



XXIX IFSO World Congress

1-4 September 2026 | Toronto, Canada

**FROM MERIT TO META-ANALYSIS:
WHEN EVIDENCE REDEFINES
THE OBESITY ALGORITHM**

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TORONTO2026

**The Future of Obesity Management:
From Weight Loss to Health Gain**



ifso2026.org

Disclosure Slide

I have the following potential conflict of interest to report

Receipt of consultation fees:

- Johnson & Johnson America (2021,2024)
- Novo Nordisc (2021)
- Innovamedica (2025-2026)
- Genesis Medtech (USA) (2023)
- Boston Scientific (2024-2026)
- Ab Medica (2025)
- Principal Investigator: MagDI Italy and MagCR Study, GT MetabolicsTM;
- Course Director: Become a Metabolic Bariatric Surgeon, Naples, Italy
- President elect Young IFSO 2026-2028



The Gastric-Volume-Reducing Effect



STATUS EVALUATION REPORT



2015

Endoscopic bariatric therapies

Volume 81, No. 5 : 2015 GASTROINTESTINAL ENDOSCOPY 1073

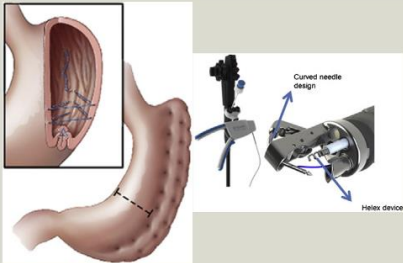
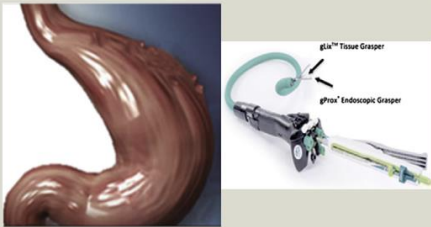
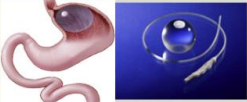
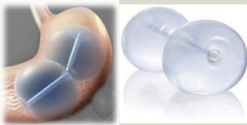
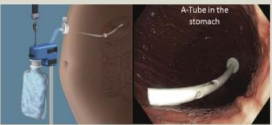
Gastroplasty Techniques		
Endoscopic Sleeve Gastroplasty (ESG) with Overstitch Endoscopic Suturing Device Apollo Endosurgery		ESG is created by a series of endoluminally placed free-hand, full-thickness, closely spaced sutures through the gastric wall from the pre-pyloric antrum to the gastroesophageal junction by using an endoscopic suturing device (Overstitch). This procedure reduces the entire stomach along the greater curvature, to form an endoscopically created sleeve.
Primary Obesity Surgery Endolumenal (POSE) USGI Medical		Large, overtube-style platform that has 4 working channels that can accommodate a slim endoscope and 3 specialized instruments to place transmural tissue anchor plications in the gastric fundus (to reduce accommodation) and in parts of the distal gastric body.

TABLE 1. Gastric Interventions		
Intragastric Balloons (IGB)		
Orbera Apollo Endosurgery		Elastic spherical balloon made from silicone and filled with about 500-700 ml of saline. It is inserted and retrieved endoscopically.
ReShape Duo ReShape Medical		Saline solution-filled, dual intragastric balloon system with 2 balloons attached to each other by a flexible tube. Each balloon has independent channels so that unintentional leaks or deflation in 1 balloon do not impact the other balloon.
Spatz Adjustable Balloon System Spatz Medical		Saline filled intragastric balloon with an extractable inflation tube for volume adjustment, while the IGB remains in the stomach.
Obalon Gastric Balloon Obalon Therapeutics		Gas-filled balloon with a maximal volume of 250ml. It is compressed, folded, and fitted in a large gelatin capsule. Once the capsule is ingested, the catheter extends from the stomach to outside the body through the esophagus and the mouth. After balloon inflation, the catheter is detached and removed. One or more balloon can be swallowed during the same session.
Other space occupying EBTs		
TransPyloric Shuttle BAROnova, Inc.		Endoluminally delivered solid silicone funnel-type device that delays gastric emptying by intermittent sealing of pylorus with peristalsis.
Full Sense Device BFW LLC		Modified fully-covered gastroesophageal stent with a cylindrical esophageal component and a gastric disk that are connected by struts, which ensure that the gastric disk applies pressure on the gastric cardia to induce satiety.
Aspiration Therapy		
A-tube and Aspire Assist Device Aspire Bariatrics		Specially designed percutaneous gastrostomy tube, known as the A-Tube. The tube is made of silicone and is inserted in a fashion similar to that of a percutaneous endoscopic gastrostomy tube. Two weeks after insertion, the external portion of the tube is shortened, and a connector valve is attached. The connector valve is flush with the skin and is connected to the Aspire Assist device to allow aspiration of 30% of the ingested meal 20 minutes after ingesting it.

(continued on the next page)



The Gastric-Volume-Reducing Effect

Gastroplasty techniques. Two studies evaluating the ESG procedure on 20 and 10 obese patients respectively reported a %EWL between 30% to 40% at 6 months.^{64,65} Results are not yet available from the PROMISE (Endoscopic Suturing for Primary Obesity Treatment) trial, which is a recently completed multicenter, prospective, single-arm study that evaluated the safety, durability, and 12 months outcomes with this technique.

A single-center, open-label, prospective trial enrolling 45 obese patients mostly with class I and II obesity demonstrated the feasibility and safety of the POSE procedure.⁶⁶ A mean of 8.2 suture anchors were placed in the fundus and 3 in the distal body. Subjects lost around 49% EWL at 6 months. The ESSENTIAL trial is a U.S. multicenter, randomized, sham-controlled pivotal trial of the POSE procedure that has enrolled 332 patients and will follow them for 12 months to evaluate safety and efficacy endpoints.

- 64. Lopez-Nava G, Galvao MP, da Bautista-Castano I, et al. Endoscopic sleeve gastroplasty for the treatment of obesity. Endoscopy. Epub 2014 Nov 7.
- 65. Sharaiha RZ, Kedia P, Kumta N, et al. Initial experience with endoscopic sleeve gastroplasty: technical success and reproducibility in the bariatric population. Endoscopy 2015;47:164-6.
- 66. Espinos JC, Turro R, Mata A, et al. Early experience with the Incisionless Operating Platform (IOP) for the treatment of obesity: the Primary Obesity Surgery Endolumenal (POSE) procedure. Obes Surg 2013;23:1375-83.

2015: n = 30 ESG, n = 45 POSE



FDA Approval



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration
9200 Corporate Boulevard
Rockville MD 20850

Apollo Endosurgery, Inc.
% Mr. Dennis McWilliams
President & CEO
7000 Bee Caves Road, Suite 350
Austin, Texas 78746

AUG 18 2008

Re: K081853
Trade/Device Name: OverStitch Endoscopic Suturing System
Regulation Number: 21 CFR 876.1500
Regulation Name: Endoscope and accessories
Regulatory Class: II
Product Code: OCW, HCF
Dated: June 26, 2008
Received: June 30, 2008

Indications for Use

510(k) Number (if known):

Device Name: OverStitch Endoscopic Suturing System

Indications for Use: The Apollo Endosurgery OverStitch Endoscopic Suture System is intended for endoscopic placement of suture(s) and approximation of soft tissue.

double-channel therapeutic scopes

TORONTO2026 The Future of Obesity Management:
From Weight Loss to Health Gain

DEPARTMENT OF HEALTH AND HUMAN SERVICES Food and Drug Administration Indications for Use	Form Approved: OMB No. 0910-0120 Expiration Date: 06/30/2020 See PRA Statement below.
510(k) Number (if known) K210266	
Device Name OverStitch Sx Endoscopic Suturing System	
Indications for Use (Describe) The OverStitch Sx Endoscopic Suturing System is intended for endoscopic placement of suture(s) and approximation of soft tissue.	

single-channel diagnostic endoscopes



XXIX IFSO
World Congress

1-4 September 2026
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30.06.2020

Published July 28, 2022

Endoscopic sleeve gastropasty for treatment of class 1 and 2 obesity (MERIT): a prospective, multicentre, randomised trial

Barham K Abu Dayyeh, Fateh Bazerbachi, Eric J Vargas, Reem Z Sharaiha, Christopher C Thompson, Bradley C Thaemert, Andre F Teixeira, Christopher G Chapman, Vivek Kumbhari, Michael B Ujiki, Jeanette Ahrens, Courtney Day, the MERIT Study Group, Manoel Galvao Neto, Natan Zundel, Erik B Wilson

Summary

Background Endoscopic sleeve gastropasty (ESG) is an endolumenal, organ-sparing therapy for obesity, with wide global adoption. We aimed to explore the efficacy and safety of ESG with lifestyle modifications compared with lifestyle modifications alone.

Dec 2017- Jun 2019 n = 209: ESG (n=85) or to control (n=124)

After 52 weeks: **Intervention vs Control**

EWL: 49.2% versus 3.2% p<0.0001

TBWL 13.6% versus 0.8% p<0.0001

SAE ESG-related 2% (3/131)

No mortality



FDA Approval



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double-channel therapeutic scopes

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Device Name OverStitch Sx Endoscopic Suturing System	
Indications for Use (Describe) The OverStitch Sx Endoscopic Suturing System is intended for endoscopic placement of suture(s) and approximation of soft tissue.	

single-channel diagnostic endoscopes



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Apollo Overstitch for Endoscopic Bariatric Interventions

November 30, 2022 by Timothy Shea Snow

Device Name: Apollo Overstitch for Endoscopic Bariatric Interventions

Author(s): Timothy Snow, DO, FACS, FASMBs

[Apollo Endosurgery received FDA approval for Apollo ESG and Apollo REVISE Systems on July 12, 2022.](#)

12.07.2022

Indications for use:

- The Apollo ESG and REVISE Systems are indicated for use by trained surgeons and gastroenterologists who perform bariatric procedures to facilitate weight loss
- Patients should be adults with a BMI ranging from 30-50
- Patients undergoing ESG via the Apollo ESG System should demonstrate an inability to lose weight or maintain weight loss through other conservative measures
- Patients undergoing TORe via the Apollo REVISE System should demonstrate an inability to lose weight or maintain weight loss through other conservative measures after prior gastric bypass

DEPARTMENT OF HEALTH AND HUMAN SERVICES Food and Drug Administration Indications for Use	Form Approved: OMB No. 0910-0120 Expiration Date: 06/30/2023 See PRA Statement below.
510(k) Number (if known) K231553	
Device Name OverStitch NXT Endoscopic Suturing System	
Indications for Use (Describe) The OverStitch NXT Endoscopic Suturing System is intended for endoscopic placement of suture(s) and approximation of soft tissue.	

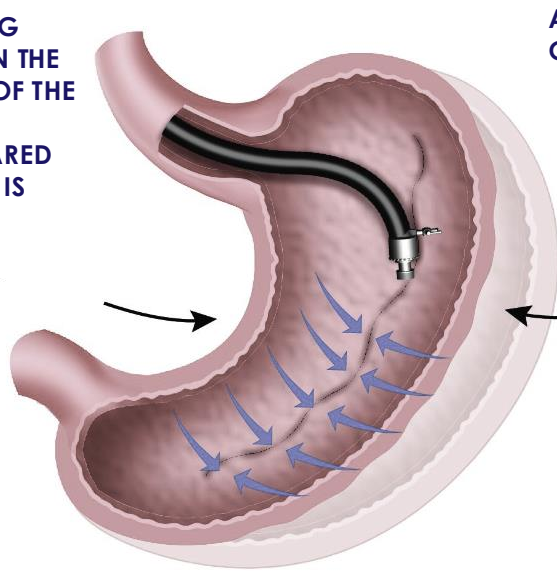


30.06.2023



ESG ENDOSCOPIC SLEEVE GASTROPLASTY

U-SHAPES RUNNING
SUTURING LINES IN THE
CORPUS (DEPOT) OF THE
STOMACH
THE FUNDUS IS SPARED
THE ANGLE OF HIS IS
PRESERVED



A ,PSEUDO-POUCH IS
CRATED

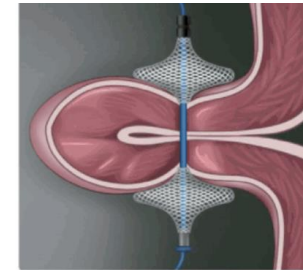
THE CORPUS OF THE
STOMACH IS
REMODELLED
ANDSLEEVE-LIKE SHAPED

TBWL
13.6%

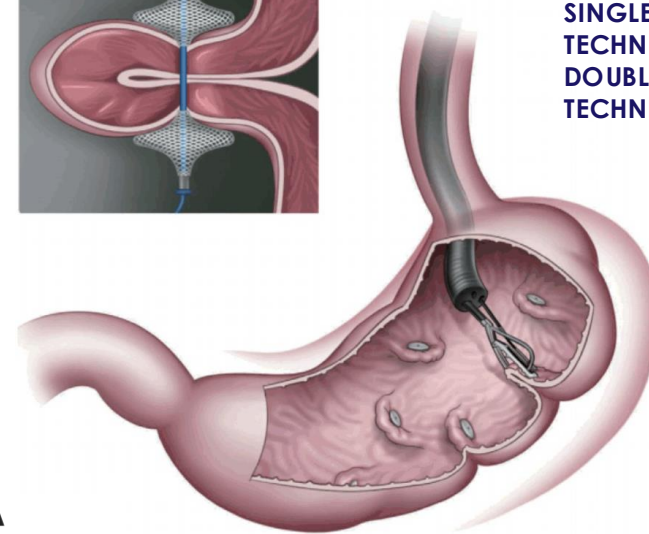
FDA APPROVEL 12.07.2022

Abu Dayyeh et al; MERIT Study Group. Endoscopic sleeve gastroplasty for treatment of class 1 and 2 obesity (MERIT): a prospective,multicentre randomised trial. Lancet. 2022 Aug

POSE PRIMARY OBESITY SURGERY ENDOLUMINAL



SINGLE HELIX
TECHNIQUE: 16 SUTURES
DOUBLE HELIX
TECHNIQUE: 5-8 SUTURES



TBWL
15.7%

**USGI Medical Receives FDA
Approval to Conduct Pivotal Study
of the POSE2.0® Incisionless
Weight Loss Procedure for Primary
Obesity**

January 31, 2024 | 4 min read



USGI Medical, Inc., the pioneer of incisionless weight loss procedures and devices, announced that the United States Food and Drug Administration has approved an Investigational Device Exemption application to conduct a pivotal study of its POSE2.0® incisionless procedure for primary obesity.

**ACUTALLY ONGOING PIVOTAL STUDY
FOR FDA APPROVAL**



Endoscopic Bariatric Therapies

Surgical Endoscopy (2023) 37:8166–8177
https://doi.org/10.1007/s00464-023-10390-6

REVIEW ARTICLE

Endoscopic therapies for patients with obesity: a systematic review and meta-analysis

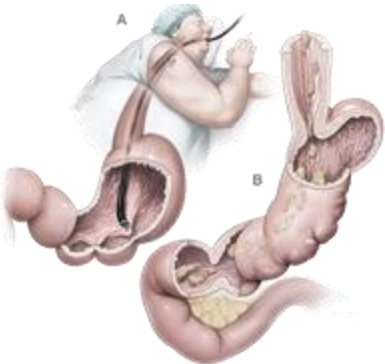
Zachary N. Weitzner¹ · Jennifer Phan² · Meron M. Begashaw³ · Selene S. Mak³ · Marika S. Booth⁴ · Paul G. Shekelle^{1,3} · Melinda Maggard-Gibbons^{1,3} · Mark D. Girgis^{1,3}

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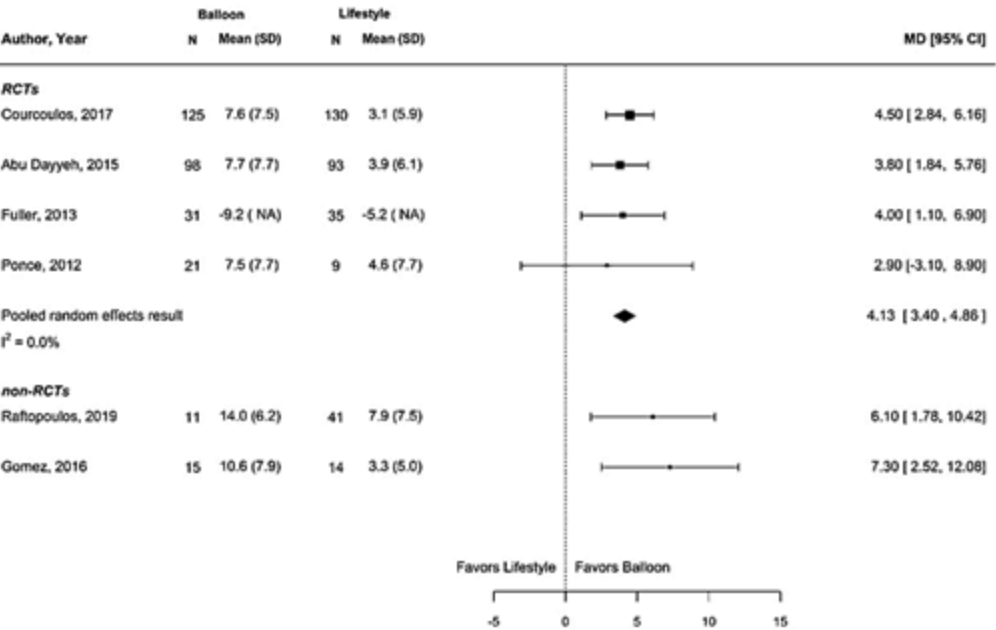
2023

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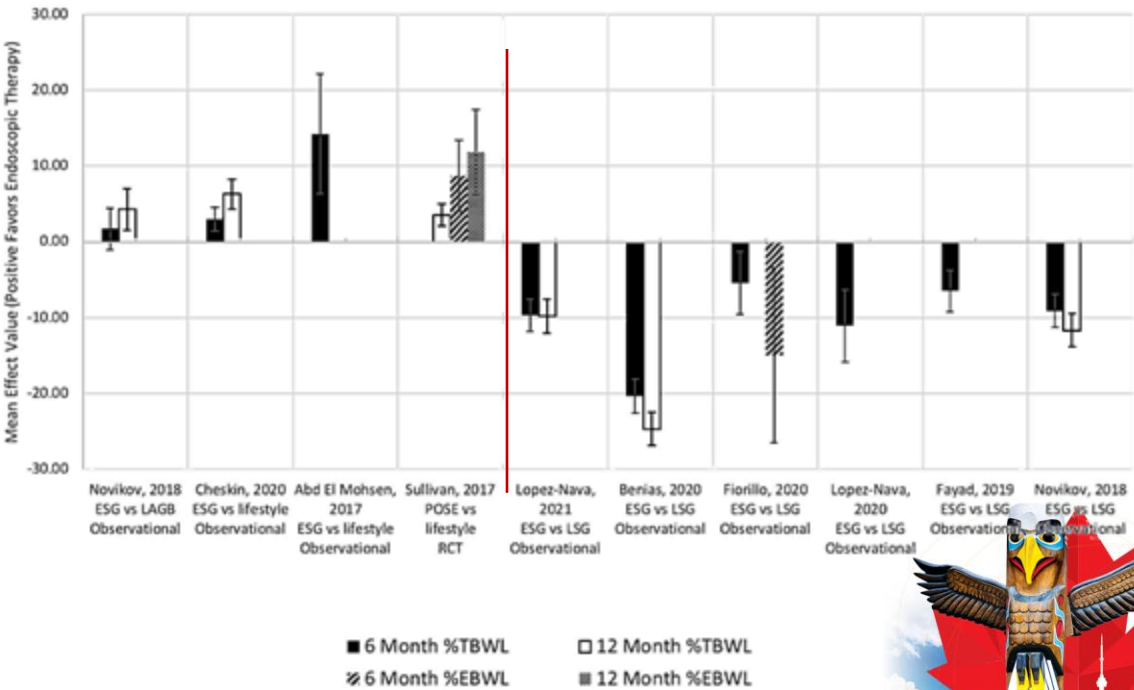
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B TBWL at 12 Months



ESG Versus Control Weight Loss



Endoscopic therapies result in greater weight loss compared to lifestyle modification, but not as much as bariatric surgery.
Endoscopic therapies may be beneficial as an alternative to bariatric surgery.





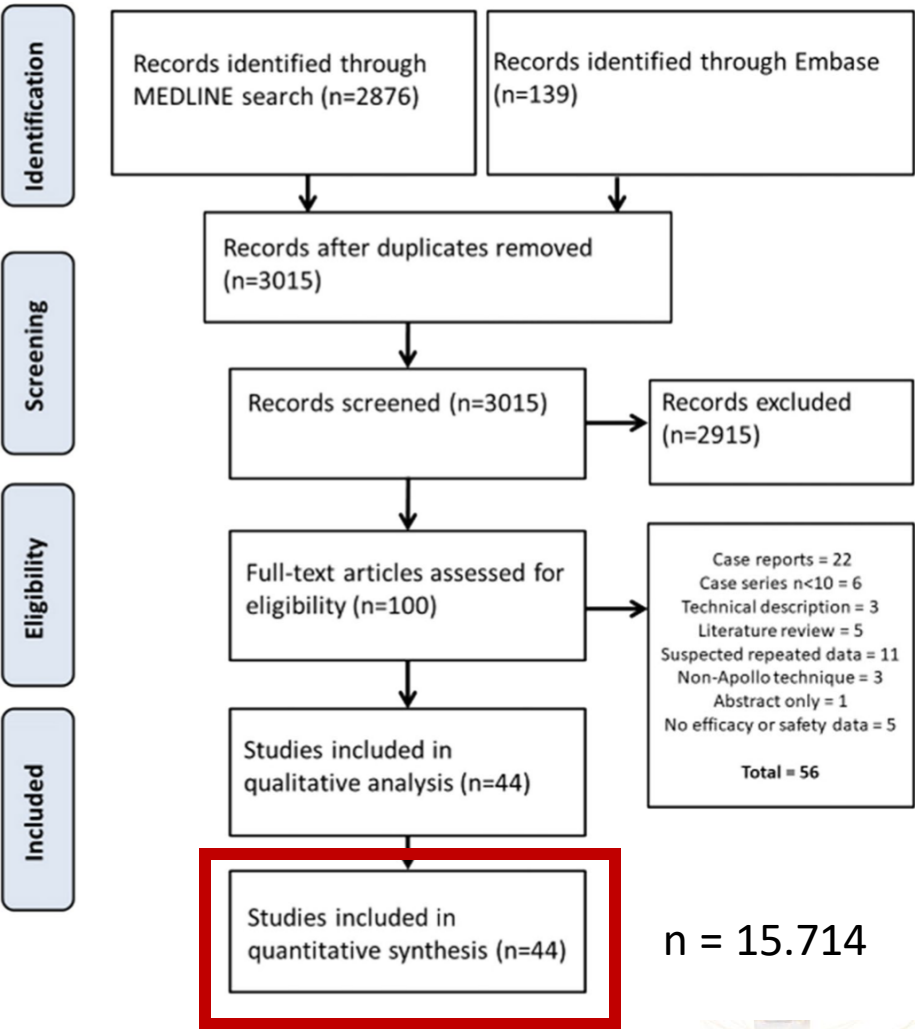
IFSO Bariatric Endoscopy Committee Evidence-Based Review and Position Statement on Endoscopic Sleeve Gastroplasty for Obesity Management

Barham K. Abu Dayyeh^{1,10} · Christine Stier² · Aayed Alqahtani³ · Reem Sharaiha⁴ · Mohit Bandhari⁵ · Silvana Perretta⁶ · Sigh Pichamol Jirapinyo⁷ · Gerhard Prager⁸ · Ricardo V. Cohen⁹

Received: 8 September 2024 / Revised: 11 September 2024 / Accepted: 16 September 2024
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mean baseline BMI was 37.56 kg/m²

Fig. 2 PRISMA flowchart for the literature screening and inclusion/exclusion process for the overall outcomes of ESG (non-comparative analysis)





RESEARCH

IFSO Bariatric Endoscopy Committee Evidence-Based Review
and Position Statement on Endoscopic Sleeve Gastroplasty for Obesity
Management

Barham K. Abu Dayyeh^{1,10} · Christine Stier² · Aayed Alqahtani³ · Reem Sharaiha⁴ · Mohit Bandhari⁵ ·
Silvana Perretta⁶ · Sigh Pichamol Jirapinyo⁷ · Gerhard Prager⁸ · Ricardo V. Cohen⁹

Received: 8 September 2024 / Revised: 11 September 2024 / Accepted: 16 September 2024
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Safety: The pooled serious adverse event rate was **1.25%**.
This low rate of SAEs indicates that ESG is a relatively safe
procedure.

Table 6 Summary of weight loss outcomes after ESG

Time	Mean %EWL	Mean %TBWL
6 months	48.04% (SE 3.59, 95%CI 40.98–55.09, 24 articles, 4329 patients)	15.66% (SE 0.35, 95%CI 14.95–16.36, 33 articles, 5227 patients)
12 months	53.09% (SE 4.15, 95%CI 44.95–61.23, 21 articles, 3652 patients)	17.56% (SE 0.39, 95%CI 16.8–18.32, 27 articles, 4118 patients)
18 months	57.98% (SE 7.38, 95%CI 43.5–72.46, 6 articles, 215 patients)	16.25% (SE 0.95, 95%CI 14.38–18.13, 5 articles, 207 patients)
24 months	46.57% (SE 9.85, 95%CI 27.26–65.88, 6 articles, 2070 patients)	15.2% (SE 0.93, 95%CI 13.36–17.04, 6 articles, 2123 patients)
36 months	53.18% (SE 7.25, 2 articles, 922 patients)	14.07% (SE 0.39, 2 articles, 922 patients)
60 months	45.3 (SD 47.32, 1 article, 56 patients)	15.9 (SD 16.79, 1 article, 56 patients)

*SE standard errors, CI confidence interval, EWL excess weight loss, TBWL total body weight loss



IFSO Clinical Practice Guidelines Obesity Management



2024

ORIGINAL CONTRIBUTIONS

IFSO Consensus on Definitions and Clinical Practice Guidelines for Obesity Management—an International Delphi Study

Paulina Salminen^{1,2} · Lilian Kow³ · Ali Aminian⁴ · Lee M. Kaplan⁵ · Abdelrahman Nimeri⁶ · Gerhard Prager⁷ · Estuardo Behrens⁸ · Kevin P. White⁹ · Scott Shikora⁶ · IFSO Experts Panel

A 3 round Delphi survey with 136 statements was conducted by 43 experts in obesity management (26 bariatric surgeons, 4 endoscopists, 8 endocrinologists, 2 nutritionists, 2 counsellors, an internist, and a pediatrician) spanning six continents over a 2-day meeting in Hamburg, Germany.

Table 3: Module 3 - Endoscopic Therapy				
Statements	N	Rounds required	Most common selection	Percentage consensus
ENDOSCOPIC SLEEVE GASTROPLASTY (ESG)				
ESG combined with lifestyle intervention is preferable to lifestyle interventions <u>alone</u> , for the management of adults with class II obesity .	39	1	Agree	89.7%
ESG combined with lifestyle intervention is an acceptable management option for adults with class III obesity who either do not qualify (given medical or psychological comorbidities) or do not wish to pursue MBS.	42	1	Agree	87.5%
ESG combined with lifestyle intervention is preferable to lifestyle interventions <u>alone</u> , for the management of adults with class I obesity .	38	1	Agree	78.9%
In individuals with class I obesity and comorbidities, ESG is effective at inducing sustained weight loss that remains at 12-24 months follow-up.	38	1	Agree	76.3%
In individuals with class I obesity and comorbidities, ESG is superior to LIFESTYLE CHANGES/AOM/NEITHER/BOTH.	39	1	Lifestyle changes	74.4%
ESG combined with lifestyle intervention is preferable to lifestyle interventions alone, for the management of adolescents with class II obesity .	40	1	Agree	72.5%
In individuals with class I obesity and comorbidities, ESG is <u>not suitable</u> if an individual does not want surgical treatment.	39	2	Disagree	71.8%
ESG combined with lifestyle intervention is preferable to lifestyle interventions alone, for the management of adolescents with class I obesity .	41	2	Agree	56.1%
To achieve weight control and improved comorbidities in individuals with Class 1 obesity and obesity-related complications, the best nonsurgical treatment consists of... (A) AOM alone; (B) ESG alone; (C) AOM + ESG	41	2	AOM alone	56.1%

Multimodal Obesity Treatment

2025

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1-4 September 2026

Received: 7 February 2025 | Revised: 7 March 2025 | Accepted: 9 March 2025
DOI: 10.1111/dom.16352

ORIGINAL ARTICLE

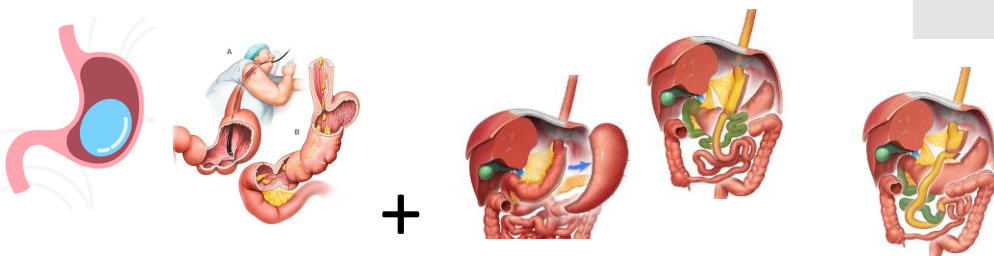
WILEY

Meta-analysis of randomized controlled trials for the development of the International Federation for Surgery of Obesity and Metabolic Disorders-European Chapter (IFSO-EC) guidelines on multimodal strategies for the surgical treatment of obesity

Maurizio De Luca MD¹ | Amanda Belluzzi MD¹ | Luigi Angrisani MD² | Giulia Bandini MD³ | Barbara Becattini MD⁴ | Marco Bueter MD⁵ | Francesco Maria Carrano MD⁶ | Sonja Chiappetta MD⁷ | Ricardo V. Cohen MD⁸ | Catalin Copaescu MD⁹ | Nicola Di Lorenzo MD¹⁰ | Marloes Emous MD¹¹ | Daniel Moritz Felsenreich MD¹² | Martin Fried MD¹³ | Jacques Himpens MD¹⁴ | Antonio Iannelli MD¹⁵ | Giuseppe Navarra MD¹⁶ | Simon Nienhuijs MD¹⁷ | Stefano Olmi¹⁸ | Chetan Parmar¹⁹ | Gerhard Prager¹² | Juan Pujol-Rafols MD²⁰ | Benedetta Ragghianti MD³ | Rui Ribeiro MD²¹ | Elena Ruiz-Úcar MD²² | Nasser Sakran MD^{23,24} | Paulina Salminen MD²⁵ | Daniele Scoccimarro MD³ | Erik Stenberg MD²⁶ | Christine Stier MD²⁷ | Halit Eren Taskin MD²⁸ | Ramón Vilallonga Puy MD²⁹ | Matteo Monami MD³ | on behalf of the Panel for the IFSO-EC on the Surgical Treatment of Obesity Using Multimodal Strategies

Results: A total of 25 RCTs were retrieved. The addition of either OMM (i.e., liraglutide) or EP (i.e., intragastric balloon—IB, endosleeve-ES) to MBS was associated with a significantly lower BMI at the end-point ($p = 0.040$). The addition of liraglutide only to MBS was associated with a greater %EWL%, but not %TWL and TBWL ($p = 0.008$). Three trials evaluated end-point HbA1c, showing a significant reduction in favour of liraglutide as an add-on therapy to MBS ($p = 0.007$). There was no mortality.

Conclusions: MBS combined with non-surgical approaches appears more effective than MBS alone in reducing BMI. Further RCTs on combined therapies to MBS for severe obesity are needed to enhance the tailoring of treatment for severe obesity.



=

more
Effective



TORONTO 2026 The Future of Obesity Management:
From Weight Loss to Health Gain

Treatment landscape of a chronic disease

Metabolic and Bariatric Surgery MBS - **since 1994**

TWL%: LSG: **24.9 %** (23.6 to 26.2)

LRYGB: **28.1%** (26.6 to 29.3) at 5 years

Salminen P et. al. Effect of Laparoscopic Sleeve Gastrectomy vs Laparoscopic Roux-en-Y Gastric Bypass on Weight Loss at 5 Years Among Patients With Morbid Obesity: The SLEEVEPASS Randomized Clinical Trial. JAMA. 2018 Jan 16;319(3):241-254..

Endoscopic Bariatric Therapy -EBT – **ESG since 07/2022**

TWL **13-16%** at 12 months

Abu Dayyeh BK, Bazerbachi F, Altayar O, et al. Endoscopic sleeve gastroplasty versus lifestyle modification for obesity: the MERIT randomized clinical trial. Lancet. 2022;400(10352):441–51.

Obesity Management Medications OMM - **since 2014** (12/24 Liraglutide)

(Semaglutide (06/21) ~**15%** WL at 68–104wks)

Tirzepatide (11/23) (~**16–22.5%** WL at 72wks)

Oral Semaglutide **12/25**

Wilding JPH, Batterham RL, Calanna S, et al. Once-weekly semaglutide in adults with overweight or obesity. N Engl J Med. 2021;384:989–1002.

Jastreboff AM, Aronne LJ, Ahmad NN, et al. Tirzepatide once weekly for the treatment of obesity. N Engl J Med. 2022;387:205–16.

Patient Selection and Multidisciplinary set-up

The Surgeon's role in the evolving multidisciplinary obesity management pathway

Patient with obesity – a chronic disease

Age, Comorbidities, Lifestyle, Social Background, BMI, EOSS

Bariatric Surgeon
Bariatric Endoscopist
Obesity medicine specialist

+

Multidisciplinary Assessment –
nutritionist/dietitian, psychiatrist/psychologist (behavioral),
exercise/physio support

Multimodal Obesity Management

Obesity Management Medication

Endoscopic Bariatric Therapy

Metabolic and Bariatric Surgery



ITALIAN GUIDELINES - 2024



Linea Guida della Società Italiana di Chirurgia dell'Obesità e delle Malattie Metaboliche (SICOB)
Il trattamento endoscopico bariatrico dell'obesità e delle complicanze associate



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

TABELLA RIASSUNTIVA DELLE RACCOMANDAZIONI

N°	Raccomandazione	Forza raccomandazione	Qualità delle prove
INDICAZIONI ALLA ENDOSCOPIA BARIATRICA			
1	Non si esprime una preferenza, né a favore né contraria, all'utilizzo della endoscopia bariatrica (procedure intragastriche temporanee e di suturing) come intervento primario nei pazienti con sovrappeso corporeo (BMI tra 27 e 29.9 Kg/m ²) e almeno una comorbidità non controllata con la terapia medica, per il trattamento del sovrappeso.	Debole né a favore né contraria	Molto bassa
2	Si suggerisce l'utilizzo della endoscopia bariatrica (procedure intragastriche temporanee e di suturing) nei pazienti con obesità di classe I (BMI tra 30 e 34.9 Kg/m ²), indipendentemente dalla presenza di comorbidità, per il trattamento dell'obesità.	Debole a favore	Molto bassa
3	Si suggerisce l'utilizzo della endoscopia bariatrica (procedure intragastriche temporanee e di suturing) nei pazienti con obesità di classe ≥ II (BMI ≥ 35 Kg/m ²), indipendentemente dalla presenza di comorbidità, per il trattamento dell'obesità.	Debole a favore	Bassa



FRENCH GUIDELINES - 2025




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RECOMMENDATIONS

Position statement and guidelines about Endoscopic Sleeve Gastropasty (ESG) also known as ‘‘Endo-sleeve’’☆



Clément Baratte^a, Hugues Sebbag^b,
Laurent Arnalsteen^c, Thomas Auguste^d,
Marie-Cécile Blanchet^e, Salomon Benchetrit^f,
Adel Abou-Mrad^g, Fabian Reche^h, Laurent Genserⁱ,
Robert Caiazzo^j, Andrea Lazzati^k,
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Fabien Stenard^q, Thibaut Coste^r, Adrien Sterkers^s,
Claire Blanchard^t, Tigran Poghosyan^a,
François Pattou^{u,*}, Silvana Perretta^v, Maud Robert^{w,x}

Which healthcare professionals can perform ESG?. — ESG must be performed by a practitioner trained in endoscopy and obesity management, capable of ensuring thorough preoperative care and comprehensive postoperative follow-up, supported by an experienced multidisciplinary team.



ASMBS GUIDELINES - 2026



Endoscopic Sleeve Gastroplasty (ESG) Gains CPT Code Effective January 1, 2026

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Endoscopic Sleeve Gastroplasty (ESG) Gains CPT Code Effective January 1, 2026

1. What is Endoscopic Sleeve Gastroplasty (ESG)?

Effective January 1, 2026, endoscopic sleeve gastroplasty (ESG) will have an official category I CPT code (43889), formally recognizing this procedure as an established, evidence-based intervention to treat obesity. Bariatric providers can now pursue standardized billing, prior authorization, contracting and reimbursement processes across commercial and public payers.

ESG is a minimally invasive, incisionless procedure performed using full-thickness endoscopic suturing to reduce gastric volume. ESG mimics the restrictive component of a surgical sleeve gastrectomy, without gastric resection. By decreasing gastric volume and slowing gastric emptying, ESG produces early satiety and durable weight loss with a favorable safety profile and outpatient recovery.



This Issue Views **37,531** Citations **72** | **Altmetric 518** | Comments **2**

Medical News & Perspectives

April 5, 2023

It Takes an Average of 17 Years for Evidence to Change Practice—the Burgeoning Field of Implementation Science Seeks to Speed Things Up

Rita Rubin, MA

JAMA. 2023;329(16):1333-1336. doi:10.1001/jama.2023.4387

2008 → 2025

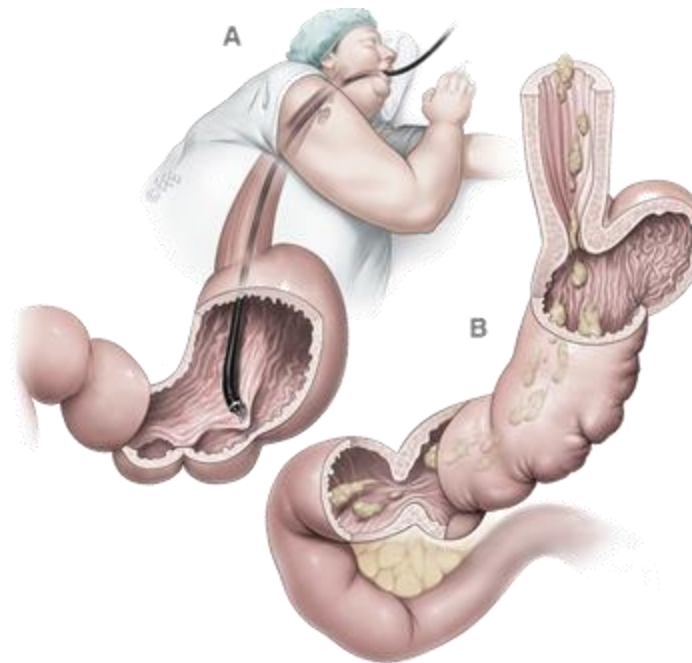
2017 around 3000 procedures

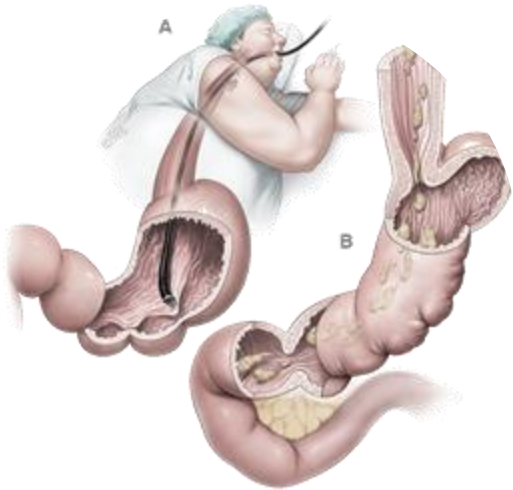
2009 around 10.000 procedures

2024/26 > 25.000 ESG procedures worldwide¹

From an innovative procedure to an established global obesity treatment within approximately one decade!

¹ Dayyeh BKA, Stier C, Alqahtani A, Sharaiha R, Bandhani M, Perretta S, Jirapinyo SP, Prager G, Cohen RV. IFSO Bariatric Endoscopy Committee Evidence-Based Review and Position Statement on Endoscopic Sleeve Gastroplasty for Obesity Management. Obes Surg. 2024 Dec;34(12):4318-4348. doi: 10.1007/s11695-024-07510-z





21. August 2026:
 2482 international
 peer-reviewed
 medical articles

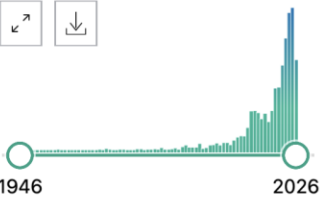

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Position statement and guidelines about Endoscopic Sleeve Gastroplasty (ESG) also known as "Endo-sleeve".
 Baratte C, et al. J Visc Surg. 2025. PMID: 39794164

☐ **Semaglutide vs Endoscopic Sleeve Gastroplasty for Weight Loss.**
 1 Haseeb M, Chhatwal J, Xiao J, Jirapinyo P, Thompson CC.

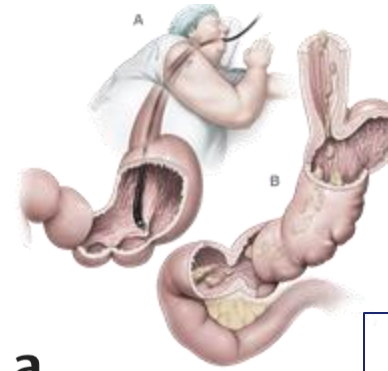


The Battle of Endoscopic Bariatric Therapies for Obesity: Endoscopic Sleeve Gastroplasty Versus Endoscopically Inserted Intragastric Balloon—A Pairwise Meta-Analysis of Comparative Studies and a Call for Randomized Controlled Trials

Abdul-Rahman F Diab^{1 2}, Joseph A Sujka¹, Kathleen Mattingly², Mehak Sachdeva², Kenneth Hackbarth², Salvatore Docimo¹, Christopher G DuCoin¹

9 studies, 5302 patients

Conclusions: While this study suggests a higher TWL% associated with ESG compared with IGB, drawing definitive conclusions is challenging due to limitations identified during a comprehensive quality assessment of the available literature. We advocate for randomized controlled trials (RCTs) directly comparing the newer IGB (with a 12-mo placement duration) with ESG. However, this study consistently reveals higher rates of early reintervention (re-endoscopy) within the IGB group, primarily necessitated by the removal or adjustment of the IGB due to intolerance. Given the additional intervention required at 6 or 12 months to remove the temporarily placed IGB, this trend may imply that IGB is less economically viable than ESG. Cost-effectiveness analyses comparing ESG and IGB are warranted to provide valuable scientific insights.

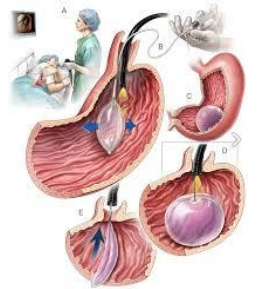


TWL%
Cost-effectiveness
>



XXIX IFSO
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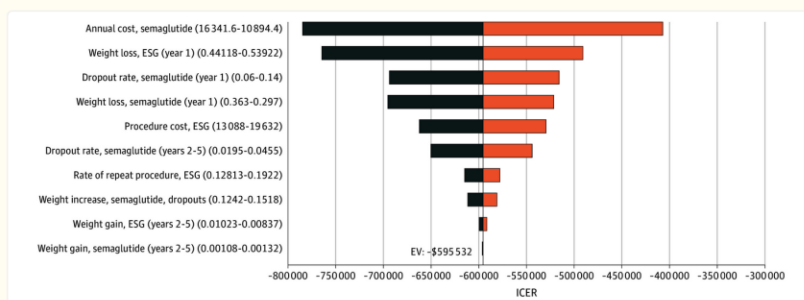
1-4 September 2026
Toronto, Canada



Semaglutide vs Endoscopic Sleeve Gastroplasty for Weight LossMuhammad Haseeb^{1,2}, Jagpreet Chhatwal³, Jade Xiao⁴, Pichamol Jirapinyo¹, Christopher C Thompson^{1,8}

What is the cost-effectiveness viability of semaglutide compared with endoscopic sleeve gastroplasty (ESG) over 5 years for individuals with class II obesity?

Figure 1. Results of 1-Way Sensitivity Analyses Performed Over a 5-Year Time Horizon.

[Open in a new tab](#)

One-way sensitivity analysis involves adjusting the value of 1 model parameter at a time to assess the association with study outcomes. This figure includes the 10 parameters with the largest association with incremental cost-effectiveness ratio (ICER) values when modified. The numbers on either side of the bars indicate the extreme parameter values associated with the resulting ICER shown in the figure. This figure is centered around the base case with an ICER of -\$595 532 per quality-adjusted life-year. ESG indicates endoscopic sleeve gastroplasty; EV, expected value.

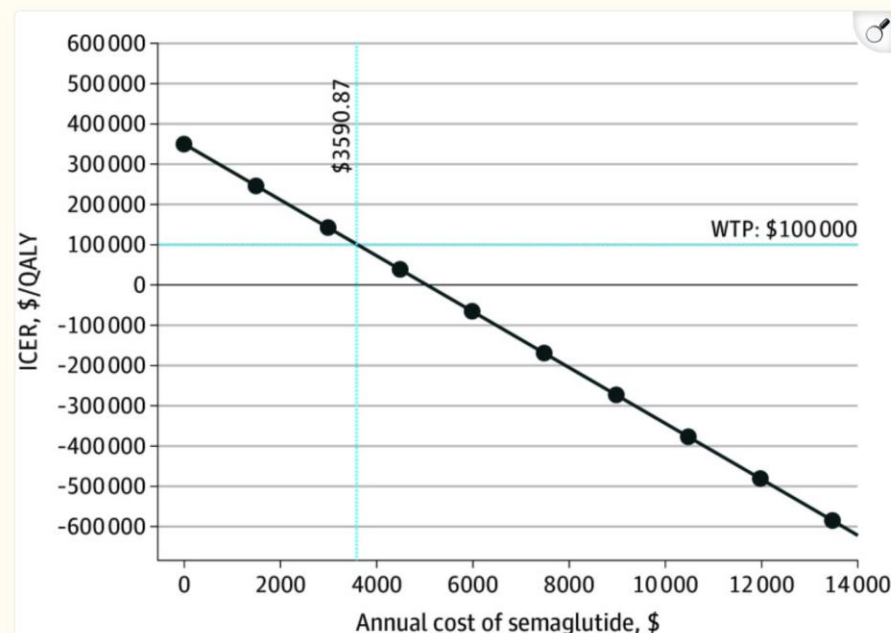
ESG more cost-effective than Semaglutide over 5 years
+ 0.06 QALYs and – \$ 33.583
ESG greater weight loss over 5 years (BMI 31.7 vs 33)

1-4 September 2026
Toronto, Canada

Conclusions and Relevance

This study suggests that ESG is cost saving compared with semaglutide in the treatment of class II obesity. On price threshold analyses, a 3-fold decrease in the price of semaglutide is needed to achieve nondominance.

Figure 2. Cost-Threshold Analysis of Semaglutide Compared With Incremental Cost-Effectiveness Ratio (ICER) of Endoscopic Sleeve Gastroplasty Over 5-Year Time Horizon, With Willingness-to-Pay (WTP) Threshold of \$100000 per Quality-Adjusted Life-Year (QALY).



2025

POSE and ESG are designed for longer-term use. The amount of weight loss determined by ESG is similar to that of the most effective OMMs and some surgical procedures. In addition, ESG appears to be more effective than POSE. The number of reported adverse events is higher than that of OMMs and not very dissimilar from surgery.

TABLE 1 | Efficacy and safety of each strategy at different time points. [Color table can be viewed at [wileyonlinelibrary.com](https://onlinelibrary.wiley.com)]

Intervention	TBWL (%)				Any SAE (OR)			
	26–52	53–104	105–156	≥ 156	26–52	53–104	105–156	≥ 156
Obesity management medications								
Orlistat	3.1	3.2	3.0	3.0	1.16	1.27	*	0.00
Liraglutide	4.5	5.1	4.2	—	1.01	1.29	*	—
Naltr./Bupr.	4.8	4.8	—	—	1.12	1.12	—	—
Phen./Topir.	—	8.8	—	—	—	1.28	—	—
Semaglutide	8.6	10.5	8.7	—	0.51	0.91	*	—
Tirzepatide	15.2	16.5	—	—	1.00	0.91	—	—
Endoscopic bariatric procedures								
POSE	3.8	—	—	—	3.12	—	—	—
IGB	4.8	—	—	—	3.40	—	—	—
AT	9.2	—	—	—	2.52	—	—	—
ESG	12.8	—	—	—	4.42	—	—	—
Metabolic bariatric surgery								
LAGB	7.9	9.6	7.4	5.6	*	1.84	*	8.06
GCP	17.1	8.1	—	6.6	1.68	—	*	10.75
LVBG	10.9	11.6	19.4	10.2	*	—	*	5.84
SG	11.5	12.1	19.4	13.0	1.68	—	*	1.87
OAGB	19.5	13.9	22.5	14.9	3.54	—	*	1.39
RYGB	18.4	17.2	17.3	17.1	2.24	5.0	*	5.84
SADI	24.4	—	—	—	*	—	—	—
BPD	26.2	24.3	25.4	26.0	*	*	*	22.78



Revisional endoscopic sleeve gastroplasty versus semaglutide and tirzepatide for weight recidivism after sleeve gastrectomy

Firas Bahdi, Sagar Shah, Fadi Dahoud, Maryam Farooq, Philip Kozan, Stephen Kim, Alireza Sedarat, Na Shen, Adarsh Thaker, Jennifer M. Kolb, Erik Dutson, V. Raman Muthusamy, Danny Issa ✉

First published: 05 February 2025 | <https://doi.org/10.1111/cob.70001> | [VIEW METRICS](#)

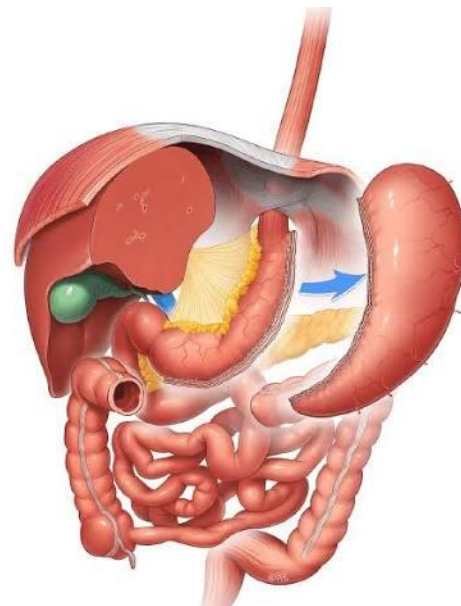
Results

Our study included 68 (prior SG + GLP1/GIP-RA) and 22 (prior SG + R-ESG). R-ESG offered higher TBWL% than GLP1/GIP-RA at 3 (11.2% vs. 4.3%, $p < .001$), 6 (13.5% vs. 6.8%, $p < .001$) and 12 months (13.4% vs. 9.2%, $p = .07$) with no significant difference in AEs or change in metabolic parameters. On subgroup analysis, tirzepatide achieved similar 12-months TBWL% as R-ESG (13.2% vs. 13.4%, $p = .9$) and significantly more than semaglutide (13.2% vs. 8.1%, $p = .04$). Compared to patients with intact stomach ($n = 87$), GLP1/GIP-RA achieved significantly lower TBWL% in patients with prior SG at 3 (4.3% vs. 5.7%, $p = .02$), 6 (6.8% vs. 9.2%, $p = .02$) and 12 months (9.2% vs. 12.7%, $p = .03$). Medication refills were difficult in 41.3% of patients.

Conclusions

In a single-centre real-world experience study, R-ESG and tirzepatide appear to offer more weight loss than semaglutide in SG patients with weight recidivism although GLP1/GIP-RA were underdosed. GLP1/GIP-RA achieved higher weight loss in patients with intact stomach than those with prior SG.

Revision after Sleeve



R- ESG/Tirzepatide > Semaglutide

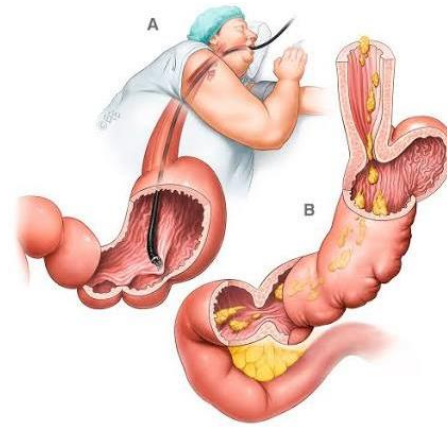


Endoscopic Sleeve Gastroplasty Versus Oral Semaglutide for Obesity: A Real-World Comparative Cohort Study

Nitin Jagtap¹, Aman Golchha^{1 1}, Anudeep Katrevula¹, Shujaath Asif¹, Hardik Rughwani¹,
Krithi Krishna Koduri¹, Priyanka Balenki¹, Rakesh Kalapala^{1 1}, D Nageshwar Reddy¹

Jan 2024-April 2025

N = 150 (ESG = 50, Semaglutide = 100)



TBWL% at 6 months:

$12.72 \pm 5.67\%$ vs $8.67 \pm 3.84\%$; $p=0.0001$

At 12-months, mean%TBWL was 11.92 ± 6.93 with ESG and 10.91 ± 4.66 with semaglutide ($p0.41$)



RESEARCH



Young-IFSO Endoscopy Training and Education Survey

Daniel Moritz Felsenreich¹ · Anna Carolina Batista Dantas² · Shahab Shahabi³ · Tamer N. Abdelbaki⁴ · Roxanna Zakeri⁵ · Mostafa E. Nagy⁶ · Daniel Gero⁷ · Elena Ruiz-Úcar⁸ · Zhi-Yong Dong⁹ · Wah Yang⁹ · Megan Jenkins¹⁰ · Sonja Chiappetta¹¹ · on behalf of Young-IFSO Collaborative Group

Received: 12 April 2025 / Revised: 29 April 2025 / Accepted: 5 May 2025
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273 respondents from 49 countries

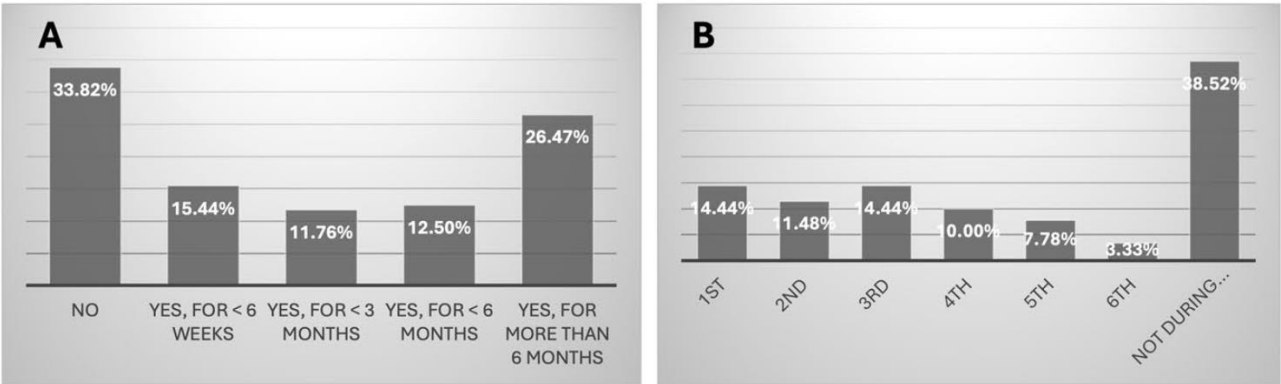


Fig. 1 Endoscopic training curriculum during surgical residency (**1 A**)
year of education for the first procedure (**1B**),

Table 1 Demographic characteristics

	N = 273
Sex, n (%)	
Male	210 (76.9)
Female	63 (23.1)
Median age, years (IQR)	36 (IQR 32.5–40)
Current position, n (%)	
Student	3 (1.1)
Trainee/resident	41 (15.0)
Consultant surgeon	189 (69.2)
Consultant endoscopist	13 (4.8)
Other	27 (9.9)
Specialty, n (%)	
Metabolic and bariatric surgeon	224 (82.1)
Endoscopist	13 (4.8)
Other	36 (13.2)
Type of hospital, n (%)	
Private	65 (23.8)
Public	62 (22.7)
University	91 (33.3)
Combined private and public	47 (17.2)
Military	1 (0.4)
Other	7 (2.6)

IQR, interquartile range

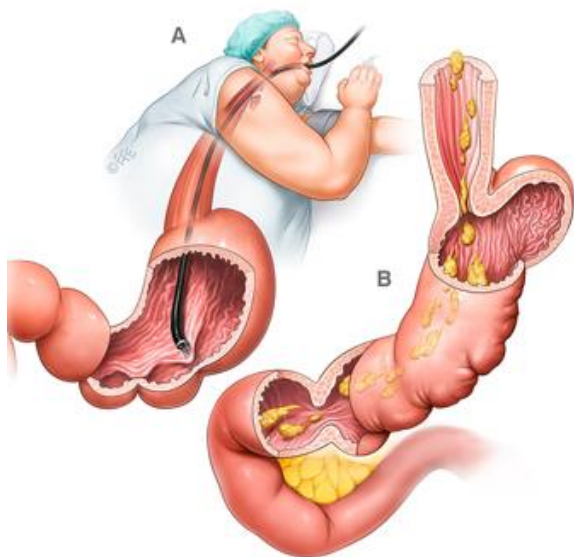


Young-IFSO Endoscopy Training and Education Survey

Daniel Moritz Felsenreich¹ · Anna Carolina Batista Dantas² · Shahab Shahabi³ · Tamer N. Abdelbaki⁴ · Roxanna Zakeri⁵ · Mostafa E. Nagy⁶ · Daniel Gero⁷ · Elena Ruiz-Úcar⁸ · Zhi-Yong Dong⁹ · Wah Yang⁹ · Megan Jenkins¹⁰ · Sonja Chiappetta¹¹ · on behalf of Young-IFSO Collaborative Group

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273 respondents from 49 countries



Endoscopic Bariatric Therapies

Half of our respondents (49.8%) reported that EBTs are routinely performed at their institutions. While 52.2% recommend EBTs as treatment option, only 23.9% perform it by themselves. Intra-gastric balloon (IGB) placement was the most commonly available procedure (60.7%) although only 34.6% of respondents perform it. Endoscopic sleeve gastropasty (ESG) was available in 26.4% of institutions and performed independently by 12.5% of our surgeons. Transoral outlet reduction (TORe) following Roux-en-Y gastric bypass (RYGB) was the least available EBTs (19.2%) and performed by just 8.1% of respondents.

Availability: 26.4%
Independently performed by 12.5%





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SAVE THE DATE:

EMERGE: BSC x Young IFSO Endobariatric Programme

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TORONTO2026 The Future of Obesity Management:
From Weight Loss to Health Gain

CONCLUSIONS

- **Obesity requires a multimodal, individualized and long-term treatment strategy** combining lifestyle intervention, pharmacotherapy, endoscopic therapies and metabolic bariatric surgery.
- Within approximately one decade, **ESG has evolved from an innovative procedure into an established global treatment for obesity**, supported by FDA authorization and its inclusion in IFSO, ASMBS and European guidelines.
- **In patients with class I and class II obesity, ESG represents an effective treatment option** that should be considered alongside intragastric balloons, semaglutide, oral semaglutide and tirzepatide.
- **ESG provides clinically meaningful and durable weight loss and may be more cost-effective** than long-term semaglutide treatment over a five-year horizon.
- **The future of obesity care will depend on selecting the right treatment for the right patient—and on training the next generation in flexible endoscopy and endoscopic bariatric therapies.**
- **ESG is no longer an experimental alternative: it is an integral component of modern multimodal obesity treatment.**



Thank you
for your attention!

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