Laparoscopy Research Center, Shiraz University of Medical Sciences, Shiraz, Iran.

The Effect of Single-Anastomosis Sleeve Ileal (SASI) Bypass on Patients with Severe Obesity in Three Consecutive Years

A. Vahidi MD. FMBS.

XXVII IFSO World Congress

IFSO MELBOURNE 2024

Melbourne 2024

Methods

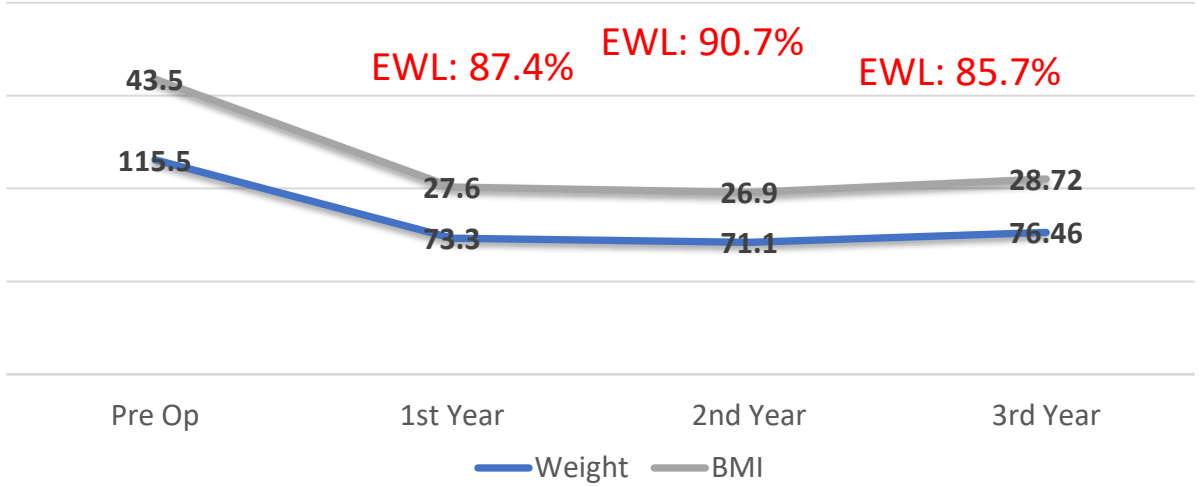
- Retrospective data
- October 2016 to September 2021
- At referral hospitals for bariatric surgery in Shiraz
- 116 patients

1. Be well informed and motivated
2. Have failed previous nonsurgical weight loss management plans
3. Have acceptable risk for surgery
4. Have BMI >40
5. Have BMI >35 and also serious comorbidities related to obesity, such as T2D, sleep apnea, obesity-related cardiomyopathy, or severe joint disease

Weight loss

Table 2 Weight loss after year 1, 2 and 3 of SASI bypass surgery

Variable[2]	Preoperatively $N = 116$	1 year post- $N = 116$	2 years post $N = 103$	3 years Post $N = 55$
Weight (kg)	115.5 (15.3)	73.3 (13.88)*	71.01 (12.3)*	76.46 (13.62)*
Total weight loss (%)		36.40 (10.08)	37.78 (8.82)	31.81 (11.37)
Excess weight loss (%)		87.37 (24.90)	90.7 (20.93)	85.7 (28.93)
BMI (kg/m^2)	43.54 (3.88)	27.66 (5.0)*	26.99 (4.26)*	28.72 (5.15)*



Improvement in comorbidities

Therapeutic impact on HTN

- HTN complete remission and improvement was observed in 75.8%, 80.7%, and 80.0% of hypertensive patients in the 1st, 2nd, and 3rd years

Variable[2]	1 year post- *N* = 116	2 years post *N* = 103	3 years Post *N* = 55
Comorbidities, no. (%)			
Hypertension			
Improvement or resolution	22 /29 (75.8)	21 / 26 (80.7)	16 / 20 (80.0)
Improvement	5/22 (22.8)	5/21 (23.8)	8/16 (50)
Resolution	17/22 (77.2)	16/21 (76.1)	8/16 (50)
Improvement or resolution	33/68 (51)	42/61 (68.8)	18 / 31 (58.06)

Table 4 Changes in laboratory parameters after year 1, 2 and 3 of SASI bypass surgery

Variable[2]	Preoperatively $N = 116$	1 year post- $N = 116$	2 years post $N = 103$	3 years Post $N = 55$
Alb (g/l)	4.05 (0.45)	3.95 (0.23)	4.05 (0.16)	4.28 (0.36)
Total protein (g/l)	7.90 (0.56)	7.15 (0.35)	6.7 (0.77)	7.6 (0.46)
Ferritin (ng/ml)	107.34 (126.12)	95.0 (87.96)	46.77 (54.65)*	90.34 (63.67)
FBS (mg/dl)	127.31 (52.83)	95.38 (17.66)*	88.33 (11.67)*	93.2 (41.5)*
BUN (mg/dl)	11.0 (3.5)	10.0 (2.80)	11.37 (2.97)	11.8 (2.29)
Cr (mg/dl)	0.93 (0.16)	0.85 (0.15)	0.84 (0.21)	0.96 (0.2)
Calcium (mg/dl)	9.12 (0.36)	8.76 (0.25)	9.04 (0.28)	9.12 (0.32)
iPTH (pg/mL)	66.82 (57.12)	58.02 (27.61)*	39.03 (17.01)*	54.77 (3.42)*
TC (mg/dl)	192.27 (55.81)	162.91 (52.70)*	150.30 (37.86)*	186.0 (28.04)
LDL-C (mg/dl)	123.90 (49.62)	86.30 (44.95)*	79.73 (27.78)*	95.8 (23.18)*
HDL-C (mg/dl)	48.90 (9.46)	50.90 (16.44)*	48.55 (5.97)	48.32 (7.8)
TG (mg/dl)	177.64 (70.59)	111.2 (54.14)*	101.5(48.95)*	126.2 (38.8)*
ALT (IU/L)	43.46 (29.63)	25.62 (9.76)*	18.67 (5.31)*	26.33 (13.18)*
AST (IU/L)	40.0 (31.185)	25.62 (10.89)*	22.80 (6.12)*	24.2 (7.08)*
Alk.Ph (IU/L)	196.17 (64.81)	175.50 (33.72)	162.0 (54.57)	196.11 (45.10)
Zn (µg/dl)	81.70 (20.47)	79.84 (25.95)	92.09 (29.76)	85.7 (2.2)
Vit A (µg/dl)	46.46 (8.32)	23.58 (10.42)*	36.65 (11.07)*	87.15 (16.47)*
Vit D (ng/ml)	23.33 (15.33)	19.70 (7.05)*	38.40 (24.01)*	38.55 (13.54)
TSH (IU/L)	3.31 (1.97)	3.75 (2.22)	3.08 (1.66)	2.22 (1.13)

Complications and reversal operation

Conclusion:

- ✓ SASI bypass is an effective procedure
- ✓ Relatively safe procedure
- ✓ Patient selection and criteria
- ✓ Standardization of technique will decrease its potential nutritional complications and increase safety