Endoscopic therapy of Zenker’s diverticulum using a novel endoscopic scissor – the Clutch Cutter device

Zenker’s diverticulum is a diverticulum of the mucosa of the pharynx above the criocopharyngeal muscle, which often causes clinical symptoms including dysphagia, regurgitation, cough, and halitosis [1]. Endoscopic therapy is based on cutting the septum between the diverticulum and the esophageal lumen. A variety of endoscopic methods have been used for this procedure, including laser, stapler, harmonic scalpel, argon plasma coagulation, and needle-knives [1–4]. Here, we describe the use of a novel device, which was originally developed for endoscopic submucosal dissection (ESD), for the rapid and safe treatment of Zenker’s diverticulum.

The Clutch Cutter (Fujifilm, Tokyo, Japan) was introduced to the European market in late October 2014 and is a forceps-type resection device for ESD. The device has a serrated cutting edge that is 0.4 mm wide and 3.5 mm long. The device is rotatable, and the outer side of the forceps is insulated to avoid burning the surrounding tissue. The device has a diameter of 2.7 mm and is compatible with most conventional endoscopes. For electrocautery, the Vio 200 D-system (Erbe, Tübingen, Germany) was used, with the following settings: Forced coagulation 30 W, Endo Cut Q with effect 1, duration 3, interval 1.

A 79-year-old woman presented with a 2-month history of regurgitation and dysphagia. Oral feeding recommenced after removal of the nasogastric tube, starting with a soft diet for the first 3 days. Follow-up endoscopy 2 days after the procedure revealed a significant improvement. In conclusion, this case illustrates the potential of the new Clutch Cutter instrument for rapid and safe endoscopic treatment of Zenker’s diverticulum. A multicenter study in a prospective setting is now highly warranted to evaluate the device.

Endoscopy_UCTN_Code_TTT_1AR_2AG

Fig. 1 Zenker’s diverticulum. a Endoscopic view. b Barium swallow examination. c The Clutch Cutter was used to dissect the septum of the diverticulum. d The scissor-like device allowed the selective grasping and cutting of the muscle fibers.
Competing interests: Dr. Neumann has received funding support from Fujifilm and has acted as a consultant for the company.

Helmut Neumann, Silke Löffler, Stefanie Rieger, Claudia Kretschmer, Andreas Nägel
Department of Medicine I, University Hospital Erlangen, Erlangen, Germany

References
2 Ferreira LE, Simmons DT, Baron TH. Zenker’s diverticula: pathophysiology, clinical presentation, and flexible endoscopic management. Dis Esophagus 2008; 21: 1 – 8

Bibliography
Endoscopy 2015; 47: E430–E431
© Georg Thieme Verlag KG Stuttgart · New York
ISSN 0013-726X

Corresponding author
Helmut Neumann, MD, PhD
Department of Medicine I
University of Erlangen-Nuremberg
Ulmenweg 18
91054 Erlangen
Germany
Fax: +49-9131-8535209
helmut.neumann@uk-erlangen.de