

Outpatient Gastric Sleeve Surgery: Medium-Term Outcome

Rui Torres¹, Rita Sá¹, Carmélia Ferreira¹
¹Hospital de Braga, Anaesthesiology, Braga, Portugal

A perioperative protocol for patients undergoing laparoscopic sleeve gastrectomy as outpatients has been implemented in our hospital, with the following key features:

Preoperative:
Pre-anesthetic consultation
3 sessions with a rehabilitation nurse for respiratory training, cough exercises, smoking cessation support, and promoting physical activity and weight loss

Intraoperative:
Multimodal analgesia
Alveolar recruitment maneuvers to minimize respiratory complications

Postoperative:
Rehabilitation initiated 6 hours post-surgery
Follow-up phone calls on days 1, 2, 5, 7, 10, and 30 to monitor recovery, assess pain, and reinforce lifestyle changes

Hypothesis: Outpatient surgery improves medium-term outcomes in lifestyle, quality of life, and comorbidities.

Methods:
Inclusion: Age 18-55, BMI <45, ASA II/III
Exclusion: Cardiac disease, chronic kidney disease, severe obstructive sleep apnea not adapted to CPAP, poorly controlled diabetes mellitus, chronic liver disease, redo surgeries
Data collection: 17 months post-surgery via online survey

	All Patients (n=34)	Outpatient (n=17)	Inpatient (n=17)	p-value
Age- median ± IQR	38±14	41±15	37±11	0,303
Female gender- n (%)	25 (74)	12 (71)	13 (77)	1,000
Cigarette per day- median ± IQR	0±2	0±1	0±8	1,000
History of psychiatric disorder- n(%)	9 (26)	3 (18)	6 (35)	0,438
Hours of physical exercise per week - median ± IQR	5±5	7±11	3±5	0,086
Adherence to dietary plan- n(%)				0,486
Does not adhere	1 (3)	0 (0)	1 (6)	
Partially adheres	23 (68)	11 (65)	12 (71)	
Strictly adheres	10 (30)	6 (35)	4 (24)	
BMI reduction- median ± IQR	14±7	16±5,5	12±10	0,303
Pre-op. stress urinary incontinence- n(%)	5 (15)	3 (18)	2 (12)	0,628
With post-op improvement- n(%)	1 (20)	1 (33)	0 (0)	
Days until recovery of normal activity- median ± IQR	30±37	30±50	30±31	0,707
BDI- median ± IQR	5±14	7±17	5±16	0,731
SF-36- median ± IQR				
Physical functioning	85±5	85±5	85±5	0,760
Role physical	80±15	80±17	80±15	0,838
Pain	90±28	90±19	90±33	0,760
Energy/Fatigue	55±32	55±38	55±33	0,610
General health	77±35	82±44	77±24	0,865
Social functioning	100±28	100±31	88±25	0,786
Role Emocional	92±30	92±27	92±30	0,919
Emotional well-being	60±33	68±34	60±32	0,610

Table 1: BDI - Beck Depression Inventory; BMI - Body Mass Index; IQR - Interquartile Range; SF-36 - Short Form 36 Survey.

Results:
There were no statistically significant differences in age, gender, or smoking habits between the groups
The outpatient group had a greater median reduction in BMI (16 vs. 12) and more weekly exercise hours (7 vs. 3), though these differences were not statistically significant
Both groups had similar BDI-II and SF-36 scores

Discussion/conclusion:
✓ Protocol is practicable and safe

✓ Quality of life and mental health outcomes were similar across groups

✓ Outpatients showed greater BMI reduction and higher physical activity, but results weren't statistically significant. Nevertheless, encouraging physical activity and healthy lifestyle changes as part of perioperative care may enhance patient adherence and outcomes

References:
Stenberg E, Dos Reis Falcão LF, O'Kane M, et al. Guidelines for Perioperative Care in Bariatric Surgery: Enhanced Recovery After Surgery (ERAS) Society Recommendations: A 2021 Update [published correction appears in World J Surg. 2022 Jan 29;]. World J Surg. 2022;46(4):729-751. doi:10.1007/s00268-021-06394-9