WEIGHT REGAIN and WEIGHT FAILURE

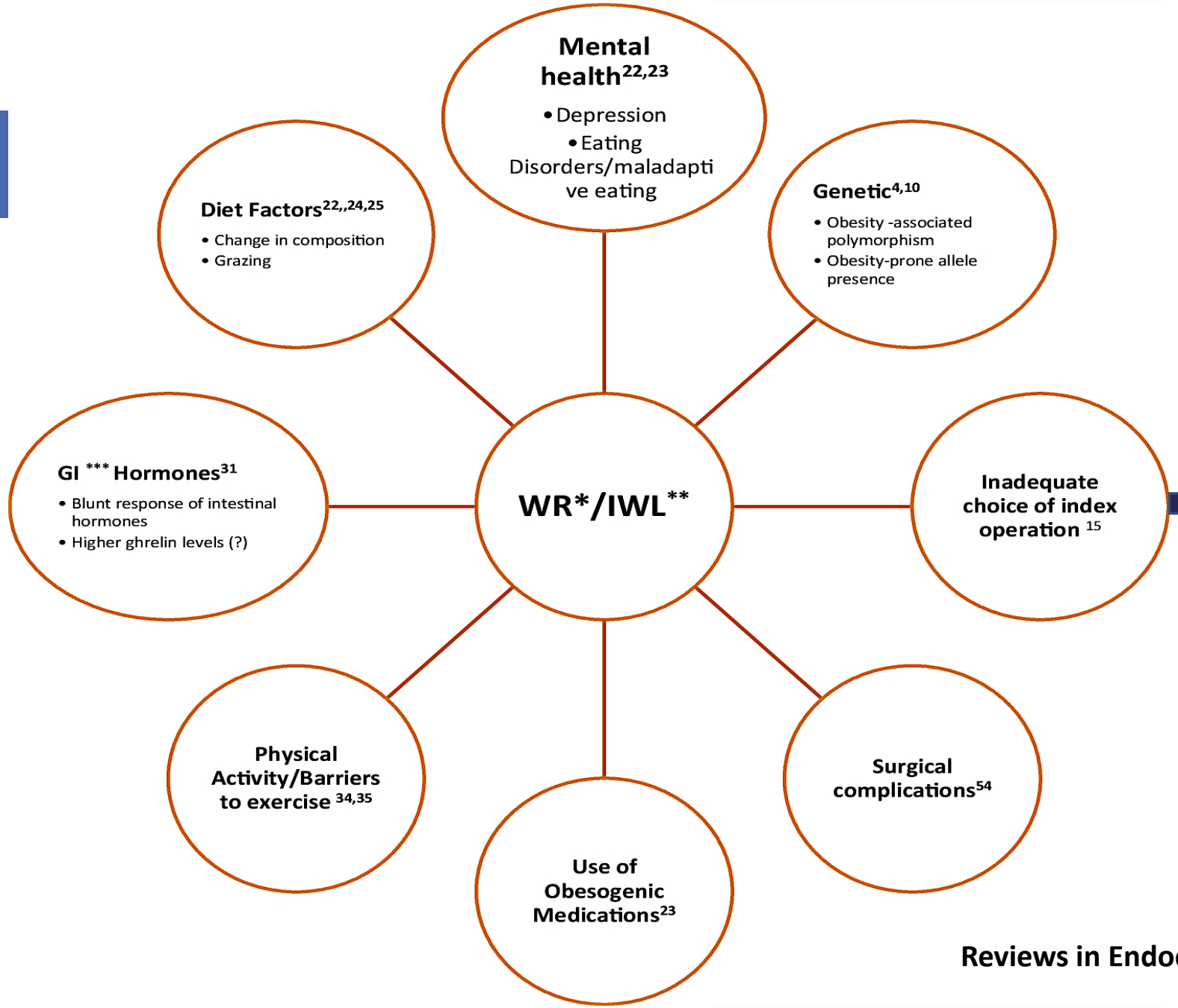
PUNTO DI VISTA DELL'ENDOSCOPISTA

Massimo P. Di Simone

Associato di Chirurgia Generale
Dip. Discipline Mediche e Chirurgiche
Alma Mater Studiorum – Università di Bologna

Centro Interaziendale di Chirurgia Metabolica e dell'Obesità
IRCSS Azienda Universitaria Ospedaliera di Bologna Policlinico di Sant'Orsola

Potential causes of insufficient weight loss or weight regain



revisional bariatric surgery:

- **"corrective"** of index bariatric operations to achieve their original desired function.
- **"conversion"** is exchanging one procedure to another type,
- **"reversal"** is intended to restore normal or near-normal anatomy.

Reviews in Endocrine and Metabolic Disorders (2023) 24:993–1002

Clapp B, Wynn M, Martyn C, Foster C, O'Dell M, Tyroch A. Long term (7 or more years) outcomes of the sleeve gastrectomy: a meta-analysis.

Surg Obes Relat Dis. 2018;14(6):741–7

Nine cohort studies, **652 pts** underwent **Sleeve Gastrectomy**

- patients regained a mean of **27.8%** (r= 14–37%) of their lost weight.
- revision rate = 13%

Seven-Year Weight Trajectories and Health Outcomes in the Longitudinal Assessment of Bariatric Surgery (LAMBS) Study.

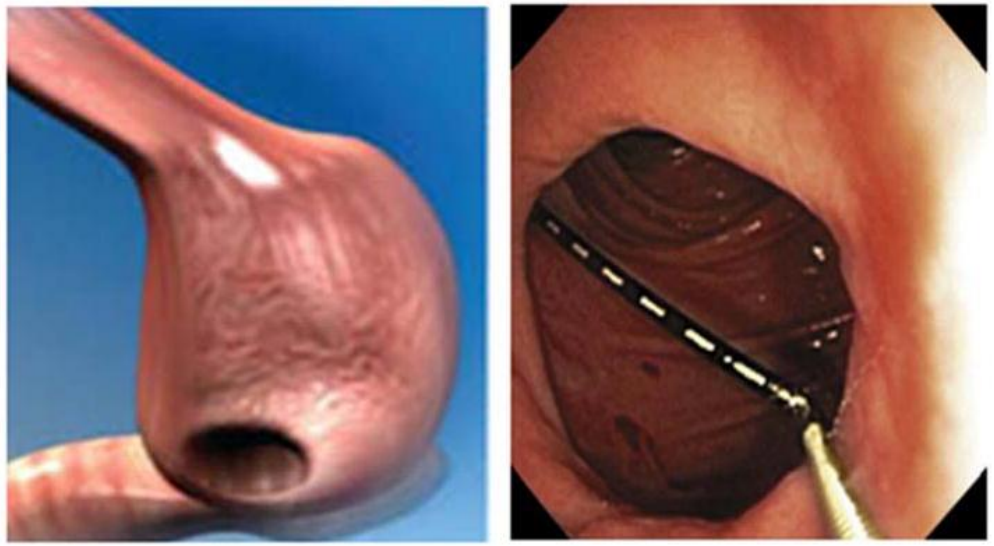
Courcoulas AP, King WC, Belle SH, et al JAMA Surg: 2018;153(5):427.

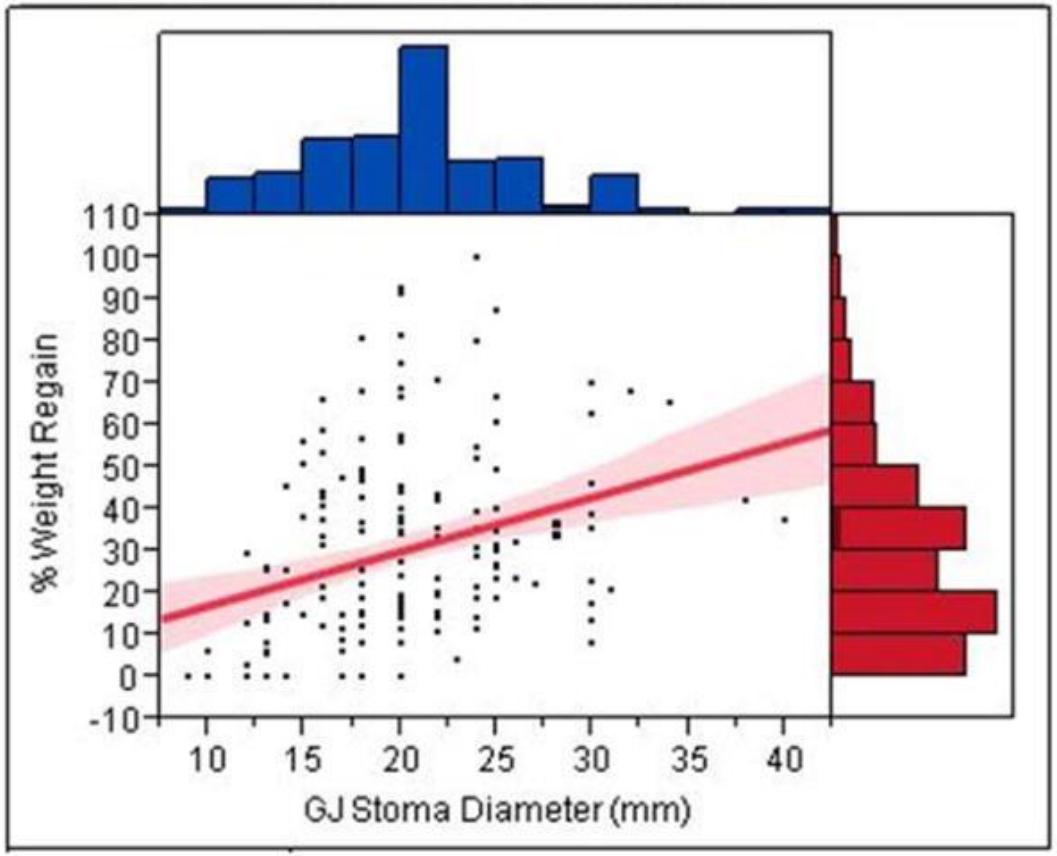
1738 pts underwent **RYGB**

between years 3 and 7 mean weight regain was **3.9%** of baseline weight.

Gastrojejunal Stoma Diameter Predicts Weight Regain after Roux-en-Y Gastric Bypass

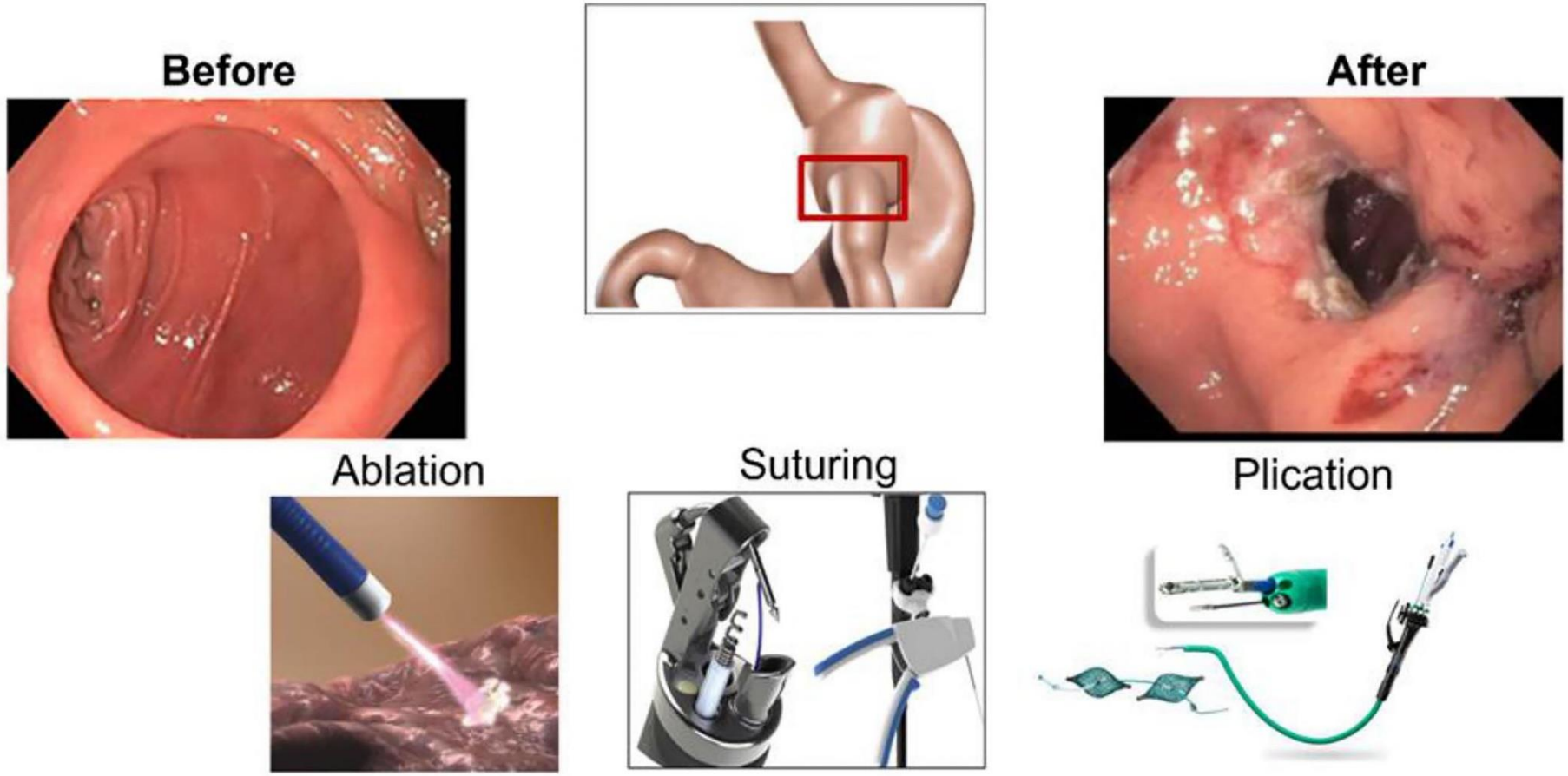
Barham K. Abu Dayyeh BK et al. Clin Gastroenterol Hepatol. 2010 Nov 17;9(3):228–33





linear relationship with a positive slope between the GJ stoma diameter in millimeters and percent of maximal weight lost after RYGB that was regained

Available modalities for endoscopic management of weight regain after RYGB

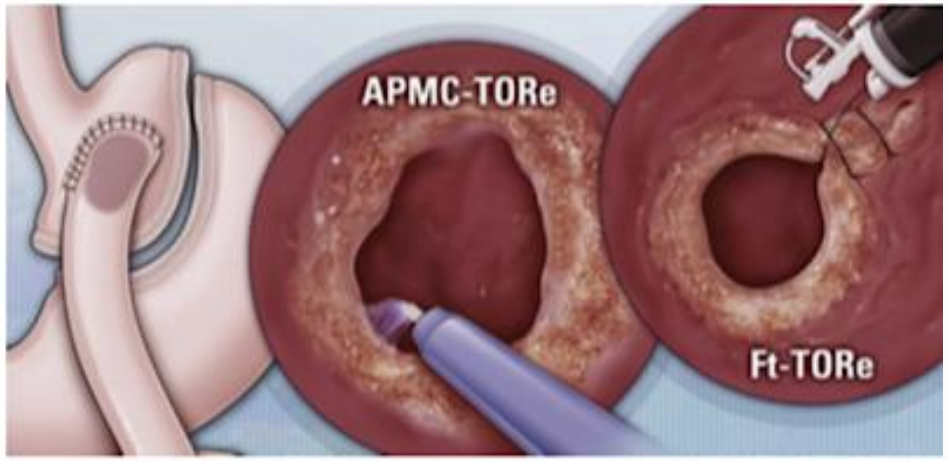


Abboud et al. Endoscopic Management of Weight Recurrence Following Bariatric Surgery. Front. Endocrinol. 2022

Endoscopic full-thickness suturing plus argon plasma mucosal coagulation versus argon plasma mucosal coagulation alone for weight regain after gastric bypass: a systematic review and meta-analysis

Veeravich Jaruvongvanich, MD,[1] Kompong Vantanasiri, MD,[2] Passisd Laoveeravat, MD,[3]

7 studies APMC-TORe (n 888) 9 studies ft-TORe (n 737)



	APMC-TORe	Ft-TORe
Total weight loss at 6 months (%)	**10.2 (8.4 - 12.1)**	**9.5 (8.1 – 11)**
Total weight loss at 12 months (%)	**9.5 (5.7 – 13.2)**	**5.8 (4.3 – 7.1)**
Number of endoscopic sessions (mean number from individual studies)	**1.2 - 3**	**1 – 2.1**

- At 12 months, both ft-TORe and APMC-TORe offer significant and comparable weight-loss outcomes with a high and comparable safety profile.
- APMC-TORe required multiple endoscopic sessions.

Gastrointest Endosc 2020;92:1164-75

Long-term Outcomes of Transoral Outlet Reduction (TORe) for Dumping Syndrome and Weight Regain After Roux-en-Y Gastric Bypass

Pontecorvi V. et al.: Obesity Surgery (2023) 33:1032–9

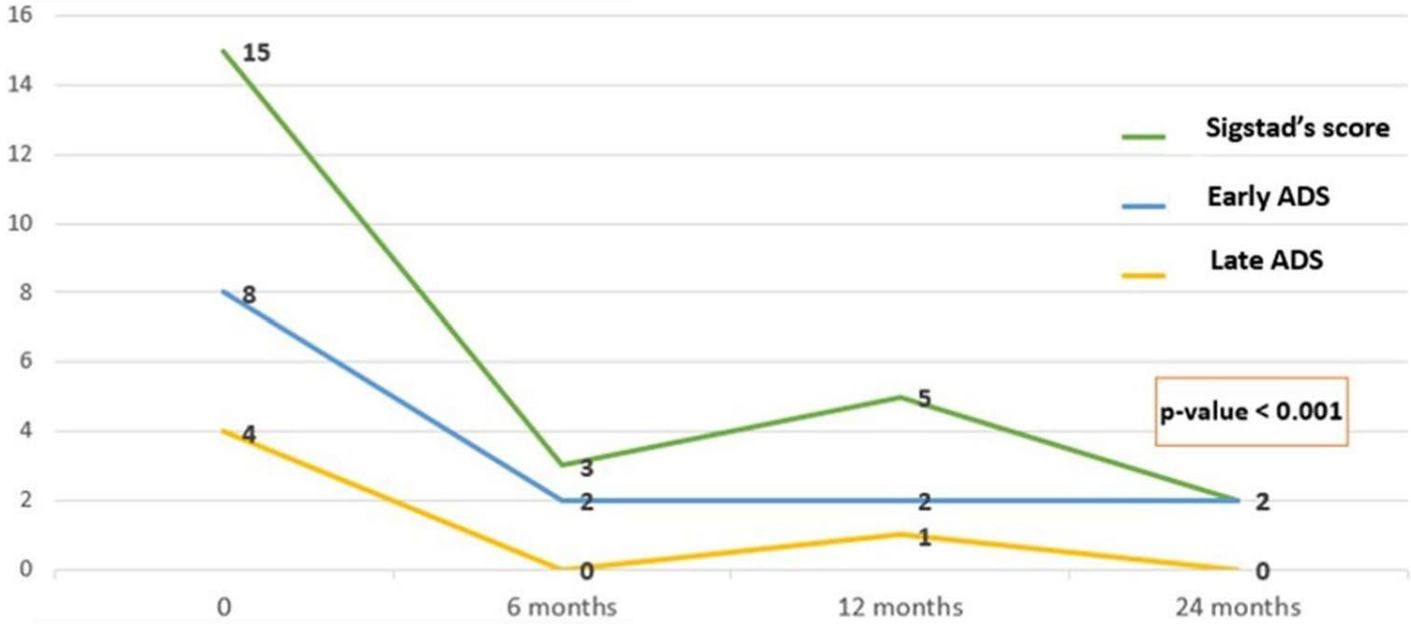
87 TORe

January 2015 - June 2021

The inclusion criteria were:

- Weight regain ≥ 50% of the weight loss after RYGB
- DS refractory to medical therapy
- Endoscopic evidence of gastro-jejunal anastomosis
- Pre-operative assessment by local bariatric multidisciplinary team with indication to endoscopic revision.

dumping syndrome after TORe



58 51 35 pts

Linea Guida della Società Italiana di Chirurgia dell'Obesità e delle Malattie Metaboliche

L'Endoscopia Bariatrica nel trattamento dell'obesità e delle complicanze associate

Linea guida pubblicata nel Sistema Nazionale Linee Guida Roma, 25 ottobre 2024

PICO 6 *(patient, intervention, comparison, outcome)*

Nei pazienti con insufficiente perdita di peso o recupero ponderale dopo chirurgia metabolica e bariatrica, la endoscopia bariatrica (suturing and sistemi endoluminali) è preferibile rispetto all'approccio psicologico/nutrizionale e medico per la perdita del peso corporeo?

Si suggerisce l'utilizzo della endoscopia bariatrica revisionale nei pazienti con obesità di classe ≥ I (BMI≥ 30 Kg/m2) con ripresa del peso corporeo o insufficiente perdita di peso corporeo dopo chirurgia metabolica e bariatrica, per il trattamento dell'obesità.

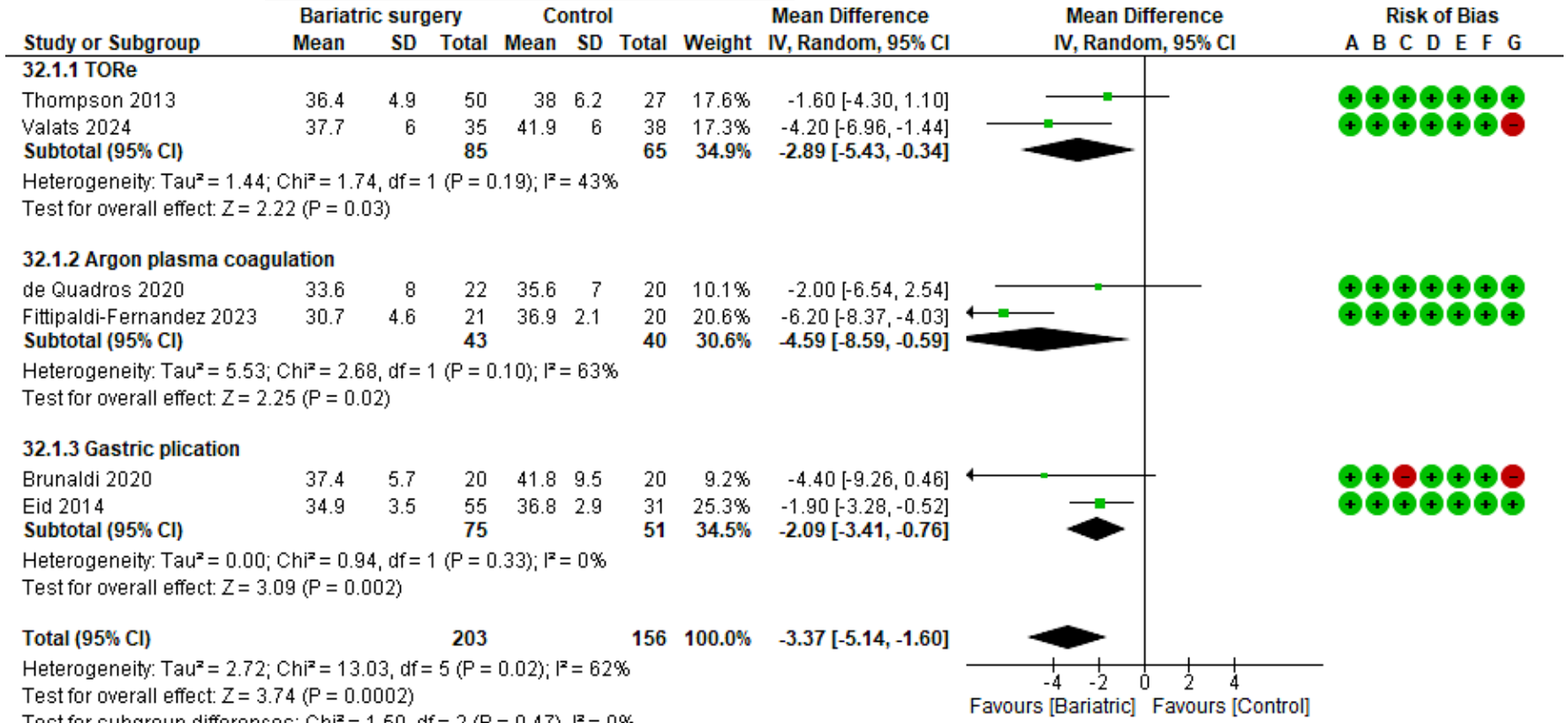
Raccomandazione debole a favore, con qualità delle prove bassa

Effetti della chirurgia bariatrica endoscopica revisionale rispetto a trattamenti non chirurgici dell'obesità o placebo/SoC sul **BMI** a fine studio, suddivisi per tipologia di intervento

TORe: riduzione transorale dell'anastomosi

Argon plasma coagulation: Coagulazione dell'anastomosi con laser argon.

Gastric plication: Plicatura gastrica.



Study or Subgroup	Bariatric surgery Mean	SD	Total	Control Mean	SD	Total	Weight	Mean Difference IV, Random, 95% CI
32.1.1 TORe								
Thompson 2013	36.4	4.9	50	38	6.2	27	17.6%	-1.60 [-4.30, 1.10]
Valats 2024	37.7	6	35	41.9	6	38	17.3%	-4.20 [-6.96, -1.44]
Subtotal (95% CI)			**85**			**65**	**34.9%**	**-2.89 [-5.43, -0.34]**
Heterogeneity: Tau² = 1.44; Chi² = 1.74, df = 1 (P = 0.19); I² = 43%								
Test for overall effect: Z = 2.22 (P = 0.03)								
32.1.2 Argon plasma coagulation								
de Quadros 2020	33.6	8	22	35.6	7	20	10.1%	-2.00 [-6.54, 2.54]
Fittipaldi-Fernandez 2023	30.7	4.6	21	36.9	2.1	20	20.6%	-6.20 [-8.37, -4.03]
Subtotal (95% CI)			**43**			**40**	**30.6%**	**-4.59 [-8.59, -0.59]**
Heterogeneity: Tau² = 5.53; Chi² = 2.68, df = 1 (P = 0.10); I² = 63%								
Test for overall effect: Z = 2.25 (P = 0.02)								
32.1.3 Gastric plication								
Brunaldi 2020	37.4	5.7	20	41.8	9.5	20	9.2%	-4.40 [-9.26, 0.46]
Eid 2014	34.9	3.5	55	36.8	2.9	31	25.3%	-1.90 [-3.28, -0.52]
Subtotal (95% CI)			**75**			**51**	**34.5%**	**-2.09 [-3.41, -0.76]**
Heterogeneity: Tau² = 0.00; Chi² = 0.94, df = 1 (P = 0.33); I² = 0%								
Test for overall effect: Z = 3.09 (P = 0.002)								
Total (95% CI)			**203**			**156**	**100.0%**	**-3.37 [-5.14, -1.60]**
Heterogeneity: Tau² = 2.72; Chi² = 13.03, df = 5 (P = 0.02); I² = 62%								
Test for overall effect: Z = 3.74 (P = 0.0002)								
Test for subgroup differences: Chi² = 1.50, df = 2 (P = 0.47), I² = 0%								

Risk of bias legend
(A) Random sequence generation (selection bias)
(B) Allocation concealment (selection bias)
(C) Blinding of participants and personnel (performance bias)
(D) Blinding of outcome assessment (detection bias)
(E) Incomplete outcome data (attrition bias)
(F) Selective reporting (reporting bias)
(G) Other bias

Effetti della chirurgia bariatrica endoscopica revisionale rispetto a trattamenti non chirurgici dell'obesità o placebo/SoC sulla **glicemia a digiuno** a fine studio, suddivisi per tipologia di intervento

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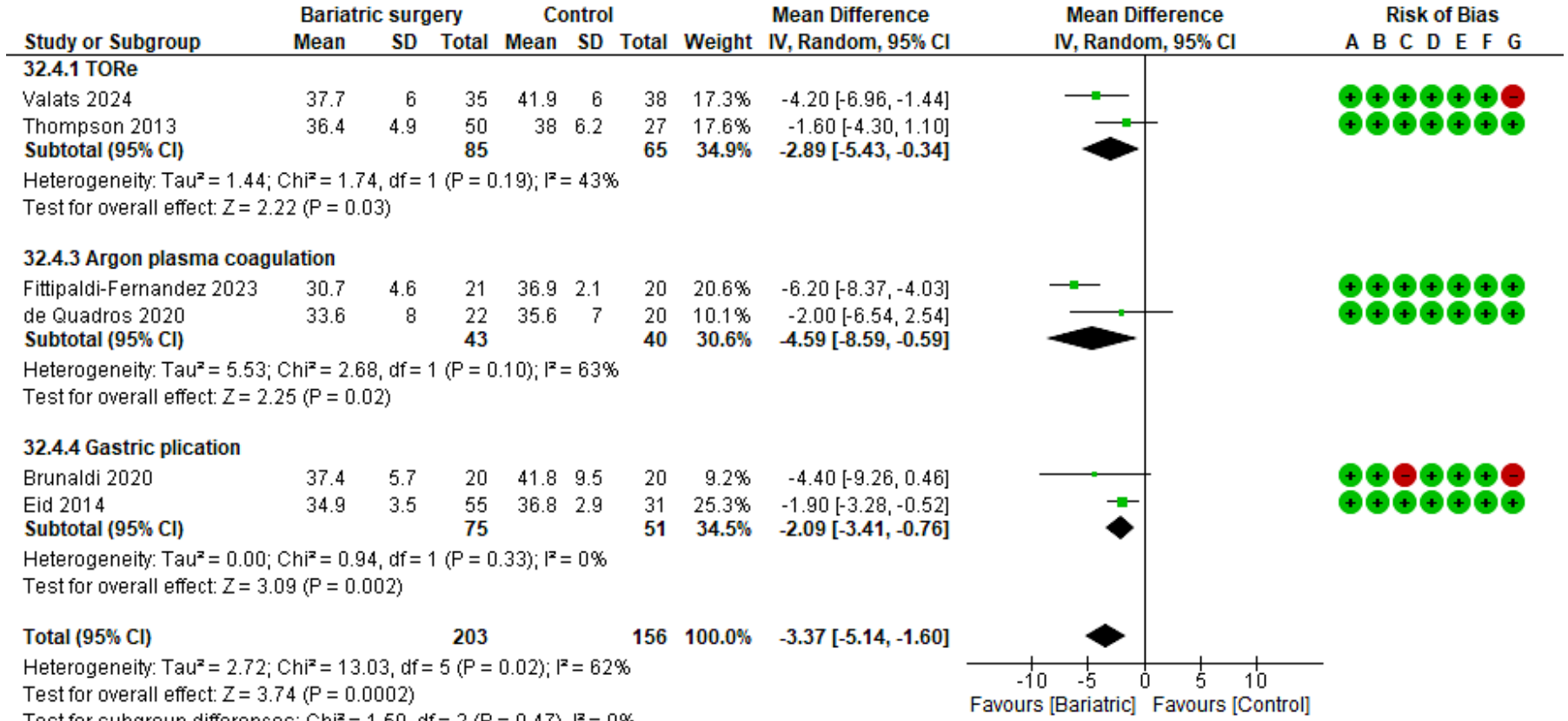


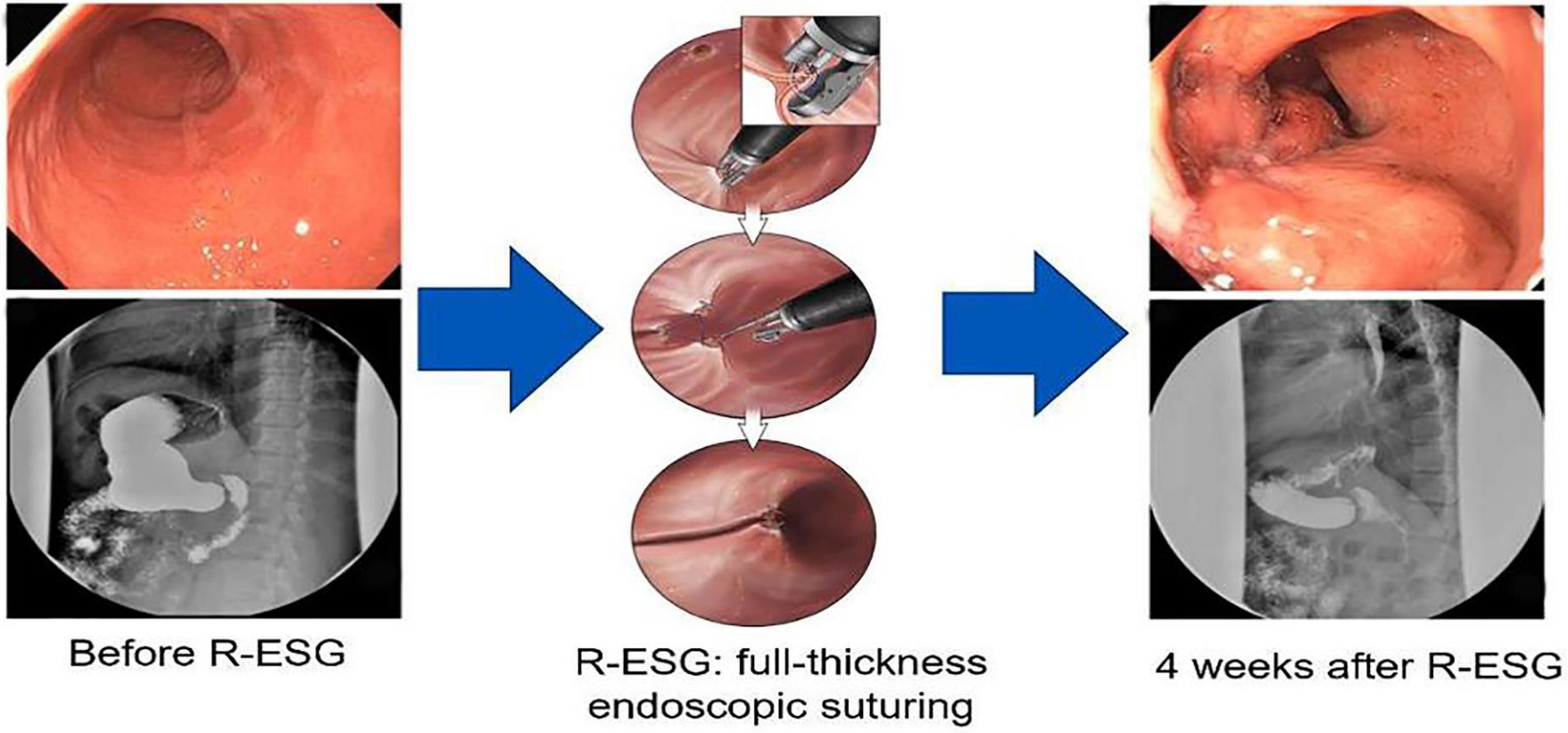
Five-year outcomes of transoral outlet reduction for the treatment of weight regain after Roux-en-Y gastric bypass.

Jirapinyo P, et al. Gastrointest Endosc 2020: 91(5):1067–73.

331 patients analyzed

Deaths	**0**
serious adverse events	**0**
moderate side effects (GI hemorrhage and strictures)	**3.2 %**
mild side effects (abdominal pain)	**7 %**

Endoscopic sleeve gastroplasty for endoscopic revision of sleeve gastrectomy



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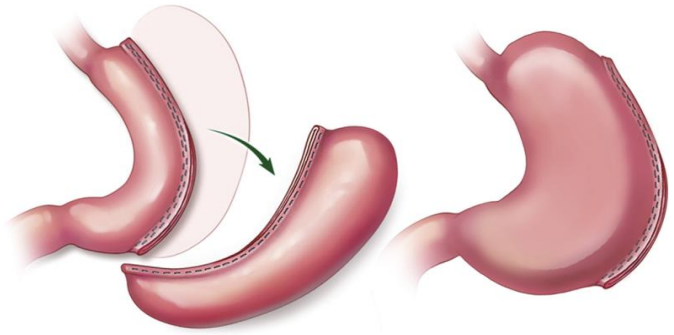
Weight Regain after Sleeve Gastrectomy



R-Endosleeve ***(OverStitch™ endoscopic suture system)***
after Sleeve Gastrectomy

Author	Year	Type of Study	# of pts	Weight Loss (1 year)
de Moura DTH et al.	2020	Retrospective (12 different centers)	34	**TWL >10 % = 82% pts** **EWL > 25% = 100% pts** (fu 17 pts)
Maselli DB et al.	2021	Prospective (9 different centers)	82	**TWL = 15.7 % ± 7.6%** (FU 51.2% of pts) **EWL= 47.6% ± 26.6%** (FU 47.6% of pts)

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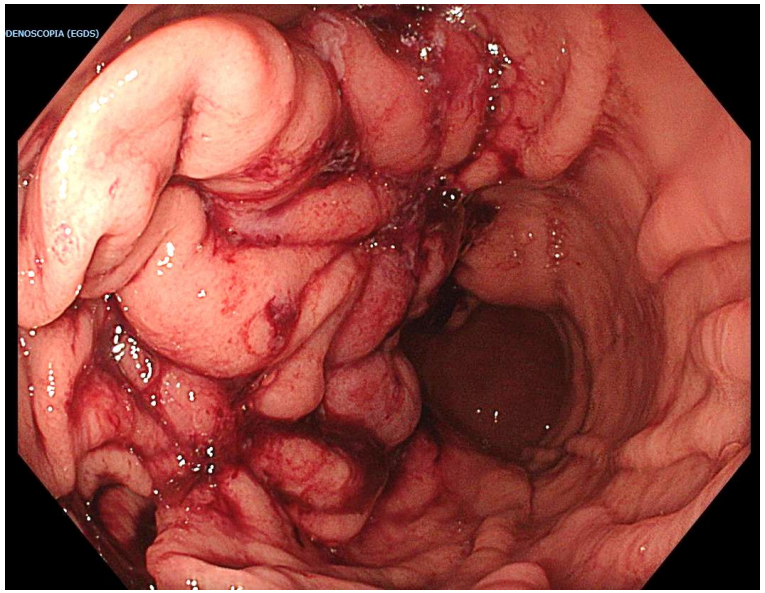
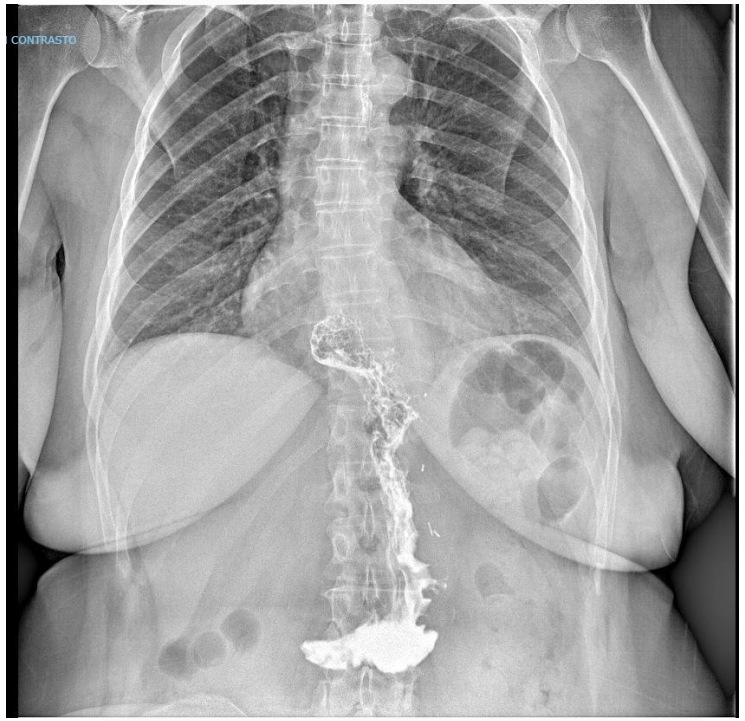
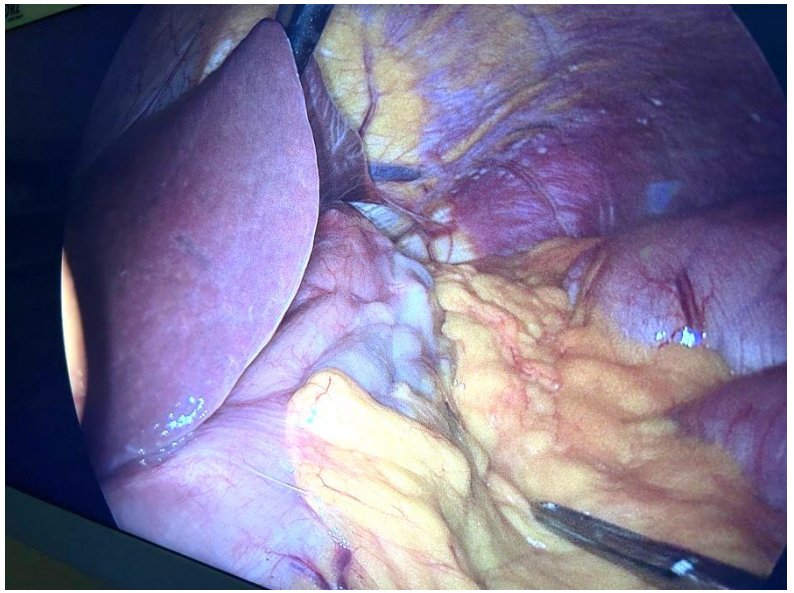
endoscopic sleeve gastroplasty

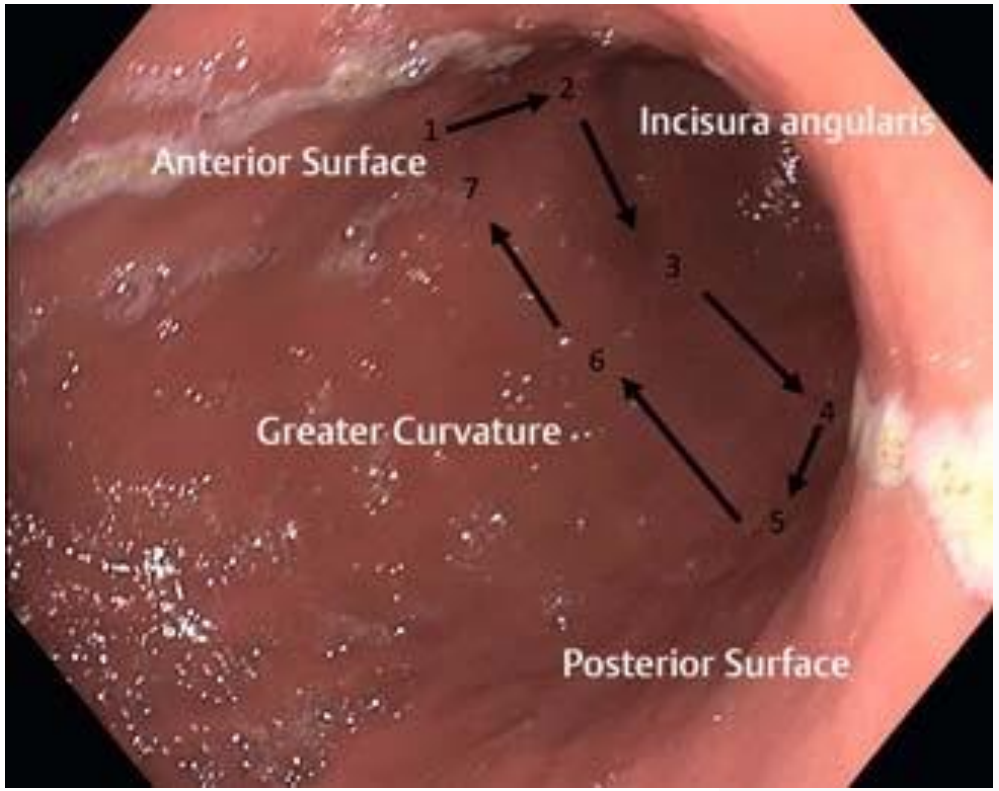
(*OverStitch SxTM endoscopic suture system)*

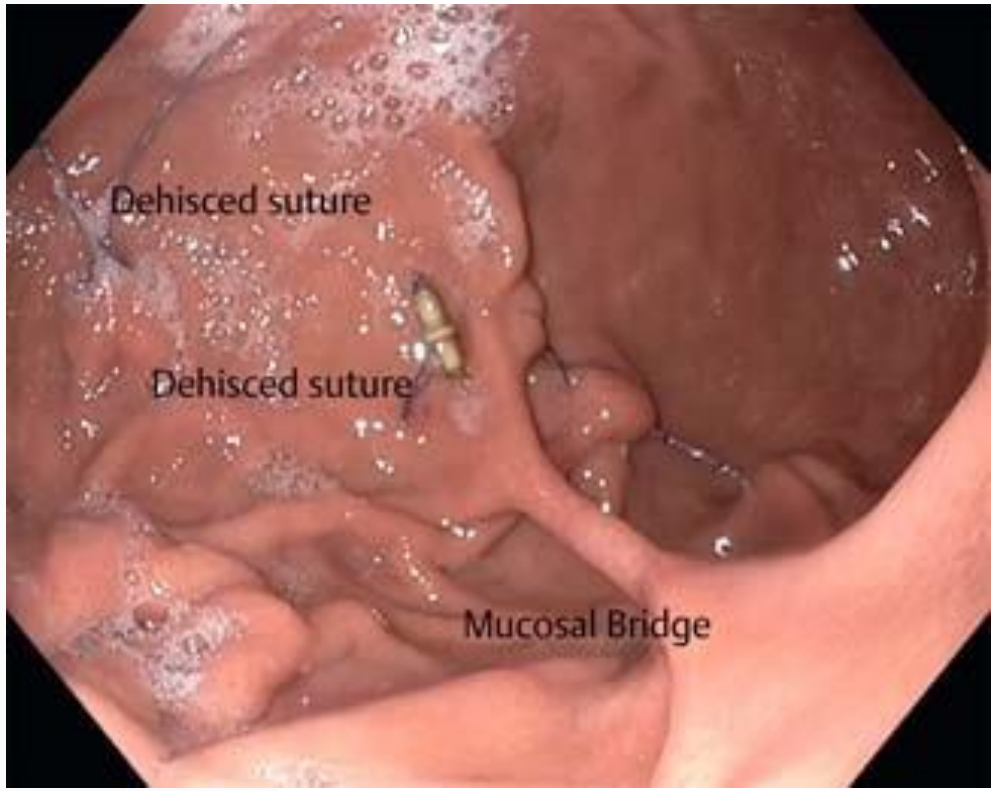






Redo endoscopic sleeve gastroplasty

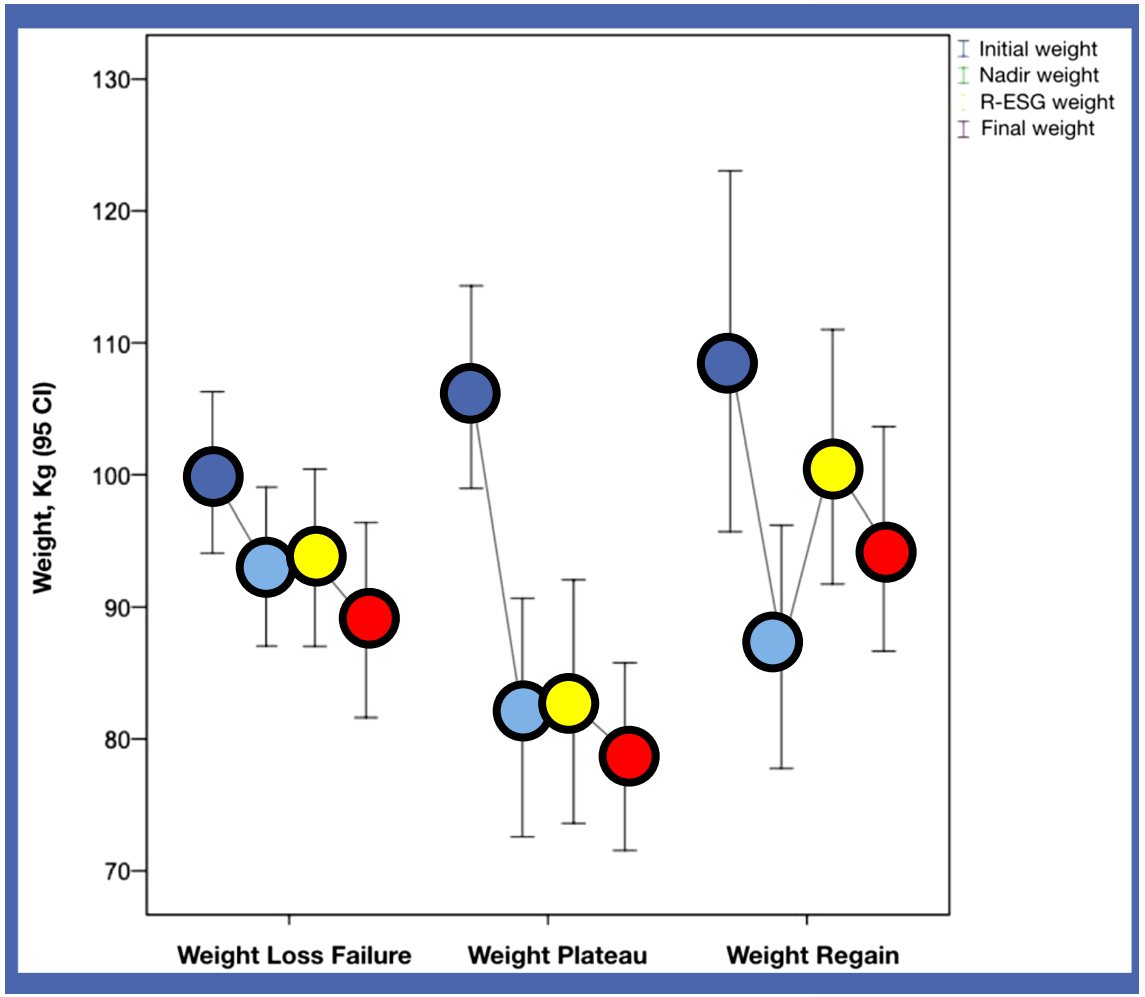




Shah-Khan Sardar et al. Endoscopy 2023; 55: E349–E350

Re-suturing after primary endoscopic sleeve gastroplasty (ESG) for obesity.

Lopez-Nava G, et al: Surg Endosc 2021;35:2523–30



35 / 482 (7%) P-ESG

12 pts= weight loss failure (WF): <10% TBWL at 6-months

11pts= weight plateau (WP): lost ≥ 10% TBWL but could not lose further over 3-months

12pts= weight regain (WR): lost≥10% TBWL and regained 50% of the maximum weight loss at or after 1-year

The field of Endobariatrics

- Pre and post-operative assessment
- primary endoscopic procedures for the management of obesity
- revision procedures for patients who experience weight regain after bariatric surgery
- endoscopic treatments for various complications of bariatric surgery (perforations, leaks, stenosis and fistulas)

S.I.C.OB. EVENTI

RICCIONE, SABATO 12 APRILE 2025

CHIRURGIA DELL'OBESITA: DAL TRATTAMENTO INTEGRATO AL WELLNESS

Resp. Scientifico
Andrea Lucchi

iscriviti all'evento sicobriccione.cloud

massimo.disimone@unibo.it