Clip with thread attachment prior to incision – new strategy for traction-assisted esophageal endoscopic submucosal dissection

A 55-year-old had a 20-mm 0-IIc lesion located in the middle thoracic esophagus. Endoscopic submucosal dissection (ESD) was performed using an electrosurgical knife (Flush Knife BT; Fujifilm Corporation, Tokyo, Japan). First, the mucosa of the anal side of the tumor was cut after submucosal injection of 0.4% sodium hyaluronate (Fig. 1). Subsequently, the oral mucosa of the tumor was adequately elevated by submucosal injection. A clip attached with dental floss was then deployed to the elevated mucosa (Fig. 2) prior to incision of the oral-side mucosa (Video 1). The oral-side mucosal incision was performed under ideal countertraction (Fig. 3), facilitating entry to the submucosal layer with sufficient countertraction throughout the ESD procedure. Dissection and the remaining circumferential incision could then be performed with excellent traction (Fig. 4), enabling this lesion to be resected easily en-bloc (Fig. 5).

Previous studies have demonstrated that traction using a “clip with thread” method can make ESD easier and safer [1–3]. The main strategy in these studies is connecting the clip with thread to the mucosa after creating a mucosal flap by incision and dissection. However, creating the initial mucosal flap is technically difficult, and there is a risk of attaching the clip to the muscle layer of the esophagus. Ide et al. also reported that clipping prior to the initial incision was convenient for colorectal ESD [4, 5]. This strategy of clipping with the thread prior to the initial incision has some merit because it eliminates the need for a mucosal flap. In addition, we can create the opening for the submucosal dissection area with our initial incision and thus dissect under traction easily and safely.

We propose that this new strategy of traction-assisted ESD is a suitable method for esophageal ESD.

Endoscopy_UCTN_Code_TTT_1AO_2AG

Competing interests

The authors declare they have no conflict of interest
The authors

Shuichi Miyamoto1,2, Tomohiko R. Ohya3, Masayuki Higashino1, Kazuteru Hatanaka1, Yoshiya Yamamoto1, Hirohito Naruse1, Naoya Sakamoto2
1 Department of Gastroenterology and Hepatology, Hakodate Municipal Hospital, Hakodate, Japan
2 Department of Gastroenterology and Hepatology, Hokkaido University Faculty of Medicine and Graduate School of Medicine, Sapporo, Japan
3 Department of Endoscopy, The Jikei University School of Medicine, Tokyo, Japan

Corresponding author

Shuichi Miyamoto, MD
Hakodate Municipal Hospital, Department of Gastroenterology and Hepatology, 1-10-1, Minato-cho, Hakodate, 041-8680, Japan
Fax: +81-138-43-4426
shuichi0210miyamoto@yahoo.co.jp

References


Bibliography

DOI https://doi.org/10.1055/a-1122-8269
Published online: 2020
Endoscopy
© Georg Thieme Verlag KG
Stuttgart · New York
ISSN 0013-726X

ENDOSCOPY E-VIDEOS
https://eref.thieme.de/e-videos

Endoscopy E-Videos is a free access online section, reporting on interesting cases and new techniques in gastroenterological endoscopy. All papers include a high quality video and all contributions are freely accessible online.

This section has its own submission website at https://mc.manuscriptcentral.com/e-videos

Video 1 A new strategy for traction-assisted endoscopic mucosal dissection of esophageal tumors.

Video 1

A new strategy for traction-assisted endoscopic mucosal dissection of esophageal tumors.

Miyamoto Shuichi et al. Clip with thread attachment prior to incision – new strategy... Endoscopy