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Conversion of sleeve gastrectomy to Roux-en-Y gastric bypass : indications, management and results

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None



1. BACKGROUND



- SG : 60% of all bariatric procedures worldwide
- Conversion to RYGB is increasing:
10 % at 10 years Lazzati A et al SOARD 2020

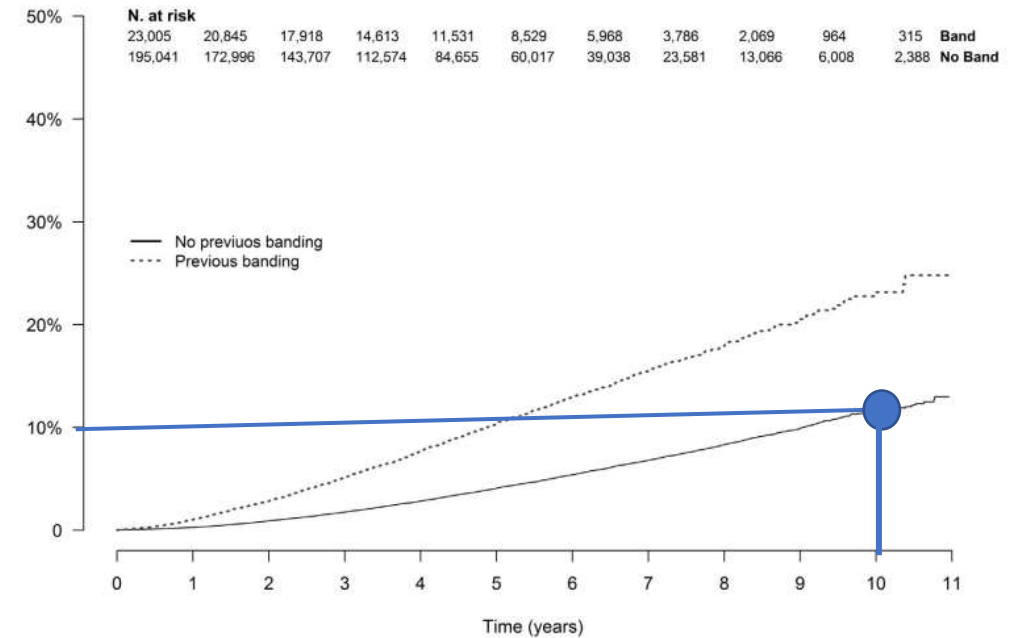


Fig. 2. Cumulative incidence of revision surgery after sleeve gastrectomy by history of adjustable gastric banding.

Weight loss failure (insufficient weight loss, weight regain)

Complications (GERD and/or food intolerance)

- Intrathoracic migration

↳ misrecognized complication 5-45 %, can worsen GERD

Review > Am J Surg. 2016 Jan;211(1):250-67. doi: 10.1016/j.amjsurg.2015.05.031.

Epub 2015 Aug 14.

Laparoscopic sleeve gastrectomy and gastroesophageal reflux disease: a systematic review and meta-analysis

Jeimer E Oor¹, David J Roks², Çağdas Ünlü³, Eric J Hazebroek³



Saber A, obesity surgery 2017
Soricelli E, SOARD 2013
Sheppard CE, obesity surgery 2014

AIMS OF STUDY

- ➔ Indications
- ➔ Prevalence of intrathoracic sleeve migration
- ➔ Weight efficiency and GERD evolution

2. Materials & Methods



- Single center study
- Retrospective
- August 2013 to December 2022

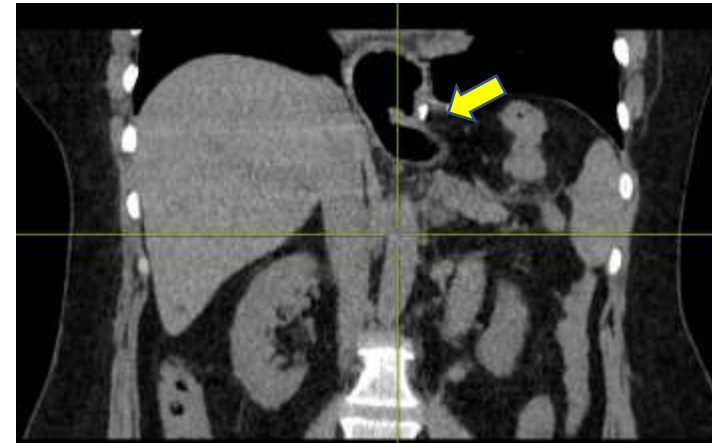
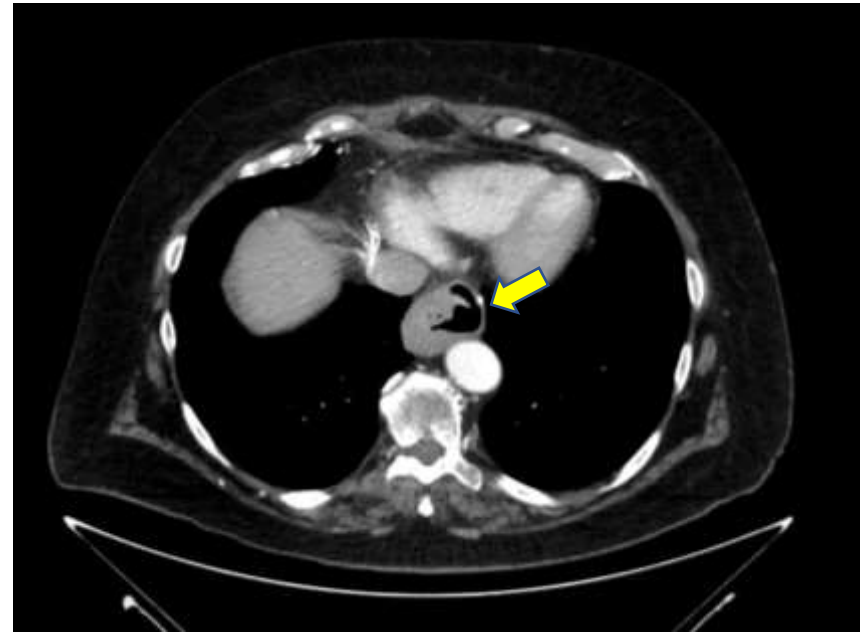
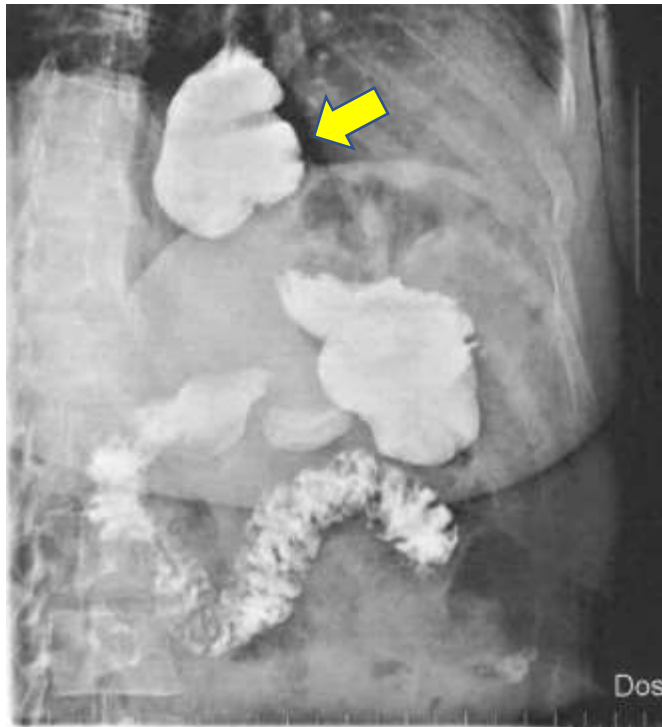
- Inclusion : SG converted to RYGB



- Main objective:

Incidence of intrathoracic migration

Hiatal hernia ≥ 4 cm at upper GI endoscopy
Confirmed by CT scan/ Gastro-grafin swallow



- Secondary objectives:

Associated repair by posterior crural closure

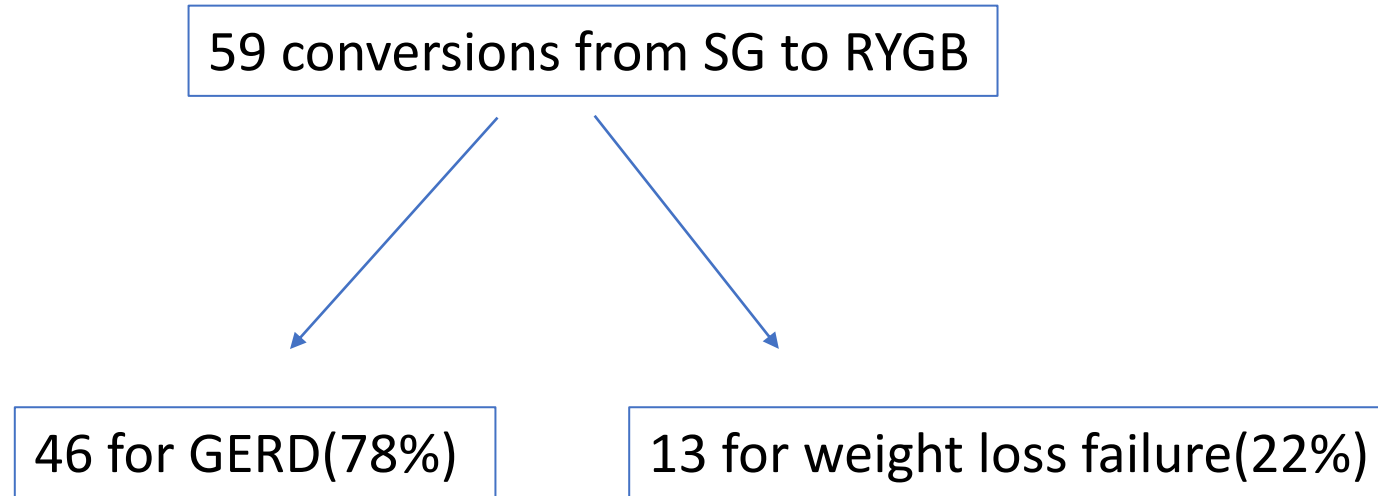
Remission of GERD

Weight evolution

Morbidity

3. Results





Mean follow-up: 32 months ± 25

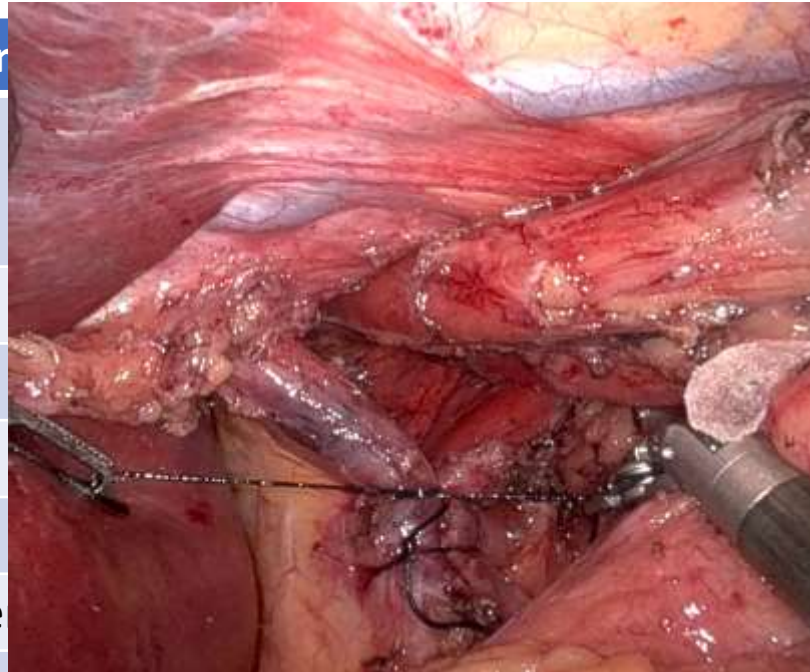
Baseline characteristics of the population

	GERD (n=46)	WLF (n=13)	<i>p</i>
Men, %	22	31	0,49
Mean Age, years	47	47	0,93
Weight before conversion, Kg	92.3 ± 23	118.5 ± 17	0,0001
BMI before conversion, kg/m ² (range)	33,3 (20,3 - 47,7)	41,8 (37,4 - 50,5)	0,0001
PPI before conversion, mg	67,6 ± 24	11,5 ± 18	0,0001
Time from SG to conversion, months	46 ± 36	72,3 ± 34	0,02

Intra thoracic migration : endoscopic and intraoperative data

	GERD (n=46)	WLF (n=13)	<i>p</i>
GI Endoscopy, n (%)	46 (100%)	13 (100%)	
CT scan	91%	100%	
GG swallow	9 %	0%	
ITM, n (%)	22/46 (48%)	3/13 (23%)	0,11
Average size of the ITM at endoscopy, cm	4,2	4,6	0,14
Esophagitis, n (%)	14 (30%)	0	0,023

Intra thoracic migration : er		WLF n=13)	<i>p</i>
GI Endoscopy, n (%)		(100%)	
CT scan		100%	
GG swallow		0%	
ITM, n (%)		3 (23%)	0,11
Average size of the ITM at e		4,6	0,14
Esophagitis, n (%)	14 (30%)	0	0,023
Intrathoracic migration repair, n (%)	22 (100%)	0	0,002



posterior crural closure

GERD evolution			
	GERD (n=46)	WLF (n=13)	<i>p</i>
Gastroesophageal reflux decrease, %	93	23	0,001
Postoperative PPI, mg	19,5	9,2	0,12
Stop PPI, %	52	15	0,02

Weight loss outcomes

	GERD (n=46)	WLF (n=13)	<i>p</i>
Body weight at last news, kg	86,6	100,7	0,03
BMI at last news, kg/m ²	31,4	35,3	0,06
TWL at last news, %	4,6	15,3	0,01
Average BMI loss, pts	- 1,9	- 6,5	0,003

Complications

	GERD (n=46)	WLF (n=13)	<i>p</i>
Complications <30 days, %	5/46 (11%)	1/13 (8%)	1
Complications >30 days, %	1 (2%)	0	1
Mortality	0	0	1

4. Conclusion



- The main indications for conversion from SG to RYGB
 ➔ **GERD** not consistent with Lazzati data (SOARD 2020)



- Incidence of ITM: 48%!
- Very good efficacy on symptomatology

Conversion of sleeve gastrectomy to Roux-en-Y gastric bypass in patients with gastroesophageal reflux disease: results of a multicenter study. Carandina S et al. SOARD 2020

- Low efficacy on weight loss
- A CT scan or gastro-grafin swallow should be performed systematically in case of GERD to assess a possible ITM

Thank you for your attention

