SINGLE ANASTOMOSIS PROCEDURES AS REVISIONAL FOR WEIGHT REGAIN POST SG (SADI VS OAGB)

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CONFLICT OF INTEREST DISCLOSURE

Nothing to disclose related to the content of this presentation.

Short–to-Medium Term Outcome..

Conclusions

SADI-S and OAGB-MGB are effective revisional procedures post unsuccessful LSG with comparable outcomes in terms of weight and BMI loss, remission of comorbidities, and nutritional deficiency in short-to-medium term follow-up. SADI-S

Why?

- Hypo-absorbitive
- Loop configuration
- One anastomosis

Methods

Retrospective observational study of a prospectively collected database

January 2016 to August 2017

Primary outcome: weight loss

Secondary parameters: resolution of comorbidities, complications, reoperation

Results:

Preoperative Characteristics:

91 patients

SADI: 42 – OAGB: 49

Mean Age: 38 y/o, more females.

Pre-LSG WT: 133 ± 28 in the OAGB-MGB

139 ± 27 in the SADI-S group

Pre-LSG BMI: 52 ± 11 for OAGB-MGB

50 ± 8 kg/m2 for the SADI-S group.

Results: OAGB

Table 1. Demographic, anthropometric, complications and outcome data of patients underwent OABG as revisional procedure for weight regain (n=49)	
Gender (M:F)	7: 42
Age (mean ± standard deviation)	37.83 ± 9.36
No. of years follow-up	3.8 ± 1.4
Weight • before LSG • before revisional procedure • 5-years after revision	 133.5±29.1 113.3±20.2 93.8±19 (p-value <0.001)
BMI • before revisional procedure • 5-years after revision	 43.0±6.8 35.6±7.0 (p-value <0.001)
TWL% 5-years post-revisional procedure	 19.4±16.3
EWL% post-revisional procedure • 5-years after revision	 50.9±30.6
Post-operative complications (n) • staple line leak • anastomotic ulcer • bile reflux • denovo GERD • nutrional deficiency • revisional surgery • mortality	 1 (RYGB) 3 3 (2 RYGB) 3 1 2 (SADI) 0

Results: OAGB

Table 2. Comparison of blood markers level before and after OABG as revisional procedure for weight regain (n=49)

Parameters	Before OABG (mean ± SD)	5-years after OABG (mean ± SD)	p-value
Hemoglobin A1C (HBA1C)	5.5±0.9	5.3±0.4	0.01
Protein	69.2±4.6	69.2±4.8	1.0
Hemoglobin (Hb)	12.1±1.5	11.5±1.9	0.02
Albumin	36.4±3.1	36.5±4.7	0.90
Zinc	11.6±2.9	11.6±2.2	0.97
Vitamin B12	250.6±86.6	237.8±101.5	0.46
International Normalized Ratio (INR)	0.99±0.04	1.0±0.03	0.13
Vitamin D	17.80 ± 9.95	19.2 ± 11.7	0.31
Triglycerides	1.2±0.5	0.9±0.4	0.03
Cholesterol	5.1±0.9	4.7±0.9	0.02
High-density lipoprotein (HDL)	1.5±0.5	1.6±0.4	0.02
Low-density lipoprotein (LDL)	3.2±0.9	2.5±0.7	0.001
Iron	12.1±5.9	12.0±6.4	0.95

SD: standard deviation

Results: SADI

Table 3. Demographic, anthropometric, complications and outcome data of patients underwent SADI as revisional procedure for weight regain (n=42)

Gender (M:F)	12: 30
Age (mean ± standard deviation)	38.0 ± 9.0
No.of years follow up	5.0 ± 1.4
Weight • before LSG • before revisional procedure • 5-years after revision	 141.5±27.8 121.6±24.4 91.4±16.1 (p-value <0.001)
BMI • before revisional procedure • 5-years after revision	 45.9±10.3 33.7±5.8 (p-value <0.001)
TWL% 5-years post-revisional procedure	30.0±18.4
EWL% 5-years post-revisional procedure	66.2±21.7 (p-value <0.001)
Postoperative complications (n) Abdominal collection Steatorrhea Nutritional deficiency Intractable GERD Mortality	 1 6 1 1(RYGB) 0

Results: SADI

Table 4. Comparison of blood markers level before and after SADI-S as revisional procedure for weight regain (n=42)

Blood markers	Before SADI (mean ± SD)	5-years after SADI (mean ± SD)	p-value
HemoglobinA1C (HBA1C)	5.7±0.9	5.2±0.6	0.001
Total Protein	66.2±8.6	66.9±8.3	0.62
Hemoglobin	12.6±1.7	11.7±2.3	0.005
Albumin	35.7±3.4	36.4±4.0	0.29
Zinc	11.1±2.3	11.3±3.8	0.70
Vitamin B12	282.2±243.7	425.5±283.8	0.002
International Normalized Ratio (INR)	1.0±0.05	1.1±0.06	0.13
Vitamin D	15.42 ± 5.75	11.76 ± 5.32	0.006
Triglycerides	1.03±0.3	0.8±0.4	0.006
Cholesterol	5.0±0.9	4.1±0.8	0.001
High-density lipoprotein (HDL)	1.4±0.3	1.5±0.3	0.03
Low-density lipoprotein (LDL)	3.0±0.9	2.1±0.7	0.001
Iron	11.8±6.2	14.4±11.5	0.14

SD: standard deviation

Results: SADI Vs OAGB

Table 5: Comparative analysis of anthropometric measures before and 5-years after revisional surgeries (OAGB vs. SADI)

Parameters	OAGB Mean ± SD	SADI Mean ± SD	P. Value
Weight before LSG surgery	133 ± 27.82	139.06 ± 27.19	0.289
Preoperative Weight	114.18 ± 21.08	119.32 ± 23.90	0.268
Preoperative BMI	43.58 ± 7.38	43.90 ± 7.37	0.832
EW	48.41 ± 18.29	51.40 ± 20.80	0.458
Δ BMI	7.4±5.7	12.2±8.9	0.006
TWL %	19.4±16.3	30.0±18.4	0.008
EWL %	50.9±30.6	66.2±21.7	0.01

Results:
SADI Vs OAGB

Table 6: Comparative analysis of blood marker levels before and 5-years after revisional surgeries (OAGB vs. SADI)			
Parameters	**OAGB Mean ± SD**	**SADI Mean ± SD**	**P. Value**
Preoperative triglycerides	**1.16 ± 0.54**	**1.13 ± 0.33**	**0.833**
Triglycerides 5-years post revision	1.0±0.4	0.8±0.4	0.07
Preoperative cholesterol	5.13 ± 1.01	5.18 ± .86	0.818
Cholesterol 5-years post revision	4.7±0.9	4.1±0.8	0.004
Preoperative HDL	1.45 ± 0.49	1.43 ± 0.25	0.831
HDL 5-years post revision	1.6±0.4	1.5±0.3	0.03
Preoperative LDL	3.18 ± 0.94	3.24 ± 0.76	0.801
LDL 5-years post revision	2.4±0.7	2.1±0.7	0.05

Discussion

Weight reduction

Resolution of comorbidities

Complications – Reoperations

Nutritional deficiencies

Limitations

Retrospective design

Quality of life

5 YEAR OUTCOME

-Conclusions:

In summary, the SADI-S procedure exhibits a superior outcome as a revisional option for weight recidivism after SG compared to the OAGB-MGB in terms of weight loss, resolution of comorbidities, and rates of complications and reoperation. Nonetheless, the OAGB-MGB still serves as an effective and safe alternative for patients experiencing weight regain following SG.

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