Bariatric and Metabolic Endoscopy: New Management Paradigm

Combining Endoscopy and Medications: Does it Make Sense?

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- Trans.Duodenal.Concepts

THIS IS A HOT TOPIC!

THIS IS A HOT TOPIC, BECAUSE....

there are significant testemonials and a ubiquitous media presence

LIFESTYLE > HEALTH

Oprah Winfrey Tackles Key Issues Around Weight Loss Drugs amid Obesity Epidemic: 'Very Personal to Me'

In a new primetime TV special airing on ABC, the Emmy-winning icon hosts an informative discussion about "shame, blame and the weight loss revolution"

COMBINATION THERAPY BARIATRIC SURGERY PLUS MEDICATION

- Esparham A, et al. **Safety and efficacy of glucagon-like peptide-1 (GLP-1) receptor agonists in patients with weight regain or insufficient weight loss after metabolic bariatric surgery: A systematic review and meta-analysis.** Obes Rev. 2024 Aug 12:e13811.
- Mok J, et al. **Safety and Efficacy of Liraglutide, 3.0 mg, Once Daily vs Placebo in Patients With Poor Weight Loss Following Metabolic Surgery: The BARI-OPTIMISE Randomized Clinical Trial.** JAMA Surg. 2023 Oct 1;158(10):1003-1011.
- Pereira M, et al. **Role of GLP1-RA in Optimizing Weight Loss Post-Bariatric Surgery: A Systematic Review and Meta-Analysis.** Obes Surg. 2024 Aug 31.
- Thakur U, et al. **Liraglutide augemnts weight loss after laparoscopic sleeve gastrectomy: a randomised, double-blind, placebo-control study.** Obes Surg. 2021;31(1):84-92.
- Sher T, et al. **Adjuvant and Neo-Adjuvant Anti-Obesity Medications and Bariatric Surgery: A Scoping Review.** Curr Obes Rep. 2024 Jun;13(2):377-402.
- Firkins SA, et al. **Utilization of Anti-obesity Medications After Bariatric Surgery: Analysis of a Large National Database.** Obes Surg. 2024 May;34(5):1415-1424.

COMBINATION THERAPY BARIATRIC ENDOSCOPY PLUS MEDICATION

- Jirapinyo P, Thompson CC. **Combining transoral outlet reduction with pharmacotherapy yields similar 1-year efficacy with improved safety compared with surgical revision for weight regain after Roux-en-Y gastric bypass (with videos).** Gastrointest Endosc. 2023 Oct;98(4)
- Jirapinyo P, Jaroenlapnopparat A, Zucker SD, Thompson CC. **Combination Therapy of Endoscopic Gastric Remodeling with GLP-1RA for the Treatment of MASLD.** Obes Surg. 2024 Mar
- Imam A, et al. **Weight Loss Effect of GLP-1 RAs With Endoscopic Bariatric Therapy and Bariatric Surgeries**. J Endocr Soc. 2023 Oct 19;7(12):bvad129.
- Badurdeen D, et al. **Endoscopic sleeve gastroplasty plus liraglutide versus endoscopic sleeve gastroplasty alone for weight loss.** Gastrointest Endosc. 2021 Jun;93(6):1316-1324.e1.

Badurdeen D, et al. **Endoscopic sleeve gastroplasty plus liraglutide versus endoscopic sleeve gastroplasty alone for weight loss.**

Gastrointest Endosc. 2021 Jun;93(6):1316-1324.e1.

Background and aims: Endoscopic sleeve gastroplasty (ESG) has been shown to be effective for inducing weight loss. The efficacy of liraglutide, a glucagon-like peptide-1 agonist, to augment weight loss after ESG is unknown. This study aims to evaluate the efficacy of ESG and liraglutide (ESG-L) compared with ESG alone.

Methods: This was a retrospective study of prospectively collected data from patients undergoing ESG at 3 outpatient clinics in Brazil between November 2017 and July 2018. Liraglutide was offered to all patients 5 months after ESG. Patients who opted to take liraglutide (ESG-L) were matched 1:1 to patients who declined it (ESG). The primary outcome was percent total body weight loss (%TBWL), and percent excess weight loss (%EWL) 7 months after initiation of liraglutide (12 months after ESG). The secondary outcome was change in percent body fat 12 months after ESG. ESG technique and postprocedure follow-up were identical at all 3 sites.

Results: Propensity score matching yielded 26 matched pairs. Adjusted comparisons between the 2 groups showed that patients who opted to take liraglutide had a superior mean %TBWL 7 months after initiation of liraglutide (ESG-L) compared with those who declined it (ESG) (24.72% ± 2.12% vs 20.51% ± 1.68%, respectively; $P < .001$). ESG-L had a statistically greater reduction in percent body fat compared with ESG (7.85% ± 1.26% vs 10.54% ± 1.88%, respectively; $P < .001$) at 12 months.

Conclusions: Addition of liraglutide at 5 months results in superior weight loss and improved efficacy as demonstrated by decreased body fat 12 months after ESG. Further studies are imperative to determine optimal dose, timing, and duration of liraglutide.

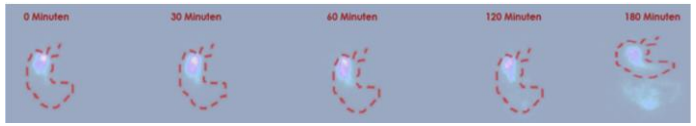
IFSO
International Federation for Surgery of Obesity & Metabolic Disorders

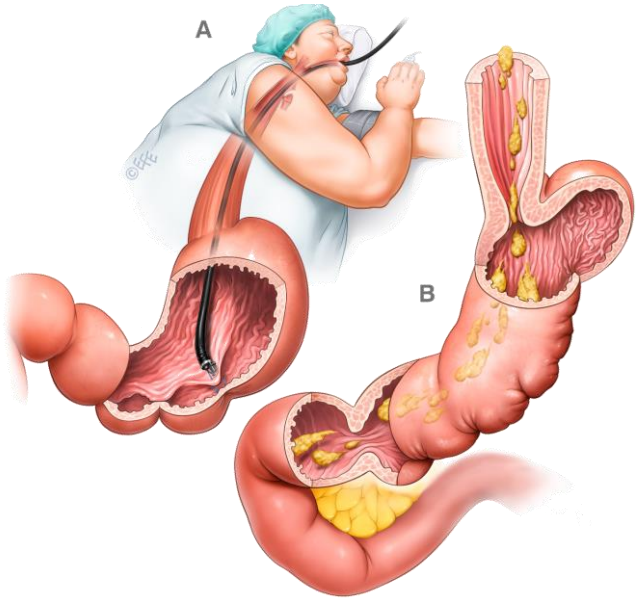
The Role of Obesity Management Medications (OMMs) in the Context of Metabolic/Bariatric Surgery (MBS)

Endoscopic procedures and OMM Lines 408-416

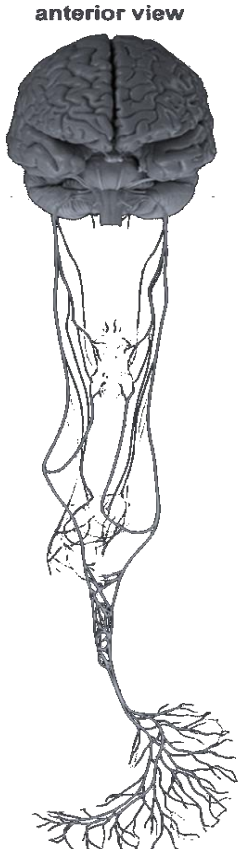
24. Although further evidence is needed to determine the value added by, and the comparative effectiveness of, combination therapies involving endoscopic procedures and OMM, such an approach can potentially enhance long-term weight loss and positively impact comorbid conditions. **LoEIII**

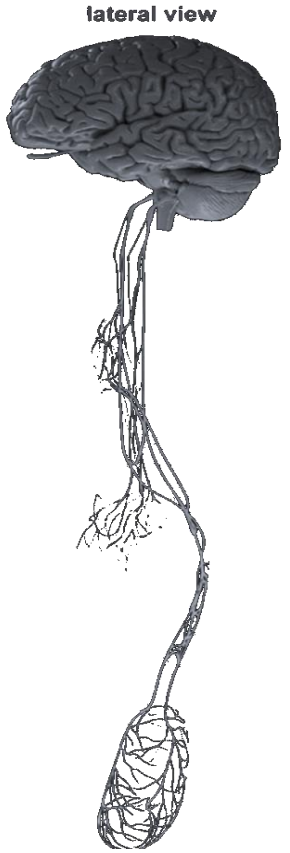
HOW DOES BARIATRIC ENDOSCOPY AND OMM FIT TOGETHER?



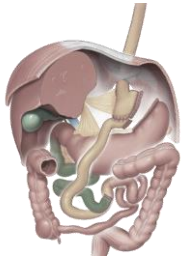


Mechanical effect translates into weight loss



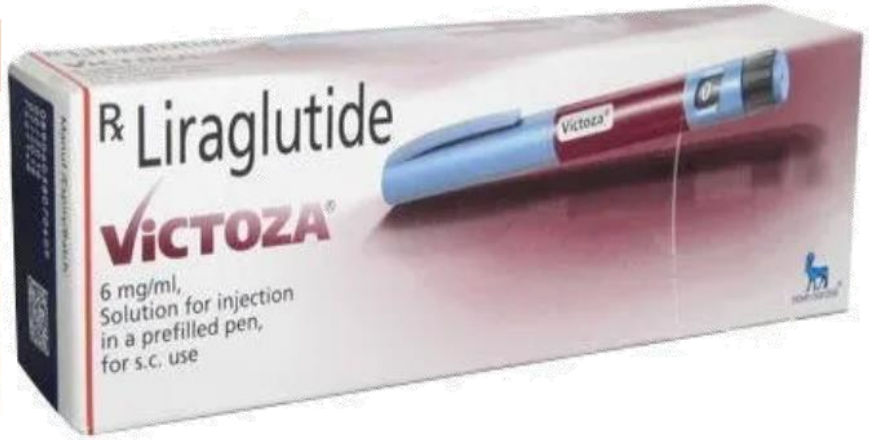


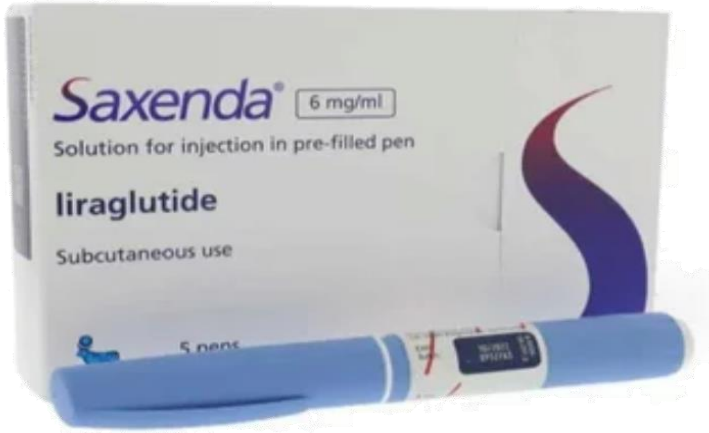
- ESG SLOWS GASTRIC EMPTYING
- ESG CREATES A POUCHLIKE-RESERVOIR AT THE FUNDUS
- ESG IS COMPLETLY ORGAN PRESERVING
- ESG IS MULTI-REPEATABLE
- ESG IS A NON-REFLUXIVE PROCEDURE
- ESG SPARES THE ANGELS OF HIS



GLP-1 – ANALOGEUS. LIRAGLUTIDE

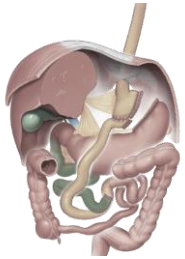
	Time (minutes)	Preoperative	Postoperative	p
GLP-1 curve (ng/ml)	-15	3.4±0.5	3.3±3	0.853
	0	3.7±0.5	3.2±3	0.674
	15	3.8±0.5	11.2±13.7	0.077
	30	4.2±0.7	13±17.8	0.107
	45	3.6±0.5	7.1±5.4	0.048
	60	3.9±0.7	5.9±5.9	0.297
	90	3.8±0.6	4.2±2.6	0.703
	120	4±0.6	3.9±2.1	0.866
	150	3.7±0.6	3.8±2	0.616





TRANSFORM FROM AN ANTI-DIABETIC MEDICATION

TO AN ANTI-OBESITY MEDICATION (AOM).



GLP-1 – ANALOGEUS. SEMAGLUTIDE

	Time (minutes)	Preoperative	Postoperative	p
GLP-1 curve (ng/ml)	-15	3.4±0.5	3.3±3	0.853
	0	3.7±0.5	3.2±3	0.674
	15	3.8±0.5	11.2±13.7	0.077
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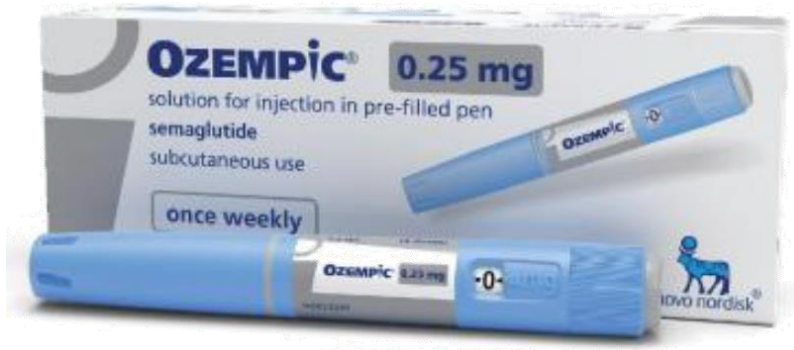
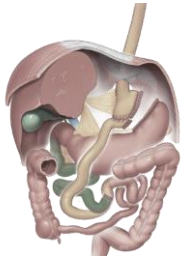


TRANSFORM FROM AN ANTI-DIABETIC MEDICATION

TO AN ANTI-OBESITY MEDICATION (AOM).



GLP-1 – ANALOGEUS. GLP-1 + GIP => MOUNJARO

	Time (minutes)	Preoperative	Postoperative	p
GLP-1 curve (ng/ml)	-15	3.4±0.5	3.3±3	0.853
	0	3.7±0.5	3.2±3	0.674
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	150	3.7±0.6	3.8±2	0.616

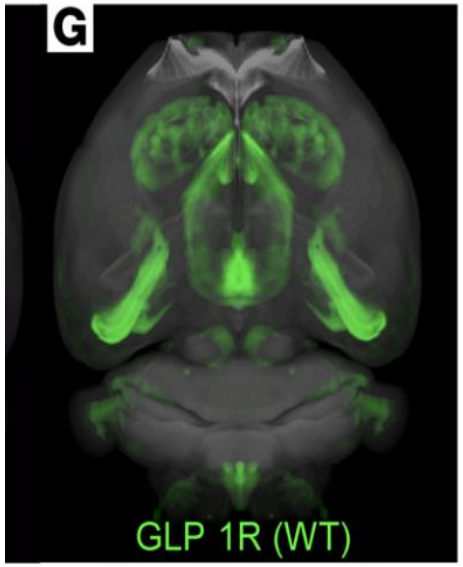
TRANSFORM FROM AN ANTI-DIABETIC MEDICATION

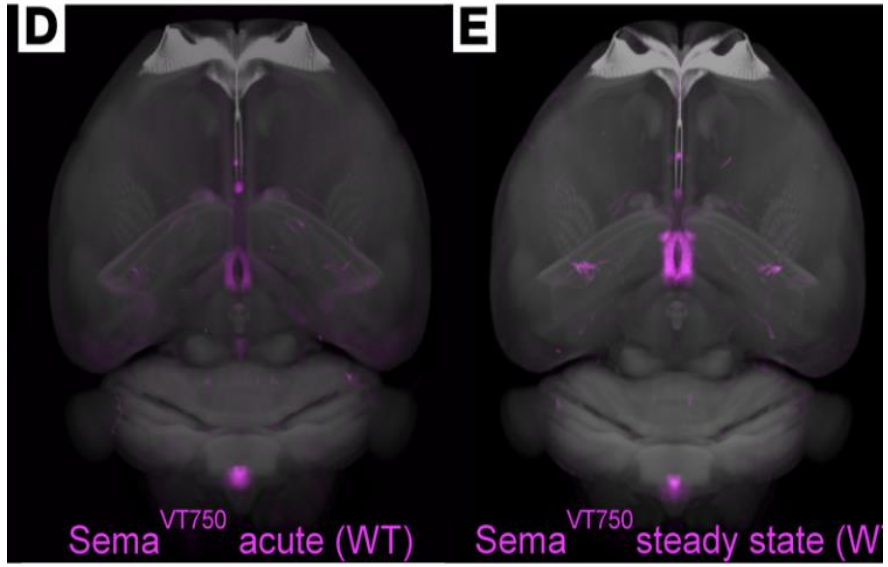
TO AN ANTI-OBESITY MEDICATION (AOM).

Gabery et al **Semaglutide lowers body weight in rodents via distributed neural pathways.** JCI Insight. 2020 Mar 26;5(6):e133429.
Suggest **that semaglutide lowers body weight by direct interaction with diverse GLP-1R populations and by directly and indirectly affecting the activity of neural pathways involved in food intake, reward, and energy expenditure.**

MODE OF ACTION.

Incretin-ANALOGUES





SIGNIFICANTLY SLOWER GASTRIC EMPTYING

INCRETINES REALEASE INSULIN (Mounjara ,IMPROVES BET-CELL FUNCTION 6-FOLD IN DIABETIC PATIENTS)

TAKE HOME

SYNERGIES.

SLOWER GASTRIC EMPTYING

COMPLEMENTATIONS.

AOM	**PRIMARILY HORMONAL**
BE	**PRIMARILY MECHANICAL** AND TRANSLATES IN A CENTRAL EFFECT INDUCING SATIETY

THE COMBINATION THERAPY SEEMS TO BE VERY PROMISING.
MORE EVIDENCE IS NEEDED

THANK YOU FOR YOUR KIND INTEREST

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