

# Self expandable metallic stent for the treatment of post-operative esophagojejuno anastomotic leak

## Introduction

Surgery is the best therapeutic option for patients with localized gastric cancer. Total or partial gastrectomy is related to possible major complications, including anastomotic leaks. This complication occurs in 4-27% of patients after radical gastrectomy, and has a high mortality rate up to 60%.<sup>1-3</sup> There are different approaches in the management of esophageal leaks, including surgery or, in the case of minor fistulas, conservative management.<sup>4</sup> Surgical repair of esophageal leaks involve a risky intervention with important consumption of hospital resources and prolonged in-hospital stay. Endoscopic techniques such as clipping<sup>5</sup> or fibrin glue application<sup>5</sup> have been proposed as alternatives, but with poor results, particularly in cases of extensive dehiscence.

We report a case of post-operative esophagojejuno anastomotic leak after total gastrectomy of T3N2M0 gastric carcinoma case with successful placement of C-SEMS and healing of anastomotic site.

## Case report

A 75-year-old female patient presented with chief complaints of pain in the retrosternal region and vomiting for 7 days. Abdominal examination revealed a firm mass in the epigastric region. CT scan showed a T3N2M0 growth in the stomach

suggestive of carcinoma. The patient underwent total D2 gastrectomy and esophagojejunal anastomosis. Histopathology report showed intestinal type adenocarcinoma. On postoperative day ten the patient had leak from the anastomotic site. Esophagogram showed leak from the anastomotic site (**Figure 1**). Endoscopy revealed sutures and serous fluid leak from the anastomotic site. (**Figure 2**). Covered SEMS called

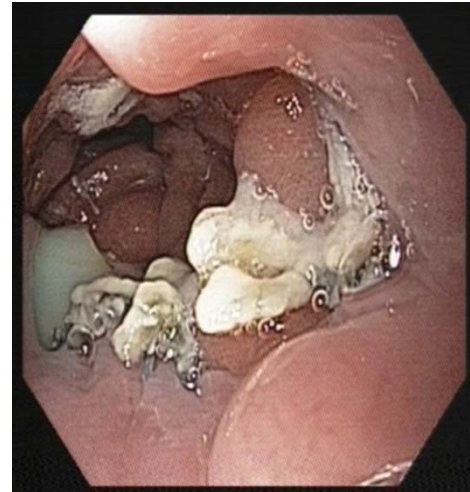


Figure 2: Endoscopic image showing anastomotic suture line and leak site

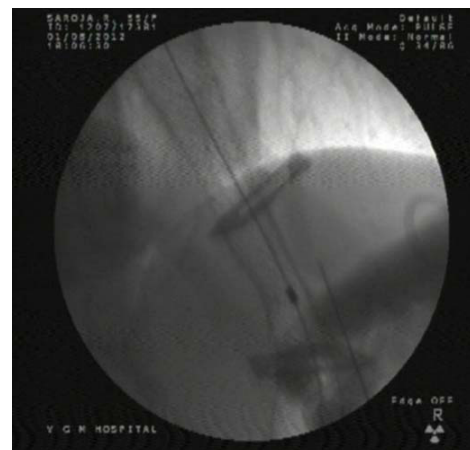


Figure 3A: Showing C-SEMS in position

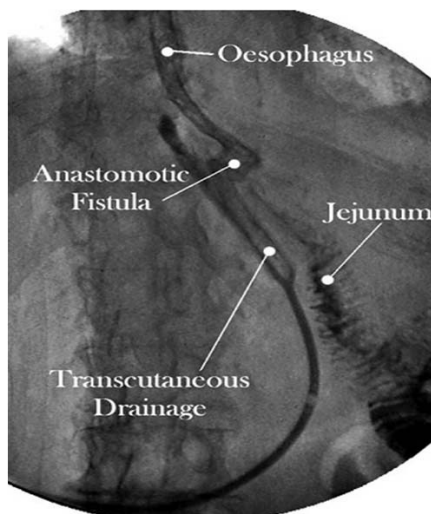


Figure 1: Radiographic image showing leak

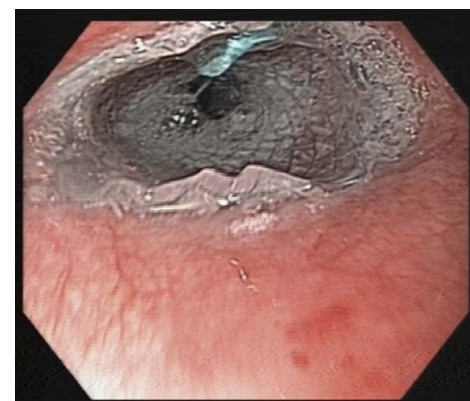


Figure 3B: Showing Deployed C-SEMS

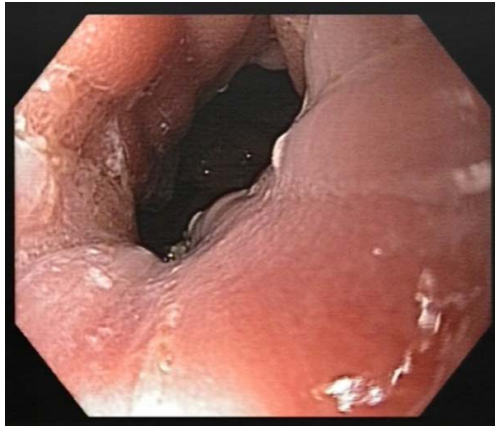


Figure 4A: Healed leak site



Figure 4B: C-CEMS removal, & Healed leak site on radiography

Double-type 12 mm x24 mm from Niti's, Taewoong<sup>®</sup> was placed (**Figures 3A and B**). After twenty-seven days the patient was followed up and C-SEMS was removed. Endoscopy and esophagogram showed healing of the leak site (**Figures 4A and B**).

## Discussion

Oesophageal or gastric anastomotic leakage, perforation, staple line dehiscence or trauma can be a life-threatening situation. There is a lack of standard protocol for their treatment. The spectrum of treatments suggested span from aggressive surgical re-exploration and repair or even disassembly of the anastomosis to conservative treatment using total parenteral nutrition, peri-anastomotic drainage with chest or abdominal image-guided percutaneous drainage and broad spectrum antibiotics in selected patients. Re-operation is often not easy and associated with high morbidity and mortality. Enteral feeding started early during the treatment plays a significant role in leak closure. In case of post-surgical leaks, with the surgical sutures holding the partially opened anastomosis or staple line, we believe that the SEMS should be left in place for a minimum possible duration, but at least for 2-3 weeks, because of the potential threat of SEMS putting

some tension on the suture anastomosis, thus compromising wound healing. Stenting with SEMS seems to be a feasible option as a primary care modality for patients with post-operative foregut leaks.

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## References

1. Ikeguchi M, Oka S, Goymo Y, Tsujitani S, Maeta M, Kaibara N. Post operative morbidity and mortality after gastrectomy for gastric carcinoma. *Hepatogastroenterology*. 2001;**48**:1517–20.
2. Lang H, Piso P, Stukenborg C, Raab R, Jahne J. Management and results of proximal anastomotic leak in a series of 1114 total gastrectomies for gastric carcinoma. *Eur J Surg Oncol*. 2000;**26**:168–71.
3. Nowakowski P, Ziaja K, Ludyga T, Kuczmik W, Biulik G, Cwik P, et al. Self-expandable metallic stents in the treatment of post-esophagogastrostomy/post-esophagoenterostomy fistula. *Dis Esophagus*. 2007;**20**:358–60.
4. Sauvanet A, Baltar J, LeMee J, Belghiti J. Diagnosis and conservative management of intrathoracic leakage after oesophagectomy. *Br J Surg*. 1988;**85**:1446–9.
5. Rodella L, Laterza E, DeManzoni G, Kind R, Lombardo F, Ricci F, et al. Endoscopic clipping of anastomotic leakages in esophagogastric surgery. *Endoscopy*. 1998;**30**:453–6.
6. Pross M, Manger T, Reinheckel T, Mirow L, Kunz D, Lippert H. Endoscopic treatment of clinically symptomatic leakages of thoracic esophageal anastomoses. *Gastrointest Endosc*. 2000;**51**:73–6.

## Ellis Van Creveld syndrome with mesenteroaxial volvulus – expanding the spectrum of endodermal involvement

### Introduction

Ellis-van Creveld is a rare autosomal recessive disorder with