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[X] I have no potential conflict of interest to report

Causes of recurrent weight regain

- Procedural failures
  - Slippage of the gastric band, gastro-gastric fistulas, dilated gastric fundus, and enlargement of the gastric pouch or gastro-jejunal stoma can result in weight regain
- Most common cause
  - **Dysregulated** (loss-of-control eating) or **maladaptive** (e.g., grazing) eating
  - Noncompliance to dietary recommendations
  - Comorbid psychiatric disorders, especially history of depression, have also been implicated as potential causes of treatment failure

Noria SF et al. Curr Diab Rep. 2023 Mar;23(3):31-42

Predictors of Recurrent weight regain

- Post-operative factors
  - **Larger gastric volume following SG**
- Longer post-operative follow-up
- Presence of diabetes
- Binge eating
- Increased food urges & excessive nocturnal eating
- Lower physical activity
- Lower social support
- Life stresses, problematic alcohol use, and depressive symptoms
- Higher pre-prandial ghrelin & lower post-prandial GLP-1 levels

Noria SF et al. Curr Diab Rep. 2023 Mar;23(3):31-42.

Does RWG Matter?

- Recurrence of comorbidities, T2DM, HTN & HLD
- Increases health care costs
- Negative effect on the QOL & emotional health

Noria SF et al. Curr Diab Rep. 2023 Mar;23(3):31-42.

Lifestyle intervention

- Nutritional, cognitive-behavioral, supportive, psychological and lifestyle interventions
  - At the time of bariatric surgery or up to 2 years post-operatively, have not demonstrated a significant effect on overall weight loss
  - Systematic reviews and meta-analyses have concluded that **these interventions have a marginal or no effect on post-operative weight loss or maintenance**

Noria SF et al. Curr Diab Rep. 2023 Mar;23(3):31-42.

LONG-TERM OUTCOMES 10 YEARS AFTER LAPAROSCOPIC SLEEVE GASTRECTOMY: A SINGLE CENTER RETROSPECTIVE ANALYSIS

METHODS

A retrospective study:

149 obese patients

Sleeve Gastrectomy (SG)

Between 2005 to 2010

Follow-up mainly assessed on

%EWL

Inadequate weight loss (WL) =

%EWL < 50% or

Need of revisional surgery

for inadequate WL

RESULTS

149 patients with SG

BMI 42,0 ± 6,5kg/m²

Follow-up :

6 P died

25 P Lost of F-up

35 P needed revisonal surgey

83 P evaluated > 10 years afetr SG

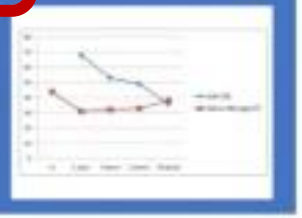
Results :

23/83-28% : %EWL > 50

32/83-39% : 50<%EWL<20

27/83-33% : %EWL< 20

Only %EWL after 1 year was predictive of Inadequate WL



CONCLUSIONS

Inadequate WL reached 80% of patients more than 10 years after SG

30 % of patients need revisional surgery

New studies must try to:

- Identify good candidates for SG
- Develop strategies to improve long-term outcomes

Roxane Vital Julie Navez, Seda Gunes, Camille Tonneau, Abdelilah Mehdi, Imad El Moussaoui, Jean Closset
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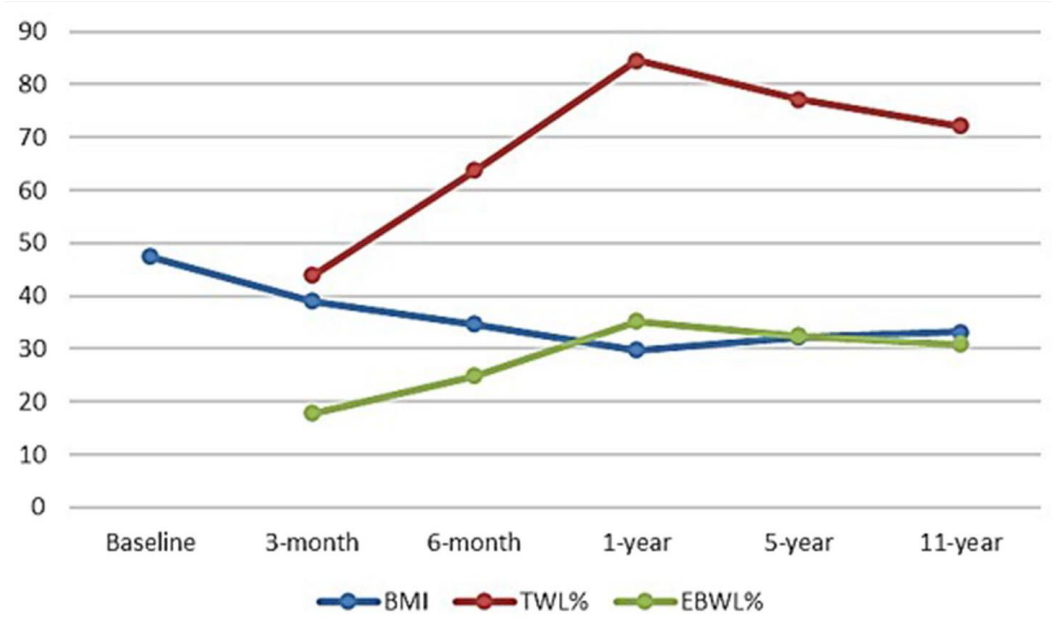
OBESITY SURGERY
The Journal of Metabolic Surgery and Allied Care

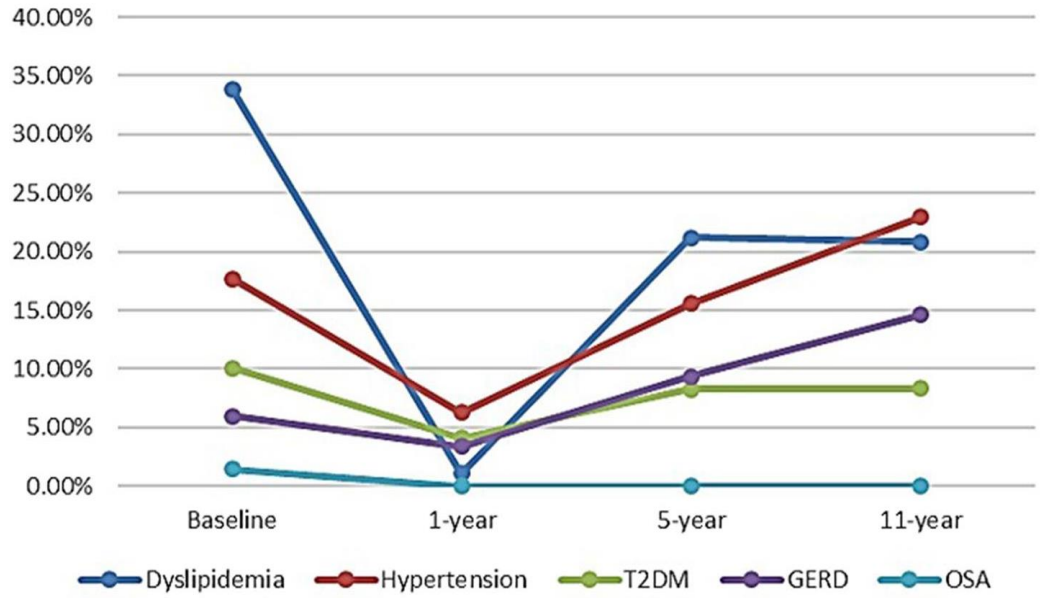
Vital, R. et al. OBES SURG **33**, 2356–2360 (2023)

Long-term LSG Outcomes

EBML%

- 1-year follow-up - 860 = 84.57 ± 18.41%
- 5-year -193 = 64.22 ± 15.53%
- 11 years 48 = 66.01 ± 8.66%

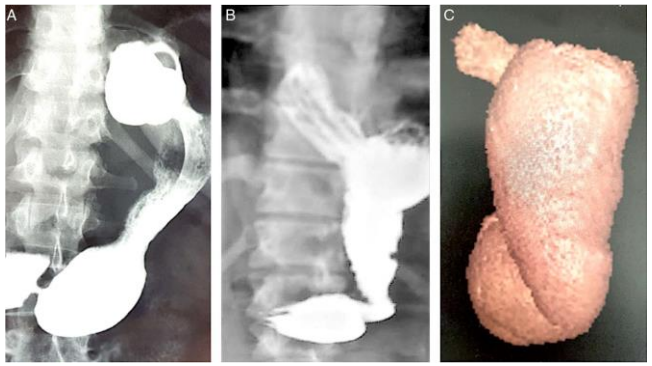


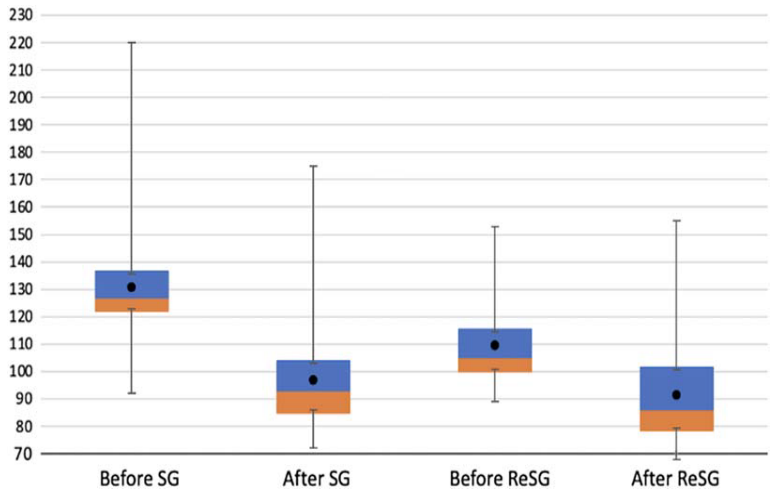


Masry et al.Obesity Surgery (2023) 33:3147–3154

Redo sleeve

- 10.1% complications rate
- Gastric stenosis (5.1%)
- Bleeding (2.5%)
- Incisional site hernia in 2.5%
- BMI decreased by 6.9 kg/m2





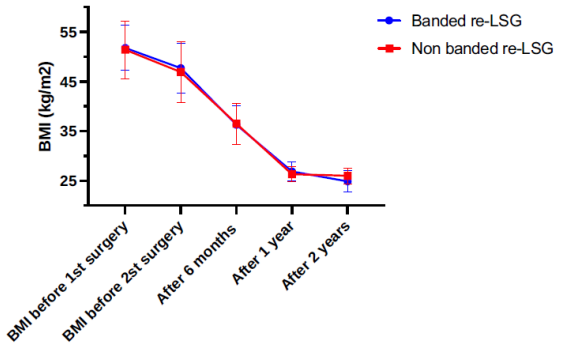
Characteristics of patients after ReSG according to a systematic review[16].

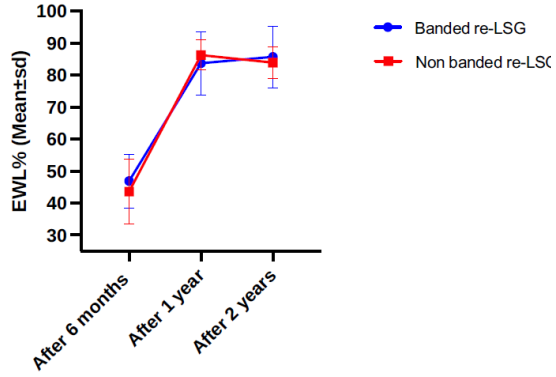
	Year	Patients number (*n*)	BMI before ResG (kg/m^2)	BMI after ResG (kg/m^2)	Leak (*n*)	Follow-up (months)
Ianelli *et al.*[11]	2011	13	34.9	27.5	0	12
Cesana *et al.*[34]	2014	11	38.9	32.2	0	12
El Ansari W.[16]	2015	61	39	29.8	0	19.9
Sileccia *et al.*[21]	2015	19	36.5	28.8	2	24
Nett *et al.*[35]	2016	17	39.8	33.8	1	37.2
Rebibo *et al.*[36]	2018	46	41.2	32.1	5	22
De Angelis *et al.*[14]	2018	19	44.3	27.8	NA	52
Antonopoulos *et al.*[37]	2019	61	40.5	31.6	5	12
Mehmet[38]	2019	21	46.1	24.5	0	12
Filip *et al.*[39]	2019	27	35.7	27.65	0	36
Al-Sabah *et al.*[22]	2020	24	42	34	0	12
Bonaldi *et al.*[40]	2023	102	38.6	30.4	3	55
Our study	2023	79	40	33.1	0	44.8
Total (sum/mean)		500	40.3	34	16	32

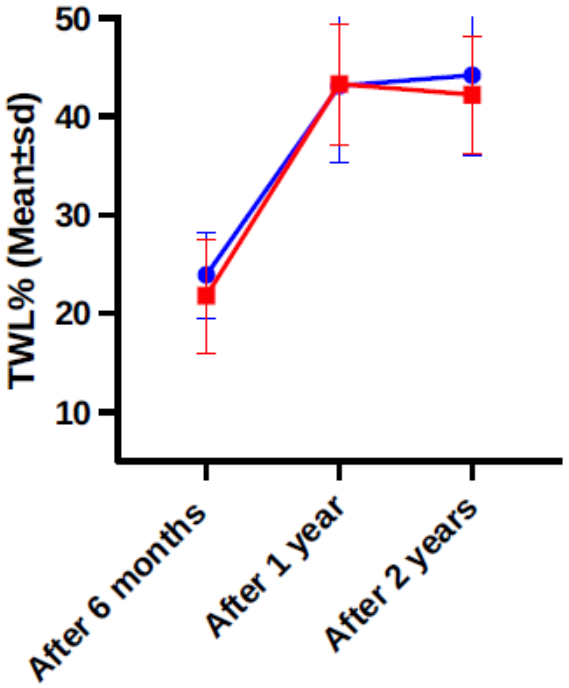
NA, not available; ReSG, re-sleeve gastrectomy.

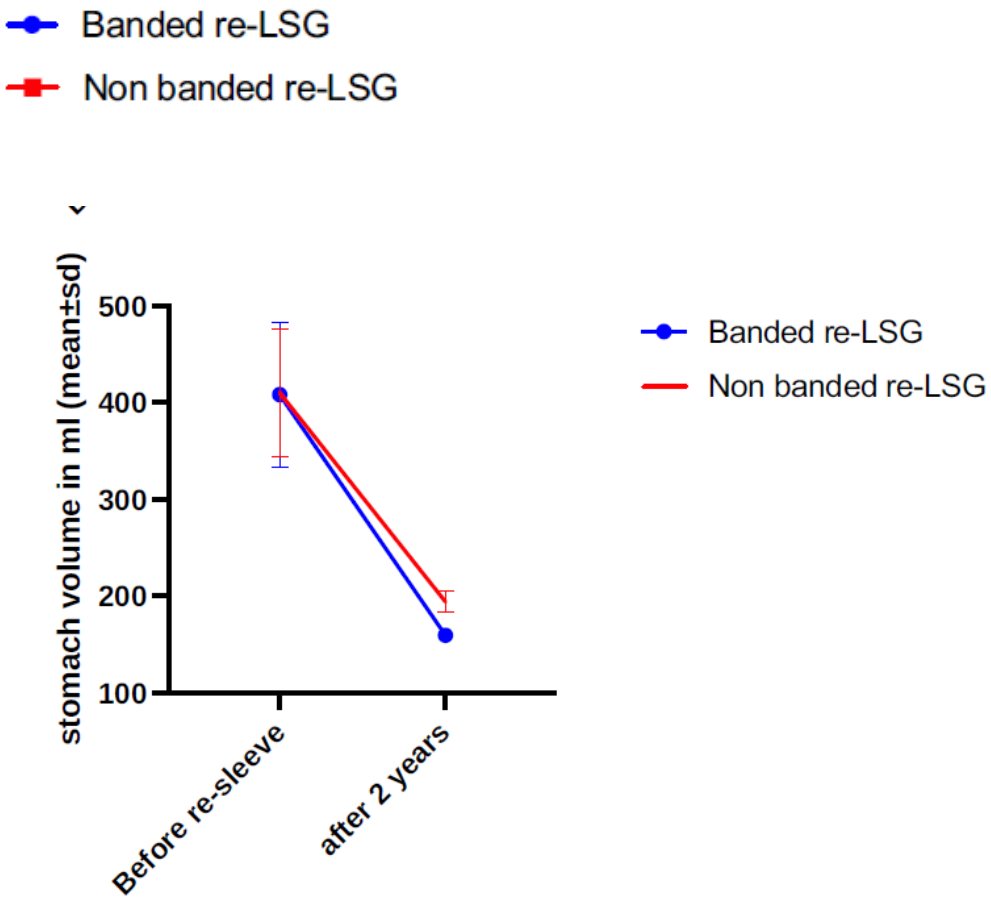
El Khoury L et al. Int J Surg. 2023 Dec 1;109(12):4145-4150

Banded vs Non-Banded Redo Sleeve









Mohamed Hany et al. Obesity Surgery (2023) 33:2049–2063

Redo OAGB vs OAGB

- 52 patients ReLSG: 27 or LOAGB: 25 with 1 year follow up
- LOAGB Patients had lower
  - Mean final weight (76.2 ± 10.5 vs 85.3 ± 13)
  - Mean Final BMI (26.4 ± 2.5 vs 29.7 ± 2.9)
  - Higher mean percentage of excess weight loss (EWL%) (83.6 ± 13.5% vs 60.29 ± 14.6%).
- All RLOAGB patients and 77.8% of ReLSG patients had EWL% > 50%.
- RLOAGB patients had higher EWL% compared to ReLSG ($p < 0.001$)
- Insufficient WL patients had higher EWL% compared to weight regain patients ($p = 0.034$).

Hossam S. Abdelrahim et al. Surgical Endoscopy (2024) 38:787–798

LSG to OAGB or RYGB

	N		
	OAGB ($n = 185$)	RYGB ($n = 306$)	p value
Length of biliary limb (cm)	180 [175–180]	100 [80–150]	< 0.001
Operation time (min)	72 [56–95]	83 [66–103]	< 0.001
Early complications			
All cause intra-abdominal	2 (1.1%)	15 (4.9%)	0.025
Leakage	1 (0.5%)	2 (0.7%)	0.876
Bleeding	1 (0.5%)	8 (2.6%)	0.295
Intra-abdominal abscess	0 (0.0%)	1 (0.3%)	0.436
Perforation	0 (0.0%)	4 (1.3%)	0.118
Wound infection	5 (2.7%)	5 (1.6%)	0.513
Pneumonia	0 (0.0%)	1 (0.3%)	0.436
Sepsis	0 (0.0%)	1 (0.2%)	0.109
Myocardial infarction	0 (0.0%)	0 (0.0%)	NA
CVA	0 (0.0%)	0 (0.0%)	NA
Re-admittance	4 (2.2%)	6 (2.0%)	0.422
Mortality	1 (0.5%)	1 (0.3%)	0.719

Nathan Poublon et al. OBES SURG (2020) 30:3287–3294

Weight loss outcomes

Table 3 Follow-up weight (total)

Months after redo	Mean ± SD/median (range)		
	OAGB	RYGB	*p* value
36 months	$n = 40$	$n = 87$	
BMI	31.1 ± 5.1	34.5 ± 7.1	0.009
TWL	22.5 ± 15.2	17.4 ± 13.3	0.056
EBMIL	58.3 ± 36.0	46.5 ± 35.0	0.084

Nathan Poublon et al. OBES SURG (2020) 30:3287–3294

Late Complications

	N		
	OAGB ($n = 185$)	RYGB ($n = 306$)	p value
Surgical intervention (all cause)	17 (9.2%)	38 (12.4%)	0.272
Biliary reflux	22 (11.9%)	6 (2.0%)	< 0.001
For which intervention was needed	10 (5.4%)	1 (0.3%)	< 0.001
Internal herniation	1 (0.5%)	17 (5.6%)	0.004
For which intervention was needed	0 (0.0%)	15 (4.9%)	0.002
Malnutrition	9 (4.9%)	2 (0.7%)	0.002
For which intervention was needed	2 (1.1%)	1 (0.3%)	0.299
Abdominal pain	8 (4.3%)	26 (8.5%)	0.078
For which intervention was needed	3 (1.6%)	14 (4.6%)	0.083
Laparoscopic cholecystectomy	8 (4.3%)	15 (4.9%)	0.769
Iron deficiency	35 (18.9%)	56 (18.3%)	0.236
Hypoglycemia	6 (3.2%)	10 (3.3%)	0.988
Hypoalbuminemia	3 (1.6%)	6 (2.0%)	0.786
Ulcer	4 (2.2%)	6 (2.0%)	0.878
Stricture formation of anastomosis	1 (0.5%)	2 (0.7%)	0.432

Nathan Poublon et al. OBES SURG (2020) 30:3287–3294

LSG to SAID's

- 13 studies - 1,001 patients.
- Mean BMI before revision was 46.88 kg/m2
- Pooled
  - mean % TWL was 23.84%
  - Mean rate of HTN resolution was 48%
  - T2DMresolution was 63%
  - Resolution of dyslipidemia was 55%
  - Incidence of perioperative bleeding of 1%
  - Incidence of leak was 1%
  - Postop diarrhea incidence rate of 2%

Karim Ataya et al. J Metab Bariatr Surg. 2023 Dec;12(2):35-43

Weight-Related Outcomes After Revisional Bariatric Surgery in Patients with Non-response After Sleeve Gastrectomy—a Systematic Review

Author	Number of patients	Pre-SG BMI	Revision				Follow up				
			Months	Op	BMI	Technical details	Months	%	BMI	%EWL	%TWL
Dapri et al.	19	41.2	30	DS	36.9	AL 150 cm, CC 100 cm	25	100	27.3	73.7	N/A
Dapri et al.	7	45.1	37	Re-SG	38.9	34 Ch	23	71	35.3	43.7	N/A
Homan et al.	14	54.0	28	DS	46.0	AL 150 cm, CC 100 cm	34	100	N/A	74.0	N/A
Homan et al.	11	50.0	30	GBP	39.0	AL 125-175 cm, BPL 50 cm	34	100	N/A	57.0	N/A
Antonopoulos et al.	83	47.8	43	GBP	41.7	AL 150 cm, BPL 70 cm	12	100	32.5	61.2	N/A
Antonopoulos et al.	61	46.8	42	Re-SG	40.5	36 Ch	12	100	31.6	69.5	N/A
Chiappetta et al.	21	49.8	33	GBP	36.6	AL 150 cm, BPL 50 cm Ω	12	100	33.5	76.0	36.0
Chiappetta et al.	34	56.5	39	OAGB	45.7	BPL 200 cm, re-SG 42 Ch Ω	12	100	36.6	64.0	34.7
Rayman et al.	119	45.9	66	GBP	39.6	N/A	35	100	33.3	N/A	27.0
Rayman et al.	144	47.2	68	OAGB	41.6	N/A	26	100	31.8	N/A	32.0
De la Cruz et al.	42	55.6	44	OAGB	43.4	BPL 200 cm	36	26	31.6	N/A	40.5
De la Cruz et al.	42	55.1	45	SADI	42.8	AL 250 cm + re-SG (n=10)	36	57	29.3	N/A	44.5

Stephan Axer et al Obesity Surgery (2023) 33:2210–2218

Weight-Related Outcomes After Revisional Bariatric Surgery in Patients with Non-response After Sleeve Gastrectomy—a Systematic Review

Author	Number of patients	Pre-SG	Revision				Follow up				
		BMI	Months	Operation	BMI	Technical details	Months	%	BMI	%EWL	%TWL
Andalib et al.	25	64.7	20	DS	46.8	AL 150 cm, CC 100 cm	12	76	38.1	31.6	14.0
Andalib et al.	33	49.5	34	GBP	40.1	AL 100 cm, BPL 50 – 70 cm	12	86	35.0	27.6	10.1
Andalib et al.	3	53.3	14	SADI	38.0	AL 250 cm	12	43	29.7	55.1	9.4
Andalib et al.	10	47.5	46	Re-SG	39.9	40-60 Ch	12	77	35.5	29.2	7.6
Homan et al.	14	54.0	28	DS	46.0	AL 150 cm, CC 100 cm	34	100	N/A	59.0	27.0
Homan et al.	11	50.0	30	GBP	39.0	AL 125-175 cm, BPL 50 cm	34	100	N/A	23.0	9.0
Chiappetta et al.	34	56.5	39	OAGB	45.7	BPL 200 cm, re-SG 42 Ch Ω	12	100	36.6	29.0	15.8
Chiappetta et al.	21	49.8	33	GBP	36.6	AL 150 cm, BPL 50 cm Ω	12	100	33.5	22.0	10.3
Kraljević et al.	20	52.9	31	GBP	42.0	CC 100 cm; BPL 100-150 cm	36	85	34.5	33.8	N/A
Kraljević et al.	12	53.0	31	OAGB	40.2	BPL 200 cm	36	83	34.6	33.2	N/A
Shimon et al.	21	53.7	35	DS	46.0	AL 150-190 cm, CC 60-100 cm	49	86	31.9	N/A	28.5
Shimon et al.	18	46.1	47	GBP	40.5	AL 150 cm, BPL 50-70 cm	47	83	31.9	N/A	20.8
Al-Sabah et al.	46	50.6	49	GBP	42.7	AL 150 cm, BPL 100 cm	60	24	34.3	49.2	N/A
Al-Sabah et al.	38	49.9	48	Re-SG	42.0	36 Ch	60	18	33.8	45.3	N/A
Dijkhorst et al.	63	53.1	36	SADI	44.9	AL 250 or 300 cm	60	14	N/A	N/A	15.0
Dijkhorst et al.	46	53.1	24	GBP	42.5	AL 100 cm, BPL 150 cm	60	35	N/A	N/A	2.1
Bashah et al.	42	50.4	24-48	SADI	43.7	AL 250-300 cm	12	100	34.1	57.6	23.7
Bashah et al.	49	52.3	24-48	OAGB	43.6	BPL 150-200 cm; re-SG 36 Ch	12	100	35.3	47.1	18.7

Stephan Axer et al Obesity Surgery (2023) 33:2210–2218

Conclusion

- Significant variations in inclusion criteria, therapy benchmarks, follow-up schemes, and outcome measurements were observed, preventing meaningful comparison of results.
- Evidence-based treatment strategies for weight non-response after sleeve gastrectomy cannot be deduced from the current literature.

- Congress Date
  - 20 – 22 Feb 2025
- Abstract submission Deadline
  - 1st October 2024
- Early Bird Registration Deadline
  - 3rd Dec 2024


תודה
Dankie
Gracias
Спасибо
شكرًا
Merci
Takk
Köszönjük
Terima kasih
Grazie
Dziękujemy
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Vielen Dank
Paldies
Kiitos
Täname teid
谢谢
Thank You
Tak
感謝您
Obrigado
Teşekkür Ederiz
감사합니다
Σας Ευχαριστούμ
ขอบคุณ
Bedankt
Děkujeme vám
ありがとうございます
Tack