

Self-expanding esophageal prostheses as an alternative temporary treatment for achalasia

To the Editor:

Achalasia is a primary esophageal motility disorder of unknown cause that lacks a definitive treatment.^{1,2} We would like to share with your readers our experience with “temporary” palliative treatment of achalasia by using self-expanding esophageal prostheses.

A pregnant 36-year-old woman presented with worsening dysphagia, regurgitation, and weight loss during her twenty-eighth week of gestation. The diagnosis of achalasia was made, and because of her advanced pregnancy, conservative treatment was chosen, with placement of a self-expanding prosthesis (Hanarostent Covered Esophageal stent with SHIM anti-reflux valve, MI Tech; IZASA, Seoul, Korea) to relieve symptoms and allow her to gain weight. She improved with this approach, and, after childbirth, the prosthesis was removed without complications. Subsequently, the patient underwent Heller myotomy, but her symptoms relapsed after 6 months.

A 54-year-old man with dysphagia and nocturnal regurgitation was diagnosed with achalasia, and, at the same time, with acromegaly secondary to a pituitary tumor. Given the urgent need for neurosurgical intervention, a temporary self-expanding prosthesis was placed to relieve his symptoms and improve his nutrition.

All currently available treatments for achalasia are palliative and aimed at diminishing pressure in the lower esophageal sphincter. Botulinum toxin injection in the 4 quadrants of the sphincter is reserved for the high-surgical-risk patient, and it is a temporary but safe and effective technique. Cap-fitted endoscopy facilitates the injection of the botulinum toxin in patients with achalasia.³ Forced pneumatic dilation of the cardia is the most effective nonsurgical method, even without fluoroscopic control, as shown by Rai et al,⁴ but it carries a low perforation risk. Heller myotomy is still the most effective long-term treatment, at the expense of higher morbidity. Nevertheless, morbidity is diminishing, thanks to new, less-invasive techniques, such as laparoscopy and partial fundoplication to reduce the incidence of postoperative GERD.¹

Both of our patients improved sufficiently with the self-expanding metal prosthesis, which allowed them to reach a good physical condition and undergo definitive therapy with a good outcome and no complications.

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REFERENCES

1. Woltman TA, Pellegrini CA, Oelschlager BK. Achalasia. *Surg Clin Am* 2005;85:83-93.
 2. Epstein FH. Mechanisms of disease. *N Engl J Med* 1996;334:1109-10.
 3. Singh R, Halwan E, Artifon ELA, et al. Cap-fitted endoscopy facilitates injection of botulinum toxin in patients with achalasia. *Gastrointest Endosc* 2007;66:1233-4.
 4. Rai RR, Shende A, Joshi A, et al. Rigiflex pneumatic dilatation of achalasia without fluoroscopy: a novel office procedure. *Gastrointest Endosc* 2005;62:427-31.
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Alveolus AliMAXX-E esophageal stent disintegration and breakage

To the Editor:

The Alveolus AliMAXX fully-covered metal stent (Alveolus, Charlotte, NC) has been promoted by the manufacturer as usable in benign strictures, with the feasibility of its removal months later. In this report, we describe that placement of the stent in a benign stricture was followed by dissolution of the cover and imbedding of the metal stent. A 32-year-old man had undergone esophagogastrectomy for perforated gastric ulcer 2 years previously, followed by a substernal colon interposition after continued complications. The colon interposition was complicated by an anastomotic leak. Placement of a Polyflex stent (Boston Scientific, Natick, Mass) was unsuccessful because of angulation—the delivery system was kinked under fluoroscopy and the stent could not be deployed. An Alveolus AliMAXX-E covered stent was placed across the anastomosis, and the patient did well, with closure of draining skin wounds and ability to eat. He returned for stent removal 15 weeks later. Endoscopy revealed that the cover was largely disintegrated, and more than half of the stent was buried in up to 4 mm of granulation tissue (Fig. 1). The distal 1 cm of the metal portion of the stent had broken entirely free and was imbedded in the colon interposition. The exposed portions of the stent were torn free by using rat-toothed and alligator forceps, but most of the embedded portions could not be freed by traction, and more than half of the stent remained embedded. After this event, the manufacturer informed us that there had been 5 prior similar complications, all occurring at anastomotic sites. All of the patients who have had the AliMAXX-E stent placed for benign disease at our center have been notified of this complication. We recommend extreme caution in the placement of the AliMAXX-E stent for benign

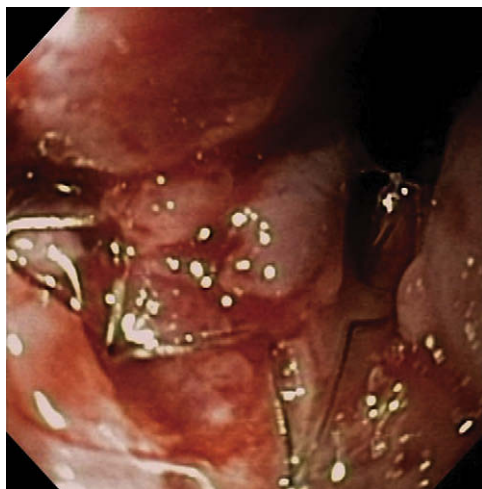


Figure 1. A small portion of the stent is visible, with portions above and below covered with granulation tissue.

disease, close monitoring of the stents to verify that the cover remains intact, or removal of the stents, if possible.

Since submission of this letter, the manufacturer has added a silicone cover to the AliMAXX-E, which they claim will prevent disintegration of the covers.

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“Short” double-balloon enteroscope for ERCP with conventional accessories in patients with altered GI anatomy

To the Editor:

We read with interest the article by Mönkemüller et al¹ on double-balloon enteroscopy for ERCP (DB-ERCP) in 2 jaundiced patients with Roux-en-Y anastomosis. Because of failed ERCP with conventional endoscopes, they performed DB-ERCP, which disclosed a biliary stricture. The guidewire exchange was impossible because of its short length. They performed direct guidewire cannulation, followed by insertion of plastic stents with a biliary catheter as a pushing device. We believe that a “short” double-balloon enteroscope would be useful for ERCP in such patients because all conventional accessories are available.

ERCP is technically challenging and often unsuccessful in patients with altered GI anatomy because of the necessary

passage length and/or anastomosis angulation.²⁻⁶ When the papilla is reached, selective cannulation and therapeutic procedures are difficult.² With the advent of the double-balloon technique, access to the papilla and ERCP with a standard EN-450P5/20 or therapeutic EN-450T5 enteroscope (Fujinon-Toshiba, Osaka, Japan) in such patients have been reported.¹⁻⁷ Because both enteroscopes have a working length of 200 cm, specialized, custom-made, or very limited accessories were available.¹⁻⁷ Several investigators^{3,5,7} desired a “shorter” double-balloon enteroscope with a large channel, which would solve the problem.

We performed DB-ERCP with a “short” double-balloon enteroscope (EC450-BI5 [Fujinon-Toshiba], which has a 2.8-mm working channel and a working length of 152 cm) in 38 patients (48 procedures) with Roux-en-Y total gastrectomy (23), Billroth II gastrectomy (12), and pancreatoduodenectomy (3). The papilla or bilio-enterostomy was reached in 45 of the 48 procedures (94%). Because all of the conventional accessories were available, we succeeded in sphincterotomy with a sphincterotome (19), nasobiliary (15) or nasopancreatic (1) drainage tube placement, stone extraction (14), anastomotic stricture dilation (11), plastic (10) or metallic (9) stent placement, and bile-duct biopsy (4). We therefore recommend the “short” enteroscope for diagnostic and therapeutic ERCP in patients with altered GI anatomy.

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REFERENCES

1. Mönkemüller K, Bellutti M, Neumann H, et al. Therapeutic ERCP with the double-balloon enteroscope in patients with Roux-en-Y anastomosis. *Gastrointest Endosc* 2008;67:992-6.
2. Chu YC, Su SJ, Yang CC, et al. ERCP plus papillotomy by use of double-balloon enteroscopy after Billroth II gastrectomy. *Gastrointest Endosc* 2007;66:1234-6.
3. Aabakken L, Bretthauer M, Line PD. Double-balloon enteroscopy for endoscopic retrograde cholangiography in patients with a Roux-en-Y anastomosis. *Endoscopy* 2007;39:1068-71.
4. Emmett DS, Mallat DB. Double-balloon ERCP in patients who have undergone Roux-en-Y surgery: a case series. *Gastrointest Endosc* 2007;66:1038-41.
5. Haber GB. Double balloon endoscopy for pancreatic and biliary access in altered anatomy (with videos). *Gastrointest Endosc* 2007;66:S47-50.
6. Moreels TG, Roth B, Vandervliet EJ, et al. The use of the double-balloon enteroscope for endoscopic retrograde cholangiopancreatography and biliary stent placement after Roux-en-Y hepaticojejunostomy. *Endoscopy* 2007;39(Suppl 1):E196-7.
7. Maaser C, Lenze F, Bokemeyer M, et al. Double balloon enteroscopy: a useful tool for diagnostic and therapeutic procedures in the pancreaticobiliary system. *Am J Gastroenterol* 2008;103:894-900.

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