

Weblike stenosis due to gastroesophageal reflux disease, treated with an insulation-tipped diathermic knife-2 (IT-2)

An 86-year-old woman of small stature was referred to the department of gastroenterology with dysphagia that was not accompanied by odynophagia. She had been taking antihypertensive medication for the past 30 years but had no other remarkable medical history. She said that the dysphagia developed gradually over the past 6–7 months but her weight had remained unchanged. Since she had difficulty swallowing solid foods, congee (rice porridge) and milk became her staple food. On careful enquiry, the patient said that she frequently experienced regurgitation of food material and burping, and had recurrent episodes of burning sensation in the retrosternal area. She had been managing her symptoms by taking over-the-counter medications, but due to the symptoms worsening, she finally attended a hospital and underwent an esophagogastroduodenoscopy (EGD). Endoscopic examination showed weblike stenosis at 30 cm from the central incisor; there was not enough space for the scope to pass (● Fig. 1). The esophageal mucosa was stained with Lugol solution but showed no suspicious lesions and histologic examination of a specimen obtained from the esophagogastric junction only revealed a chronic ulcer. A computed tomography (CT) scan showed a hiatal hernia in the lower posterior mediastinum, with suspicious circumferential wall thickening in the distal esophagus. Luminal dilatation was also noted in the mid-esophagus.

Since all the evidence pointed toward the presence of benign stricture, which was most probably due to longstanding gastroesophageal reflux disease (GERD), the stricture was cut and widened along the fibrotic lesion with an insulation-tipped diathermic knife (IT-2) (Olympus, Tokyo, Japan) (● Fig. 2), with minimal bleeding (● Fig. 3). A large hiatal hernia was seen on the retroflexion view (● Fig. 4). After the procedure, the patient's oral intake normalized and she was discharged with a prescription for a proton pump inhibitor. She has been followed up at the outpatient department for more than 12 months, without complaint of dysphagia. The causes of benign esophageal strictures are diverse, ranging from congenital

(esophageal web) and acquired (peptic and caustic injury, esophageal web) to iatrogenic (anastomotic stricture). They are usually managed with dilation using a wire-guided bougie or through-the-scope balloon [1]. For refractory strictures, incisional therapy can be considered; this treatment has also been attempted in patients with anastomotic strictures, with favorable results [2]. Incisional therapy has not been used for benign strictures due to GERD, but, as seen in the present case, it can be considered as an option for this condition. Our experience with using the IT-2 for various procedures indicates that this knife is safer, more effective, and easier to use compared with the original IT knife, and use of this device for incising benign strictures seems to be a good treatment option.

Endoscopy_UCTN_Code_TTT_1AO_2AH
Endoscopy_UCTN_Code_TTT_1AO_2AN

**J. J. Hyun, H. J. Chun, B. Keum, Y. S. Seo,
Y. S. Kim, Y. T. Jeon, H. S. Lee, S. H. Um,
C. D. Kim, H. S. Ryu**

Department of Internal Medicine, Institute of Digestive Disease and Nutrition, Korea University College of Medicine, Seoul, Korea

References

- 1 Lew RJ, Kochman ML. A review of endoscopic methods of esophageal dilation. *J Clin Gastroenterol* 2002; 35: 117–126
- 2 Lee TH, Lee SH, Park JY et al. Primary incisional therapy with a modified method for patients with benign anastomotic esophageal stricture. *Gastrointest Endosc* 2009; 69: 1029–1033

Bibliography

DOI 10.1055/s-0029-1243946

Endoscopy 2010; 42: E110

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

Corresponding author

H. J. Chun, MD, PhD

Department of Internal Medicine
Institute of Digestive Disease and Nutrition
Korea University College of Medicine
126-1 Anam-dong, 5-Ga Seongbuk-Gu
Seoul, Korea 136-705
Fax: +82-2-9531943
drchunhj@chol.com

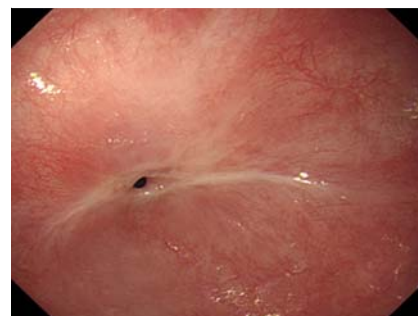


Fig. 1 Weblike fibrotic stenosis at 30 cm from central incisor.



Fig. 2 An incision made along the fibrotic scar tissue and widened using IT-2 knife.

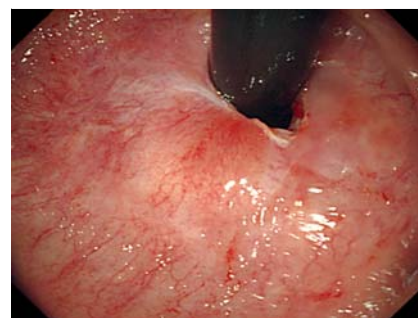


Fig. 3 There was minimal bleeding following the procedure since the cutting was done along the fibrotic scar and coagulation was also attempted.

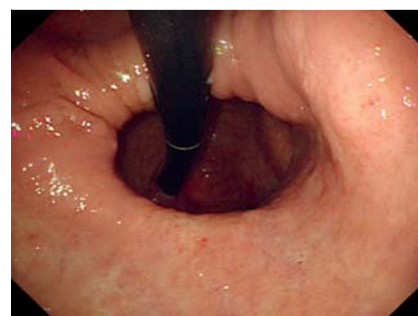


Fig. 4 A large sliding hiatal hernia seen on retroflexion view.