Laura Sebring, MS, RD, LDN True You Weight Loss Cary, North Carolina



The Latest in Bariatrics: Endobariatrics

Laura Sebring, MS, RD, LDN March 23, 2022



Objectives

- Define and describe endobariatric procedures
- Understand the reasons patients choose endobariatrics vs. traditional bariatrics
- Describe the RD's role in assisting with optimal outcomes
- Review an endobariatric case study

What are endobariatrics?

Endobariatrics are weight loss procedures that do not require surgery, be it open or laparoscopic. All device placements and therapies are performed endoscopically.

Why do patients choose endobariatrics over traditional bariatrics?

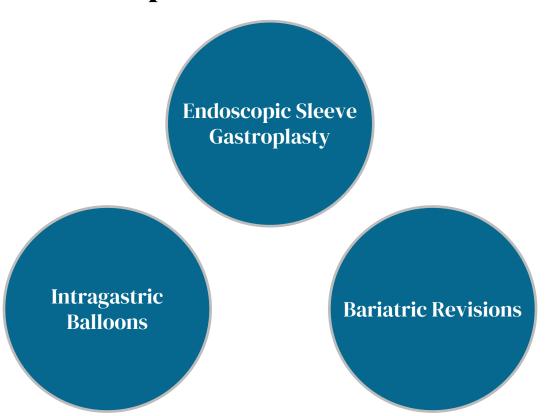
- Hassle of qualifying for traditional bariatric surgery with health insurance
- Lower cost if paying out-ofpocket

- Fear of surgery
- Safety
- Hospital stay not required
- Less recovery time



2016 ASMBS and NORC Survey on Obesity in America Ponce, et al., 2016

Endoscopic Procedures Offered



Endoscopic Sleeve Gastroplasty (ESG)





- Restrictive
- Sutures to hold shape
- Similar to vertical sleeve gastrectomy
- 20-30% volume remains
- Not reversible

Abu Dayyeh, et al., 2013 Isom and Majumdar, 2022 Lopez-Nava, et al., *Surgical Endoscopy*, 2021

Indications & Contraindications



- 27 35 BMI or higher
- Unable to lose weight with diet and lifestyle changes
- Depending upon reasoning, unable or unwilling to have bariatric surgery
- No comorbidities required



- Gastric ulcers
- Gastric or esophageal varices
- Gastric polyps
- Uncontrolled or untreated psychological disorders including eating disorders

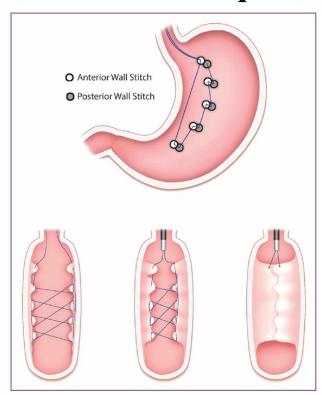


Overstitch™ Suturing Device

Full plication through the wall of the stomach

Apollo Endosurgery

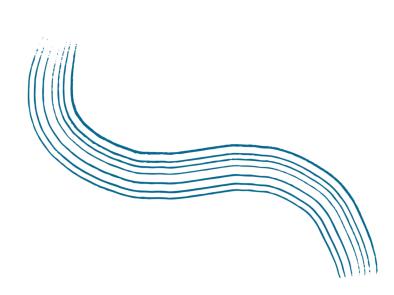
ESG Technique



Jung, et al., 2017 Farha, McGowan, et al., 2020



- Obesity I: 16.5% TBWL*
- Obesity II: 18.2% TBWL*
- Obesity III: 20.5% TBWL*
- Adverse events: 1.4%
- MERIT study

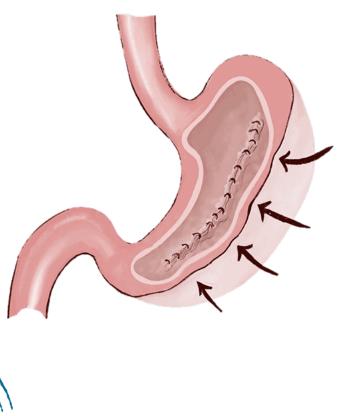


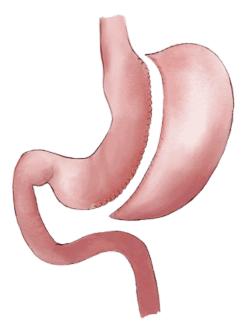
* At 1 year



Lopez-Nava, et al., Surgical Endoscopy, 2021 Li, et al., 2020 Storm and Abu Dayyeh, 2019 Fiorillo et al., 2020







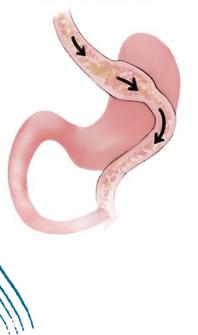
Lopez-Nava, et al., *Endoscopy*, 2021 Fayad, et al., 2019 Fiorillo et al., 2020



Transoral Outlet Reduction (TORe)







Stretched Gastric Pouch

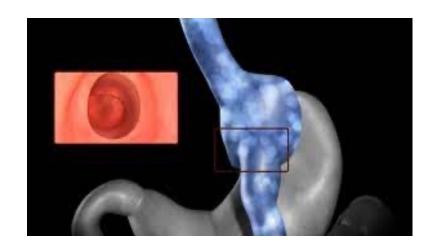


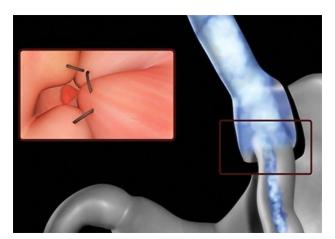
Revised Gastric Pouch



TORe



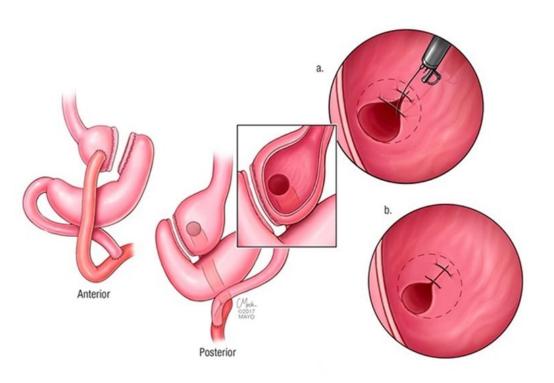






Kumar, 2015

TORe

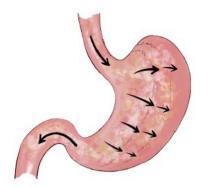


VSG Revision

Gastric Sleeve



Stretched Sleeve



Revised Sleeve





Intragastric Balloons

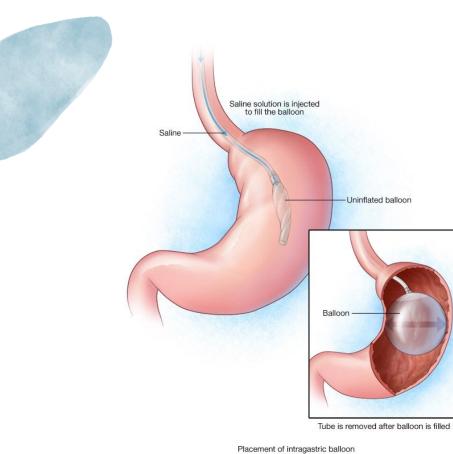




- Remains in stomach for 6 months
- Occupies volume
- Not permanent
- Follow up for 12 months



Mion, et al., 2005



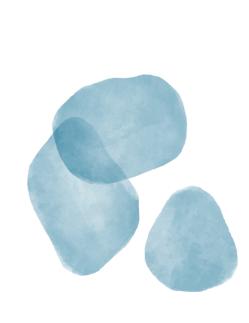


Image credit: Mayo Foundation for Medical Education and Research Abu Dayyeh, et al., 2015 Genco, et al., 2005

Indications & Contraindications



- 30 40 BMI
- Unable to lose weight through diet changes and exercise alone
- No comorbidities required



- Prior gastric surgery
- Large hiatal hernia
- Peptic ulcer disease
- NSAID use
- Unwilling to take PPI





- Nausea, vomiting, cramping
- Dehydration, gastric outlet obstructions, gastric perforation
- Mortality rate is < 0.01%

Courcoulas et al., 2017



RD's Role



- Pre op education
- Post op assistance and support through the diet progression
- Regular long term follow up

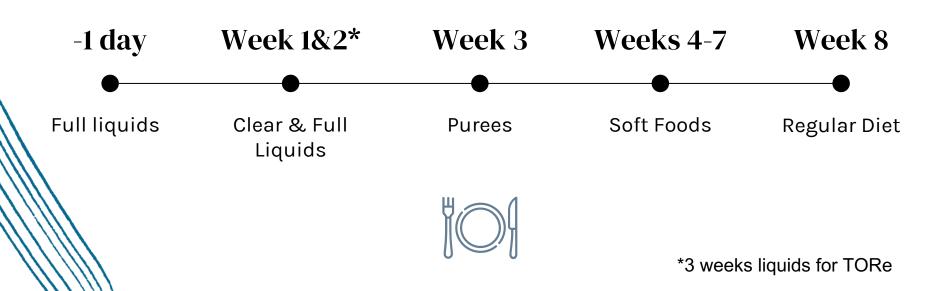






- Meet, build rapport and determine motivations and barriers
- Review current dietary and exercise habits,
- Review pre and post op nutrition guidelines
- Answer any questions and explain rationales for guidelines





Guidelines

- Avoid caffeine, SSBs, carbonation
- Avoid alcohol for 6 months to 1 year after procedure
- Protein foods eaten first, then vegetables, fruits and starches
- Food and drink consumed separately
- MVI for 6 months
- Exercise restrictions for 2 weeks



Type II DM
Hypertension
Hyperlipidemia

Genco et al., 2017 Sharaiha et al., 2017



Russ



Age 40

Height 6'2"

Start wt 340

• October, 2020

Endoscopic Sleeve Gastroplasty Performed

• October, 2021

22.1% TBWL - 265 lbs

March, 2022

10 lbs from goal weight – 253 lbs (25.6% TBWL)



Thank You

laura@trueyouweightloss.com www.linkedin.com/in/laura-l-sebring www.trueyouweightloss.com

CREDITS: This presentation template was created by **Slidesgo**, including icons by **Flaticon** and infographics & images by **Freepik**.

References

Abu Dayyeh, B., Rajan, E. and Gostout, C., 2013. Endoscopic sleeve gastroplasty: a potential endoscopic alternative to surgical sleeve gastrectomy for treatment of obesity. *Gastrointestinal Endoscopy*, 78(3), pp.530-535.

Abu Dayyeh, B., Kumar, N., et al., 2015. ASGE Bariatric Endoscopy Task Force systematic review and meta-analysis assessing the ASGE PIVI thresholds for adopting endoscopic bariatric therapies. *Gastrointestinal Endoscopy*, 82(3), pp.425-438.e5.

Courcoulas, A., Abu Dayyeh, B., et al., 2017. Intragastric balloon as an adjunct to lifestyle intervention: a randomized controlled trial. *International Journal of Obesity*, 41(3), pp.427-433.

Fayad, L, Adam, A., et al., 2019. Endoscopic sleeve gastroplasty versus laparoscopic sleeve gastrectomy: a case-matched study. *Gastrointestinal Endoscopy*, 89(4), pp.782-788.

Fiorillo, C., Quero, G., Vix, M., et al., 2020. 6-Month Gastrointestinal Quality of Life (QoL) Results after Endoscopic Sleeve Gastroplasty and Laparoscopic Sleeve Gastrectomy: A Propensity Score Analysis. *Obesity Surgery*, 30(5), pp.1944-1951.

Genco, A., Bruni, T., Doldi, S., et al., 2005. BioEnterics Intragastric Balloon: The Italian Experience with 2,515 Patients. *Obesity Surgery*, 15(8), pp.1161-1164.

Gleysteen, J., 2016. A history of intragastric balloons. *Surgery for Obesity and Related Diseases*, 12(2), pp.430-435.

Isom, K. and Majumdar, M., 2022. *Academy of Nutrition and Dietetics Pocket Guide to Bariatric Surgery*. 3rd ed. Chicago, IL: Academy of Nutrition and Dietetics, pp.205-218.

Jung Y. Role of Endoscopic Gastroplasty Techniques in the Management of Obesity. *Clin Endosc.* 2017;50(1):21-25. doi:10.5946/ce.2016.147

Kumar, N., 2015. Endoscopic therapy for weight loss: Gastroplasty, duodenal sleeves, intragastric balloons, and aspiration. *World Journal of Gastrointestinal Endoscopy*, 7(9), p.847.

Li, P., Ma, B., Gong, S., Zhang, X. and Li, W., 2020. Efficacy and safety of endoscopic sleeve gastroplasty for obesity patients: a meta-analysis. *Surgical Endoscopy*, 34(3), pp.1253-1260.

Lopez-Nava, G, Laster, J, Negi, A, Fook-Chong, S, Bautista-Castaño, I., Asokkumar, R. Endoscopic sleeve gastroplasty (ESG) for morbid obesity: how effective is it?. *Surg Endosc.* 2021;36(1):352-360. doi:10.1007/s00464-021-08289-1

Lopez-Nava, G., Asokkumar, R., et al., 2021. Endoscopic sleeve gastroplasty, laparoscopic sleeve gastrectomy, and laparoscopic greater curve plication: do they differ at 2 years?. *Endoscopy*, 53(03), pp.235-243.

Ponce, J., DeMaria, E., Nguyen, N., Hutter, M., Sudan, R. and Morton, J., 2016. American Society for Metabolic and Bariatric Surgery estimation of bariatric surgery procedures in 2015 and surgeon workforce in the United States. *Surgery for Obesity and Related Diseases*, 12(9), pp.1637-1639.

Sharaiha, R., Kumta, N., Saumoy, M., Desai, et al., 2017. Endoscopic Sleeve Gastroplasty Significantly Reduces Body Mass Index and Metabolic Complications in Obese Patients. *Clinical Gastroenterology and Hepatology*, 15(4), pp.504-510.

Storm, A. and Abu Dayyeh, B., 2019. Endoscopic sleeve gastroplasty for obesity: defining the risk and reward after more than 1600 procedures. *Gastrointestinal Endoscopy*, 89(6), pp.1139-1140.

The ASMBS/NORC Obesity Poll | NORC.org. Norc.org. https://www.norc.org/Research/Projects/Pages/the-asmbsnorc-obesity-poll.aspx. Published 2016.

Tawadros, A., Makar, M., Kahaleh, M. and Sarkar, A., 2020. Overview of bariatric and metabolic endoscopy interventions. *Therapeutic Advances in Gastrointestinal Endoscopy*, 13, pp.1-11.