume@med.uoeh-u.ac.jp