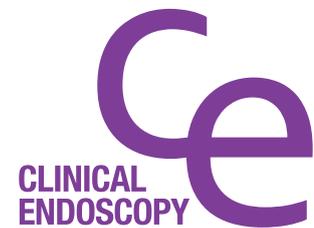


CASE REPORT

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Placement of a Self-Expanding Metal Stent to Treat Esophagogastric Benign Anastomotic Stricture via Retroflexed Ultrathin Endoscopy: A Case Report with a Video

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Previous studies reported that ultrathin endoscope (UE) provides endoscopic guidance during insertion of a self-expanding metal stent (SEMS) without fluoroscopic monitoring in patients with upper gastrointestinal stenosis (benign or malignant) or postoperative esophageal leakage. According to the type of SEMS and level of the stenosis, the technique of the procedure is variable. Herein, we report a patient who underwent placement of a distal release esophageal SEMS to treat an esophagogastric anastomotic stricture via retroflexed UE. **Clin Endosc 2015;48:428-430**

Key Words: Esophageal stent; Ultrathin endoscope; Esophagectomy

INTRODUCTION

Previous studies have reported that ultrathin endoscope (UE) provides endoscopic guidance during self-expanding metal stent (SEMS) insertion without fluoroscopic monitoring in patients with upper gastrointestinal stenosis (benign or malignant) or postoperative esophageal leakage.¹⁻³ The technique can vary according to the type of SEMS and level of stenosis. Herein, we report a patient who underwent distal release esophageal SEMS placement to treat an esophagogastric anastomotic (EGA) stricture via retroflexed UE.

CASE REPORT

A 54-year-old woman was admitted to our unit for postop-

erative dysphagia after an Ivor-Lewis procedure for esophageal cancer. Endoscopic examination revealed a benign EGA stricture located 26 cm from the upper incisors. Despite three previous dilatation attempts using a through-the-scope (TTS) balloon dilatator, her symptoms recurred after each procedure. The stricture was passed with the UE (GIF-XP-150N; Olympus, Tokyo, Japan; with a diameter of 5.5 mm), and a guide-wire was left in place to perform dilatation using an 18-mm TTS balloon under conventional endoscopic guidance. Thereafter, the guide-wire was left in place and the UE was advanced beyond the stricture but not over the guide-wire. The length of the anastomotic stricture was measured at 20 mm via UE. Then, a 6-cm partially covered SEMS (Non-Vascular Ni-Ti Alloy SEMS; Changzhou Health Microport Medical Device, Changzhou, China) was pushed beyond the anastomosis over the guide-wire, and deployed under direct visualization via retroflexed UE (Fig. 1, Supplementary Video 1 [available online at <http://www.e-ce.org/>]). Tissue ingrowth was not found by endoscopy 6 weeks after the procedure, and the SEMS was removed. The patient recovered fully and is still without any recurrence of dysphagia after 2 months of follow-up.

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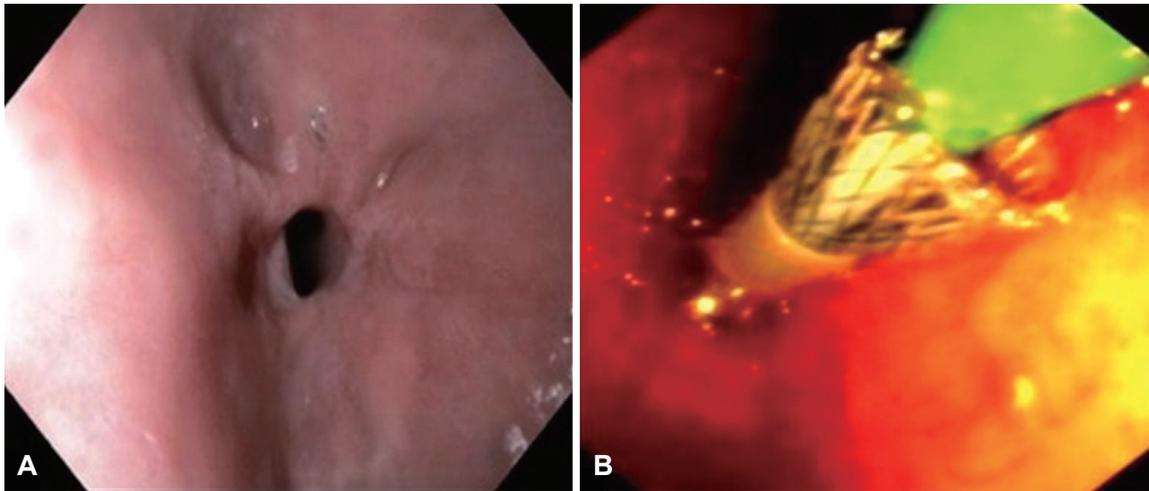


Fig. 1. (A) Endoscopic appearance of the benign esophagogastric anastomotic stricture. (B) The distal section of the partially covered self-expanding metal stent under visualization via retroflexed ultrathin endoscopy.

DISCUSSION

SEMSs are usually deployed under endoscopic and fluoroscopic guidance. Fluoroscopy has several disadvantages for stent insertion. First, it necessitates demarcation of the proximal and distal extents of the lesion. This may prevent SEMS placement in patients with stenosis close to the upper esophageal sphincter.¹ Second, the transfer of critically ill patients to fluoroscopy rooms can limit the use of fluoroscopic guidance for such patients.⁴

Therefore, the direct-vision technique with endoscopic guidance alone can be used for conventional SEMS placement.⁵⁻⁸ While standard endoscopes may not be able to pass through regions of tight stenosis, an UE with an outer diameter of 4.8 to 5.5 mm can easily pass through a site of malignant stenosis in most cases. UE enables the endoscopist to observe the whole stent during placement, and permits repositioning if required.

To date, two studies have investigated the feasibility of esophageal SEMS placement under UE visualization.^{1,2} In a prospective study by Lee et al.,² proximal release esophageal SEMSs were successfully placed in seven patients with postoperative esophageal leakage under proximal visualization via UE using the transoral route. No instances of migration were reported in the study. Postoperative leaks were completely occluded in 4 patients. Another prospective study by Borgulya et al.¹ reported that distal release esophageal SEMSs were successfully placed in 20 patients via UE (under proximal or retroflexed visualization) using the transnasal route. There were 12 patients with malignant stenosis and one patient with benign stenosis. Four patients had proximal lesions very close to the upper esophageal sphincter. In all patients, the proximal and distal stent positions were observed and

corrected when needed. The migration rate was 25% (three of 12 patients) among patients with malignant stenosis in this study.

Partially covered SEMSs are not recommended for the treatment of benign esophageal strictures by the American College of Gastroenterology,⁹ but were used to prevent stent migration in the present case.

The insertion of a proximal release SEMS can be performed easily under proximal visualization via UE in patients with postoperative esophageal leakage.² Whether it is more feasible to deploy a distal release SEMS under proximal or distal (retroflexed) UE visualization is a matter of debate considering the variable nature of esophageal stenosis. However, as the esophageal remnant can be very short in some cases after the Ivor-Lewis procedure, it might be better to choose a proximally located UE during the deployment of proximal or distal release SEMSs in order to protect the upper esophageal sphincter.

Conflicts of Interest

The authors have no financial conflicts of interest.

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