

Single Center Experience Using Eso-Cremer Stent as First Line Endoscopic Therapy for Post-Sleeve Gastrectomy Leak

Mupingu Sandra MD, Rigaux Johanne MD, Blero Daniel PhD
Marie Curie Hospital, CHU Charleroi, Charleroi, Belgium



C.H.U. de Charleroi

Introduction

Temporary endoscopic stenting is considered as a first line treatment of post bariatric leak or fistula. Different self-expanding metallic stents (SEMS) exist and the most frequently reported policy uses a partially covered SEMS with a retrieval in two steps, after the insertion of a fully covered plastic stent.

In case of sleeve gastrectomy, 2 particularities are the high intraluminal pressure in the proximal part of the sleeve which favors the opening of the leak, and the length of the sleeve which implies the precise placement of the stent into the eso-gastric neo-tract. In order to circumvent these particularities, Prof. M. Cremer designed a 20 cm long nitinol SEMS fully covered excepted on 5 mm at the level of the inflection of the upper tulip.

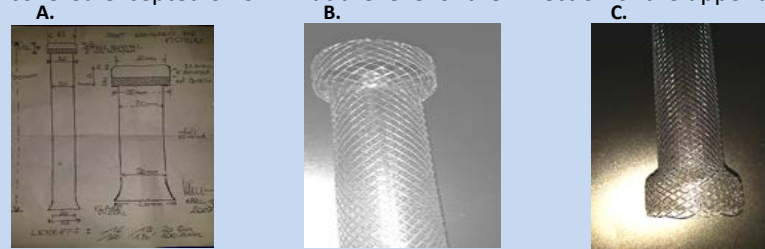


Figure 1. A. Design of Eso-Cremer stent by Pr Michel Cremer in 2007 B. Proximal tulip with uncovered collar C. Distal tulip totally covered

Methods

Retrospective review of the charts of all patients with leak occurring after sleeve gastrectomy from Sep 2011 until Nov 2014, for which a Eso-Cremer SEMS was inserted (Endo-Flex, Dusseldorf, Germany) in our center.

SEMS (Eso-Cremer length 20 cm; diameter 20-25 mm) was deployed under fluoroscopy after placement of a stiff wire into the upper GI tract.

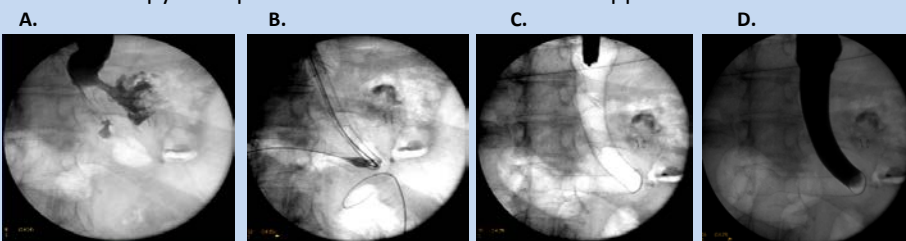


Figure 2. A. leak after sleeve gastrectomy B stent releasing C stent deployment D. Sealing is confirmed by oesophagogram

Results

Six patients have been included (2 women and 4 men; range 19-66 years).

Patient	Delay btw surgery/leak diagnosis (days)	Delay btw leak diagnosis/stent (days)	Previous drainage	Stenting duration (weeks)
1	8	5	radiological	8
2	13	2	surgical	8
3	4	54	surgical	9 (+ 6days)
4	7	10	surgical	8
5	4	2	surgical	8
6	15	5	surgical	10 (+ 4 days)

All stents were placed successfully (success defined as complete disappearance of leak on barium swallow at the end of the procedure).

Removal of these SEMS was successful in all patients in a single session.

One patient had distal migration of the SEMS, requiring a second procedure to reposition it.

Despite treatment with proton pump inhibitor, five patients developed ulcers Forrest III in the antrum, due to the impaction of SEMS at that level.

One patient developed a benign stenosis at the level of the proximal hyperplasia, which required balloon dilations.

	GERD	Migration	Dysphagia	Bleeding	Perforation	Antral ulcer	Stenosis
Time to onset	immediately	< 1 month	immediately	immediately	immediately	> 2 months	> 5 months
Number of patients	6/6	1/6	5/6	0/6	0/6	5/6	1/6

Conclusions

Insertion of a long and almost fully covered SEMS is efficient to treat leak after post-sleeve gastrectomy, but its use should be carefully evaluated due to the risk of traumatic ulcers.

References

Swinen J et al. self-expandable metal stents for the treatment of benign upper GI leaks and perforations. GIE
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