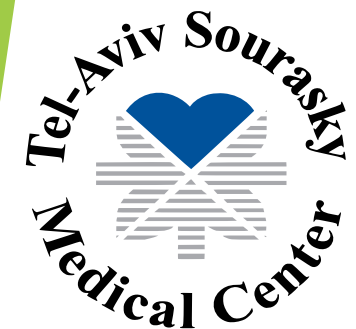




**Comparison of One Anastomosis Gastric Bypass and Sleeve
Gastrectomy for Revision of Laparoscopic Adjustable Gastric
Banding: 5-Year Outcomes**

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▶ No disclosures



Bariatric procedures (N)	2008	2011	2013	2016	2018
	344,221	340,768	468,609	685,874	696,191

Angrisani L et al. Bariatric Surgery Survey 2018: Similarities and Disparities Among the 5 IFSO Chapters. *Obes Surg.* 2021

Original article

Long-term results after laparoscopic adjustable gastric banding: a mean fourteen year follow-up study

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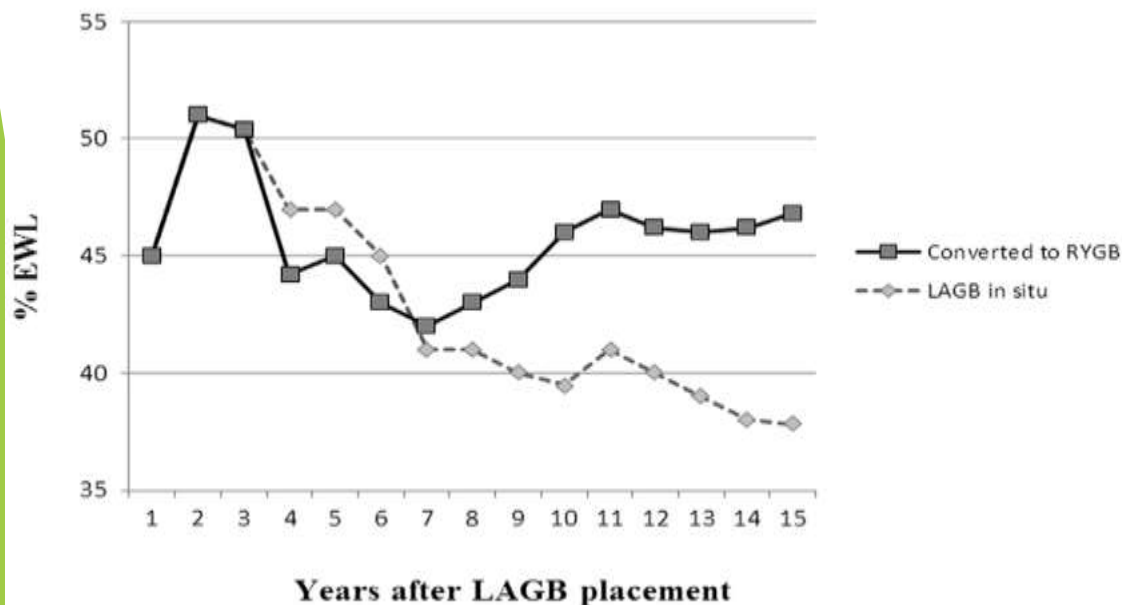


Table 3
Minor and major reoperations

	n (% patients)
Port/tube change	37 (18%)
Band change	13 (6%)
Repositioning band	20 (10%)
Conversion to RYGB	90 (44%)
Conversion to gastric sleeve	4 (2%)
Conversion to Scopinaro	4 (2%)
Band removal alone	25 (12%)
Port removal	1 (0.5%)
Total n of reoperations	204
n of patients with reoperation(s)	133 (67%)

n = number; RYGB = Roux-en-Y gastric bypass.

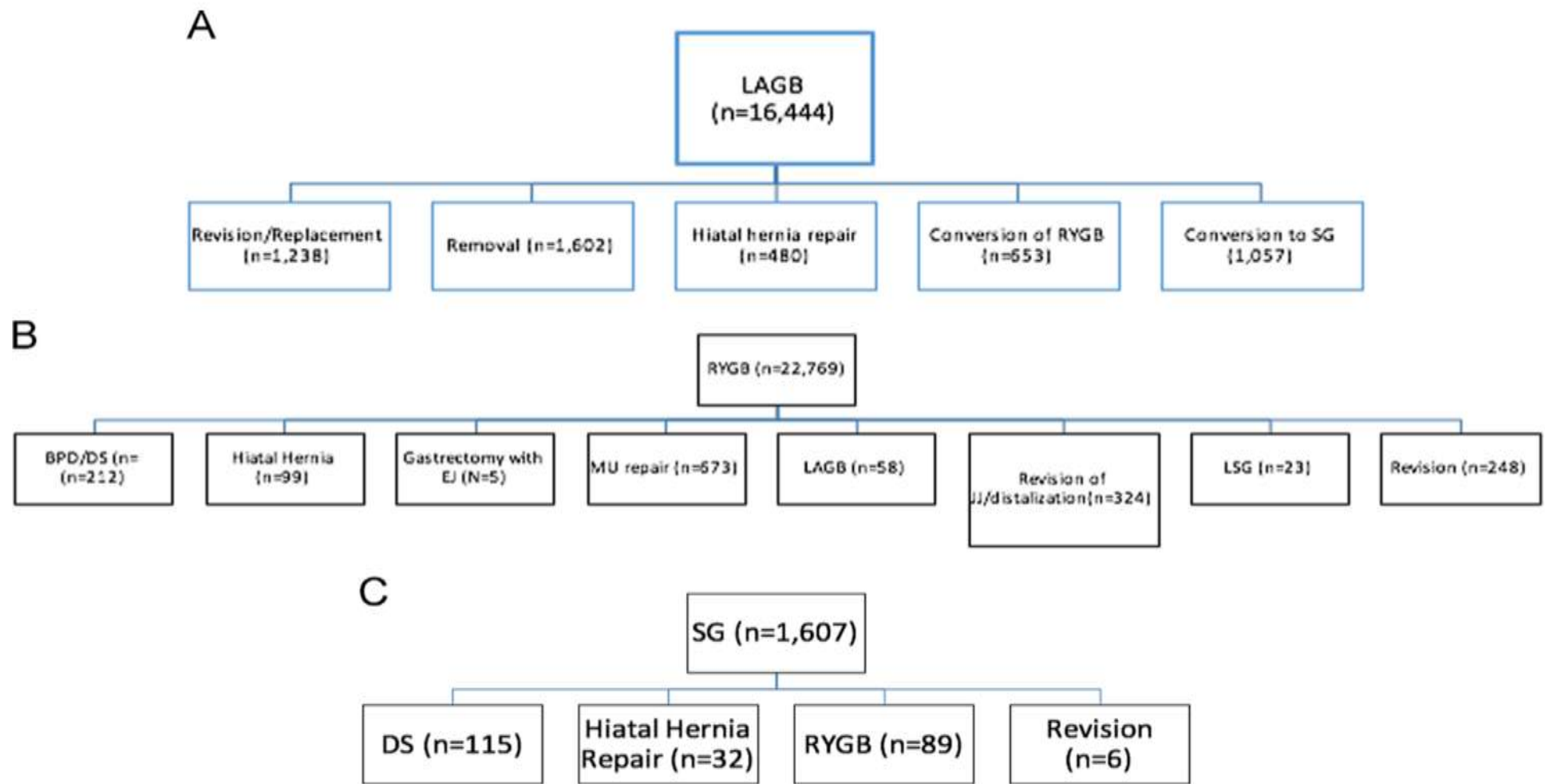


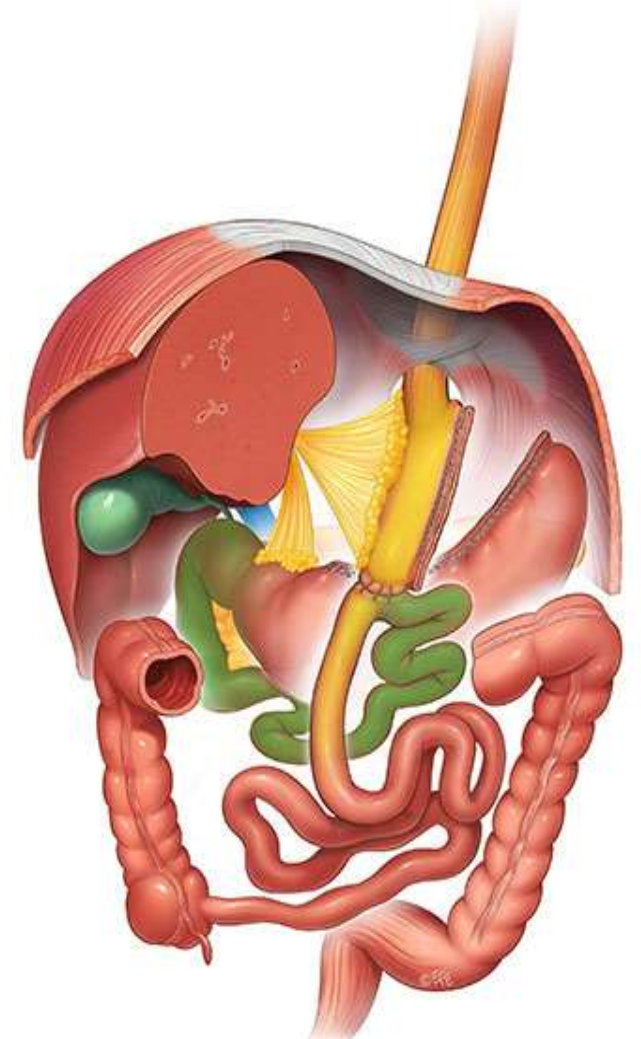
Fig. 1. Types of subsequent procedures. (A) Reoperations/revisions for laparoscopic adjustable gastric band (LAGB). (B) Reoperations/revisions for Roux-en-Y gastric bypass (RYGB). (C) Reoperations/revisions for sleeve gastrectomy (SG).

Aim and Methods

- ▶ Aim - evaluate 5-year outcomes of patients undergoing revisional OAGB and SG due to IWL/WR after LAGB
- ▶ Retrospective analysis of prospectively maintained database
- ▶ All patients (n=280) undergoing OAGB or SG after LAGB were included
- ▶ The indication was IWL/WR in 276 patients (98%)
- ▶ 46 patients (16%) were lost to follow-up

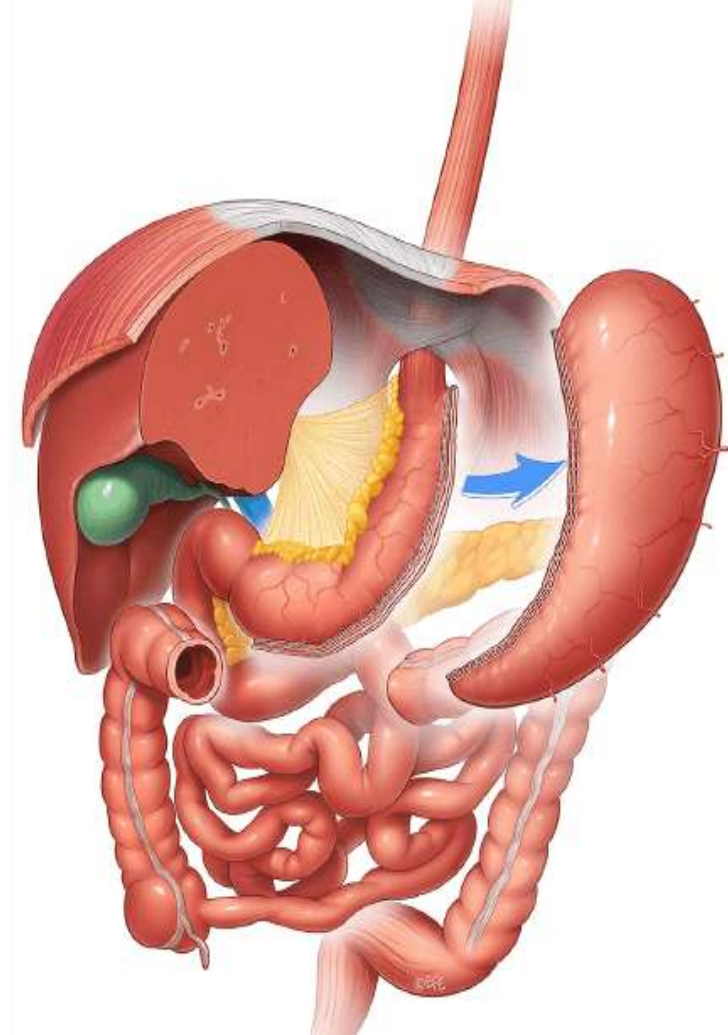
Surgical technique - OAGB

- ▶ Long (16-18 cm) and narrow gastric pouch at levels of crow's foot
- ▶ Gastro-jejunal anastomosis 180-200 cm distal to Treitz lig.
- ▶ Manual suturing of opening, routine leak test
- ▶ LAGB - removal of band if not removed in past!



Surgical technique - SG

- ▶ Mobilization of greater curvature 4 cm proximal to pylorus till His angle
- ▶ 34-36 Fr Bougie inserted and vertical transection of stomach
- ▶ routine leak test
- ▶ LAGB - removal of band if not removed before



Demographic and clinical characteristics of patients undergoing revisional surgery after LAGB

	OAGB (n=125)	SG (n=151)	P value
Age (years)	45.7 ± 10.3	44.4 ± 11.54	0.28
Gender (%females)	72.0%	76.8%	0.22
Weight at primary surgery (kg)	128.7 ± 25.6	122.9 ± 17.2	0.057
BMI at primary surgery (kg/m ²)	45.9 ± 6.6	44.2 ± 7.1	0.07
Weight at revisional surgery (kg)	115.3 ± 24.3	119.8 ± 21.1	0.16
BMI at revisional surgery (kg)	41.3 ± 6.6	42.3 ± 9.6	0.34
Time interval between surgeries (years)	10.9 ± 4.8	8.9 ± 3.6	<0.001
T2D (n, %)	15 (12%)	38 (25.2%)	0.14
HTN (n, %)	26 (20.8%)	47 (31.1%)	0.07
GERD (n, %)	12 (9.6%)	8 (5.2%)	0.17

Perioperative outcomes of patients undergoing revisional surgery following LAGB

	OAGB (n=125)	SG (n=151)	P value
Leaks, n (%)	2 (1.6%)	4 (2.6%)	0.55
Bleeding, n (%)	3 (2.4%)	4 (2.6%)	0.89
Abscess/fluid collection, n (%)	3 (2.4%)	3 (2%)	0.81
Complications graded CD \geq 3, n (%)	3 (2.4%)	6 (4%)	0.46
Reoperation, n (%) (%)	3 (2.4%)	4 (2.6%)	0.89
Readmission, n (%)	5 (4%)	8 (5.3%)	0.61
LOS, days, mean \pm SD	2.5 \pm 0.93	4.4 \pm 2.8	<0.001
Mortality, n (%)	1 (0.8%)	0 (0%)	0.27

One- vs two- staged procedures

	OAGB (n=125)	SG (n=151)	P value
One- staged procedure	91 (73%)	103 (68%)	0.34
Two- staged procedure	34 (27%)	48 (32%)	0.34

Complication rates for one-stage versus two-stage procedures

OAGB - 7/91 versus 1/34 (p=0.33)

SG patients 9/103 versus 2/48 (p=0.31).

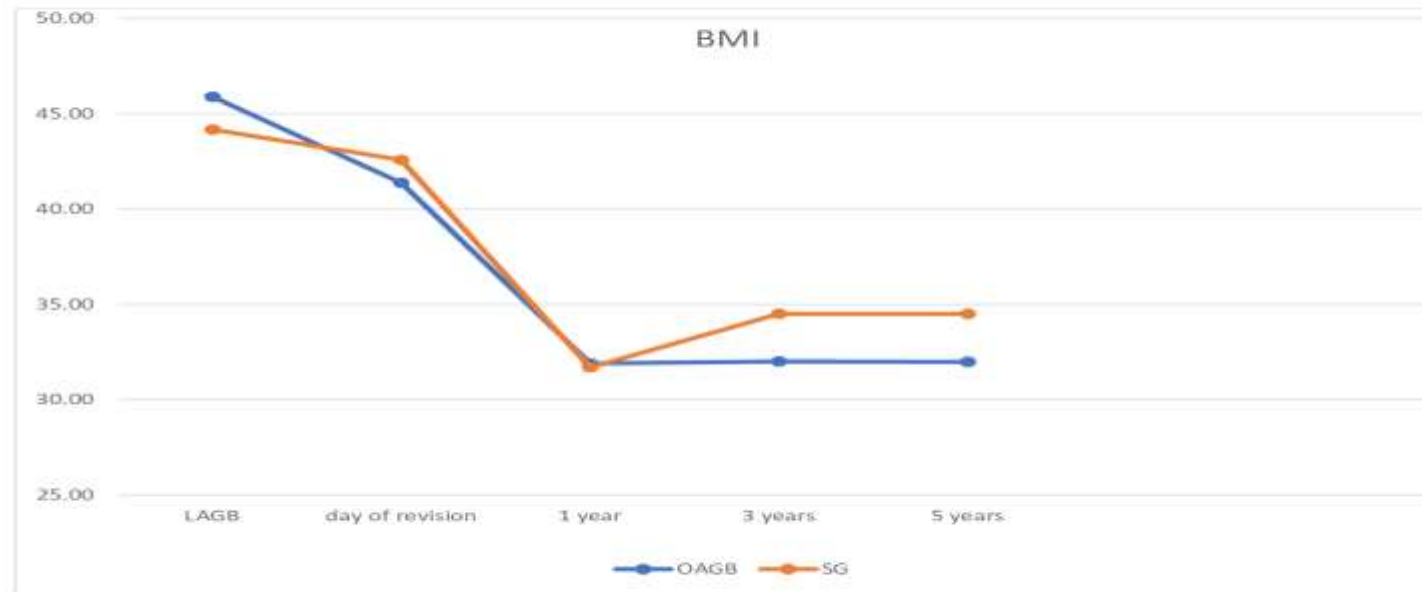
When comparing one- to two- stage procedures of the entire cohort, there was no statistically significant difference either (16/194 versus 3/82, respectively; p=0.17).

Table 3- Mid- and long-term outcomes of patients undergoing revisional surgery following LAGB

Mean followup time 78 months

	OAGB (n=125)	SG (n=105)	P value
BMI at last follow-up (kg/m ²)	31.3 ± 8.3	34.5 ± 6.9	0.002 *
% TWL	25.1% ± 17.6	18.8% ± 14.1	0.003 *
%TWL > 25	63 (50.4%)	32 (30.5%)	0.002 *
T2D resolution†	14/15 (93.3%)	24/36 (66.6%)	0.047 *
HTN resolution†	22/26 (84.6%)	29/36 (80.5%)	0.68
Revisional surgery/reoperation during follow-up	5 (4%)	9 (8.6%)	0.14

Figure 1 – BMI trends during 5-year follow-up of patients undergoing revisional LAGB*



	OAGB	SG
BMI at revision	41.4	42.6
BMI at 1- year	31.9	31.7
BMI at 3- years	32	34.5
BMI at 5- years	32	34.6

*Follow-up at 1-, 3-, and 5- years was available for 99%, 77% and 66% of the entire study cohort (n=276)

BMI- Body Mass Index; LAGB- Laparoscopic adjustable gastric banding; OAGB- One anastomosis gastric bypass; SG- Sleeve Gastrectomy

Results - long term follow-up

- ▶ Revisional Surgery - 4% in OAGB, 8.6% in SG (p=0.14)
- ▶ OAGB - BPL shortening due to PEM - n=2
 - Conversion to RYGB due to bile reflux n=1, Braun n=1
 - Marginal ulcer perforation n=1
- ▶ SG - Conversion to OAGB due to WR, n=5
 - Conversion to RYGB due to WR +reflux, n=4
 - Conversion to RYGB due do de novo reflux, n=1

Conclusion

- ▶ Revisional OAGB after LAGB due to insufficient weight loss or weight regain is safe, and appears to be more effective in weight reduction and resolution of T2D than SG.
- ▶ The rate of revisional surgery after revisional OAGB is acceptable and comparable to revisional SG.

Limitations

- ▶ Retrospective comparing unmatched groups.
- ▶ Loss to follow-up was 16.6%
- ▶ The sample size is medium, and follow-up duration in OAGB is 5 years.
- ▶ Further investigation of large-scale cohorts and long-term outcomes is needed.

Strengths

- ▶ Comparative study of two different revisional surgeries.
- ▶ Comparative data in the literature is limited for revisional OAGB.
- ▶ Study focuses solely on IWL/WR as an indication for revision of LAGB.

Thank you !

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