

Can we make Roux-n-Y Bypass a better-looking procedure after years of recurrent weight gain by endoscopic intervention?

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CONFLICT OF INTEREST DISCLOSURE



I have the following potential conflict(s) of interest to report:

Disclosures

Ricardo Zorron

✓ *Apollo EndoSurgery*

✓ *Ethicon EndoSurgery*

✓ *GORE*

✓ International consultant

✓ Scientific Advisory Board



Bariatric Surgery

Bariatric Endoscopy

Robotic Surgery



ENDOSCOPIC CLOSURE

Closure of Chronic
Anastomotic ULCER
with Apollo Overstich

R Zorron

ENDOSCOPIC THERAPY for
CANDY CANE post RYGB

R. Zorron

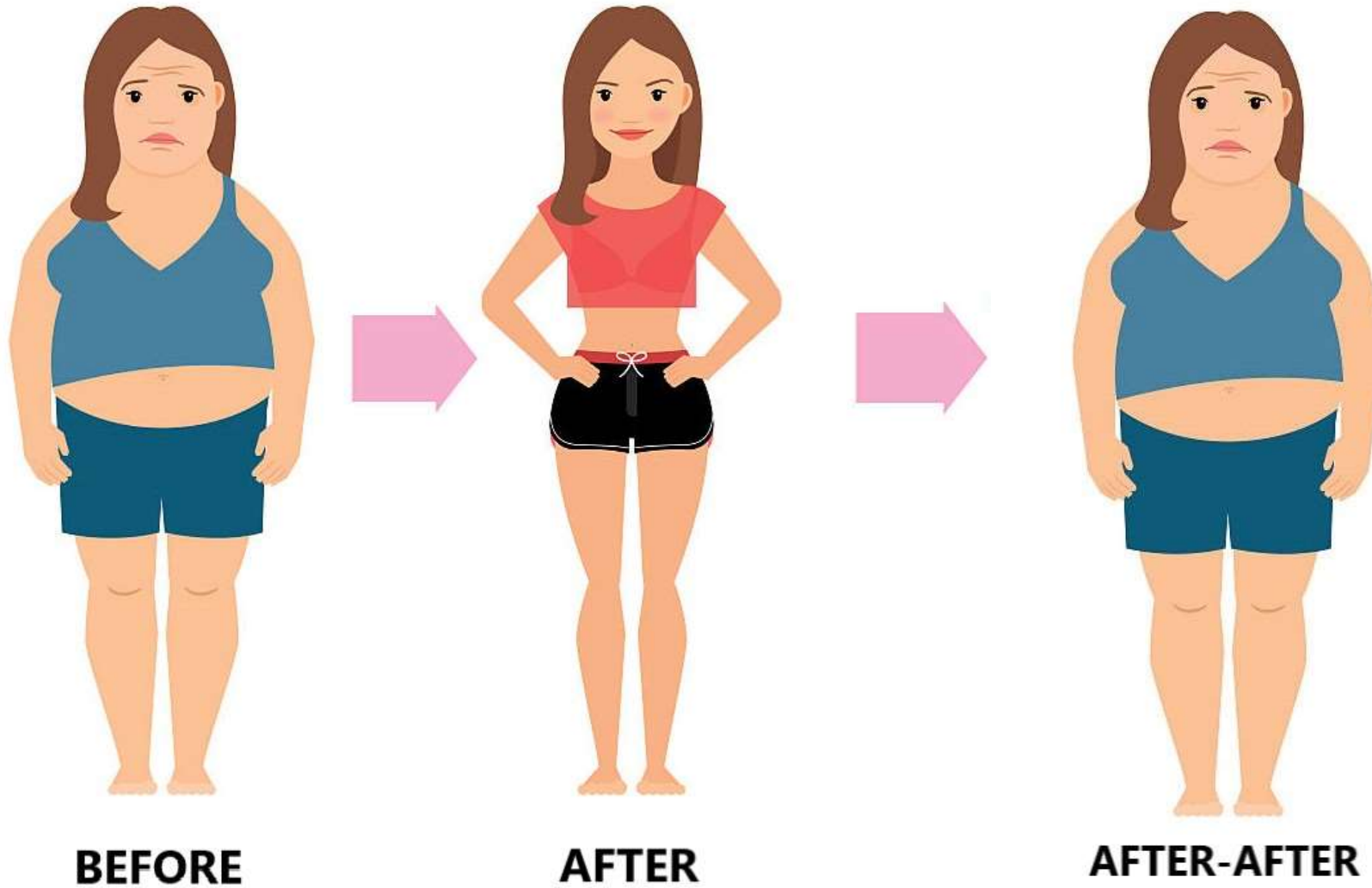
Ulcer RYGB



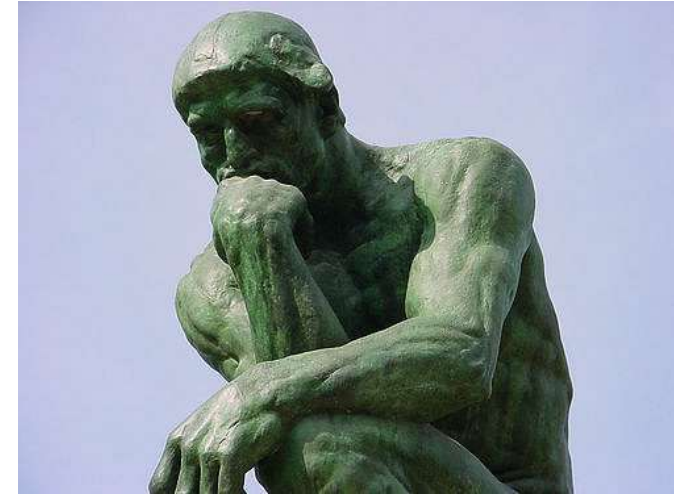
Candy Cane

CAN OUR RYGB LOOK GREAT AGAIN?

WEIGHT REGAIN AFTER BARIATRIC SURGERY



How can our RYGB look great again?

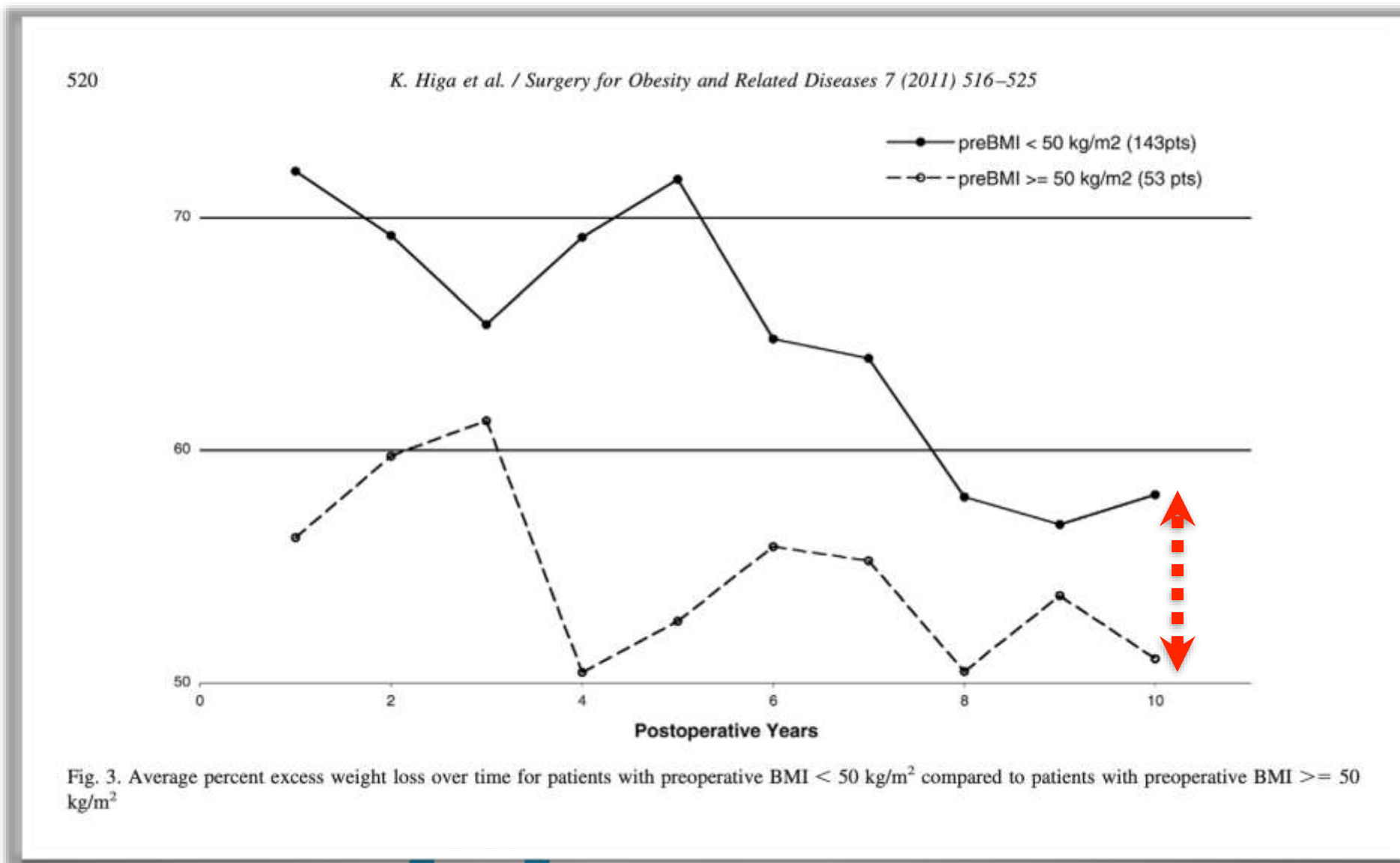


WHY IS OUR BYPASS NOT WORKING WELL?

- Weight regain (or insufficient weight loss)
- Dumping Syndrome
- Reflux
- Diverse problems – ulcer, stenosis, GG Fistula, candy...



HOW CAN OUR RYGB LOOK GREAT AGAIN?

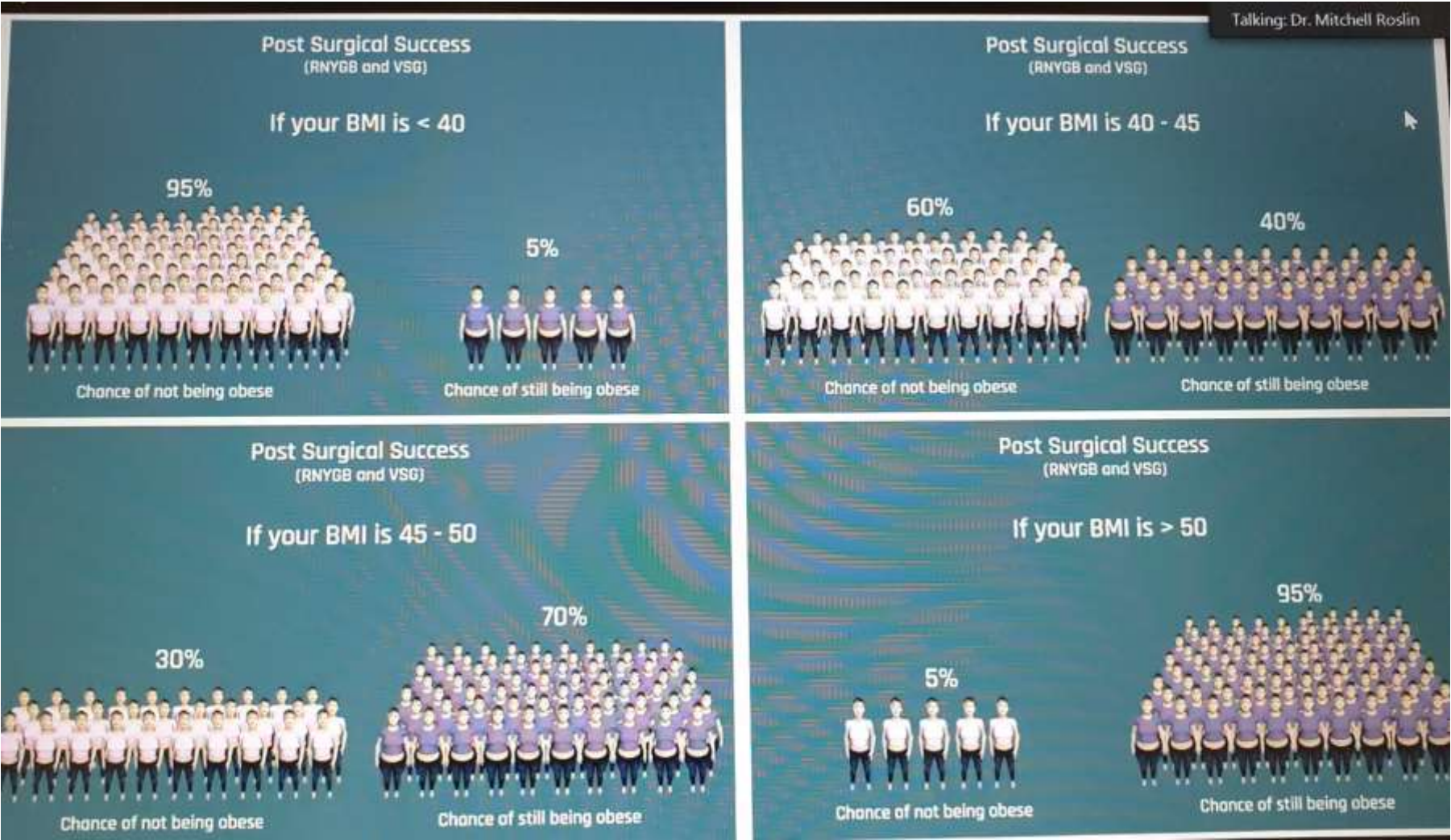


Higa K, et al. 2011

TAILORED APPROACH?

RYGB

SLEEVE



Courtesy M. Roslin 2021



ORIGINAL CONTRIBUTIONS

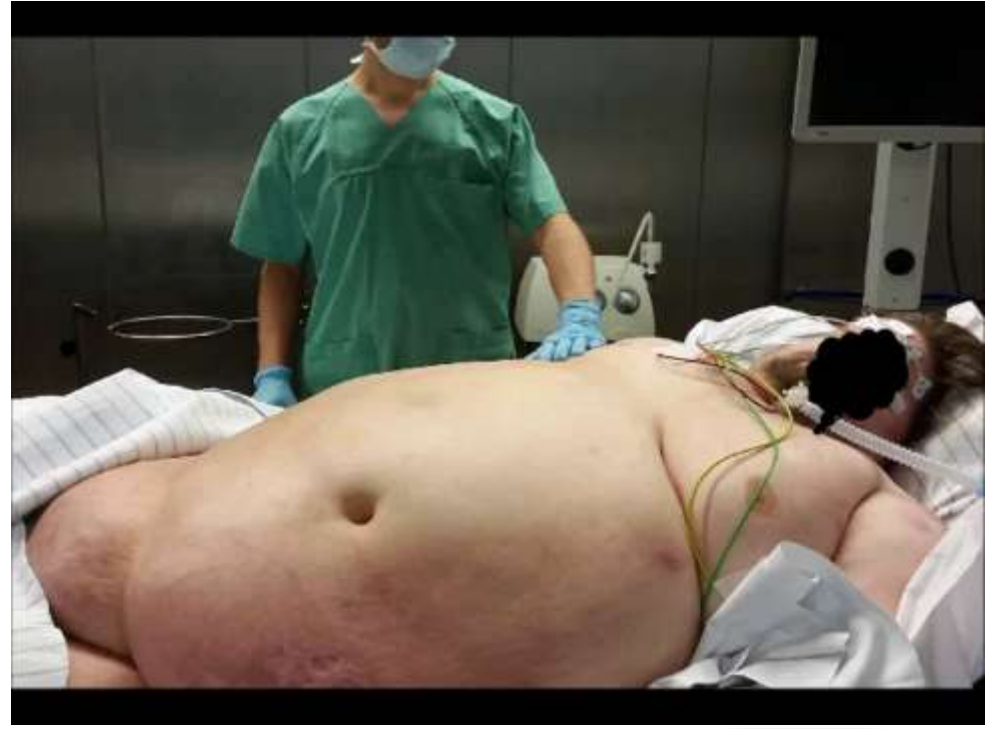


Endoscopic Sleeve Gastroplasty (ESG) for High-Risk Patients, High Body Mass Index (> 50 kg/m²) Patients, and Contraindication to Abdominal Surgery

Renjie Li¹ • Wilfried Veltzke-Schlieker² • Andreas Adler² • Maximilian Specht¹ • Wael Eskander¹ • Mahmoud Ismail³ • Harun Badakhshi⁴ • Manoel Passos Galvao⁵ • Ricardo Zorron¹

Post-ESG Adverse Event and Mortality

Mild post-ESG adverse events such as nausea or abdominal pain have not been recorded routinely. One patient (4.2%, 1/24) who was previously submitted to full anticoagulation therapy with clopidogrel had a gastric mucosal bleeding on the 3rd post-ESG day (Table 1), who needed transfusions (4 units of red blood cells concentrates) and was successfully



ESG reduces the risk for pure primary or 2 Step strategy, especially for transplant candidates



Roux-en-Y Gastric Bypass for Super-Obese Patients?

A Longer Biliopancreatic Limb in Roux-en-Y Gastric Bypass Improves Weight Loss in the First Years After Surgery: Results of a Randomized Controlled Trial

Jens Homan¹ · Abel Boerboom¹ · Edo Aarts¹ · Kemal Dogan¹ · Cees van Laarhoven² · Ignace Janssen¹ · Frits Berends¹

- Evolution of RYGB
- Longer and Slim Pouch
- Longer BP Limb from 150cm

Conclusion

Extending the gastric pouch is a promising modification of RYGB design that seems to be a safe and effective technique which improves mid-term weight loss, potentially driven by a lower occurrence of weight regain.

Boerboom et al 2020

Homan et al 2018

An Extended Pouch in a Roux-En-Y Gastric Bypass Reduces Weight Regain: 3-Year Results of a Randomized Controlled Trial

Abel Boerboom¹ · Mellody Cooman¹ · Edo Aarts¹ · Theo Aufenacker¹ · Eric Hazebroek¹ · Frits Berends¹

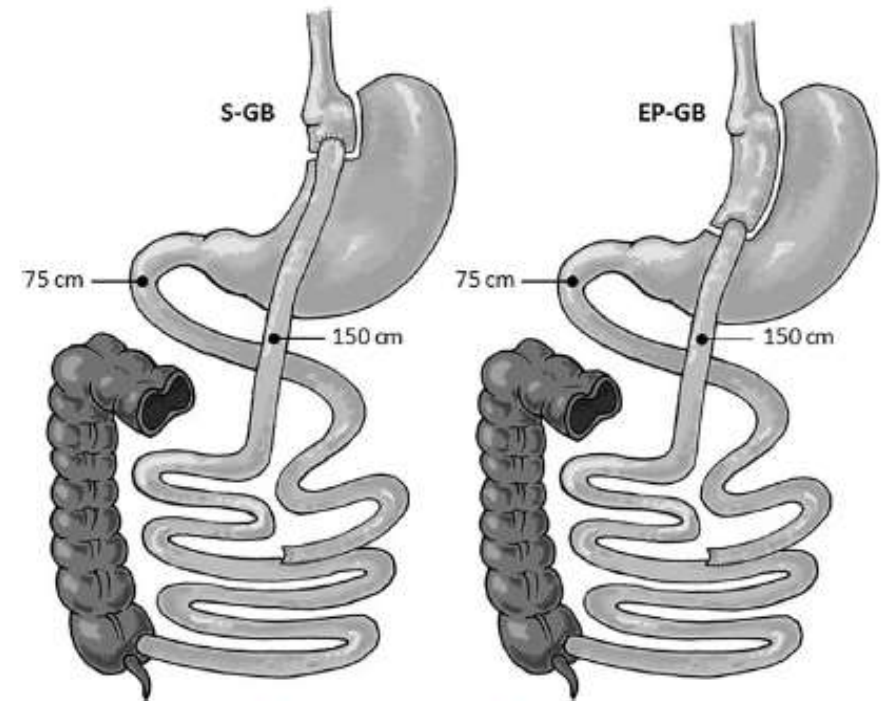


Fig. 1 Surgical procedures. S-GB standard pouch Roux-en-Y gastric bypass, EP-GB extended pouch Roux-en-Y gastric bypass

SADI-S versus RYGB

Failed Sleeve Gastrectomy: Single Anastomosis Duodenoileal Bypass or Roux-en-Y Gastric Bypass? A Multicenter Cohort Study

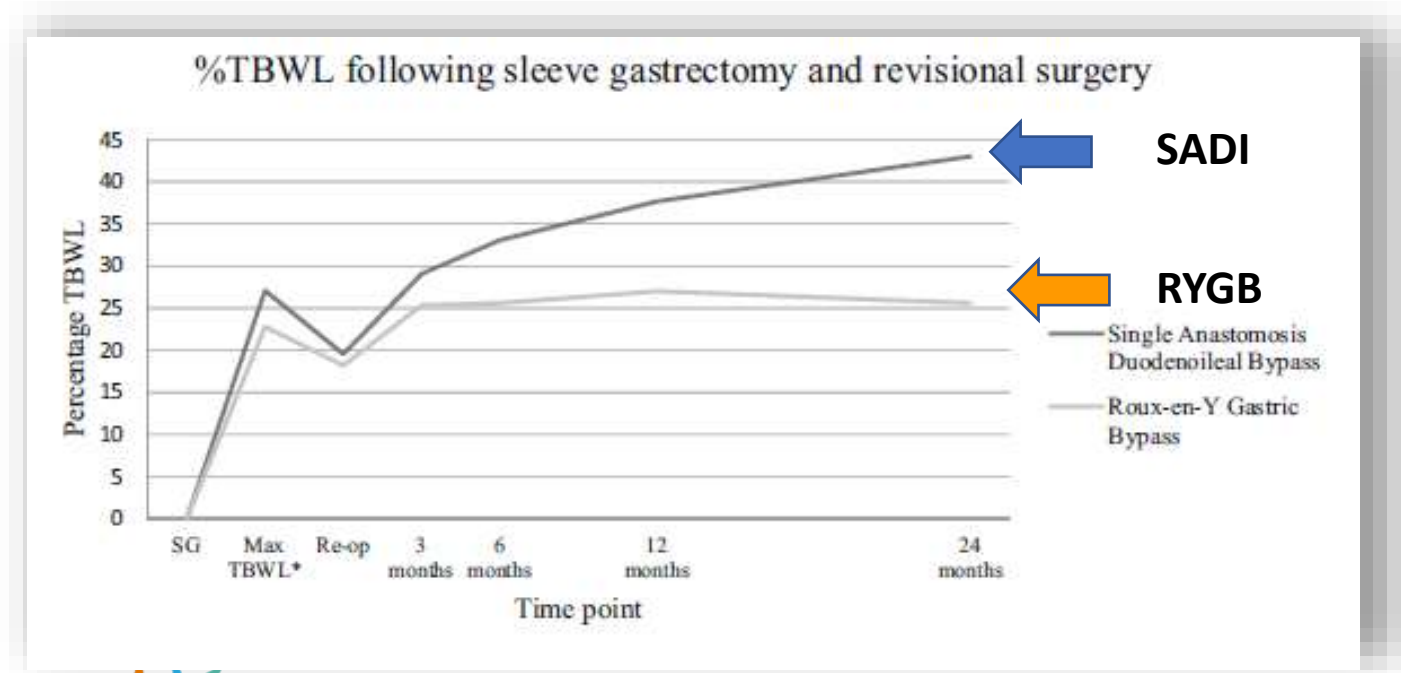
Phillip J. Dijkhorst^{1,2} • Abel B. Boerboom² • Ignace M. C. Janssen¹ • Dingeman J. Swank³ • René M. J. Wiezer⁴ • Eric J. Hazebroek² • Frits J. Berends² • Edo O. Aarts²



Obesity Surgery

<https://doi.org/10.1007/s11695-018-3429-z>

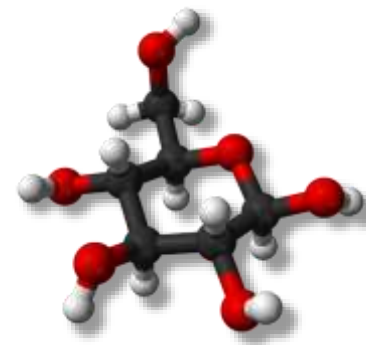
- Multicenter 4 Hospitals
- 140 patients
- 2 years



SADI 19,4% more TBWL than RYGB



Theory of Glucose Variability



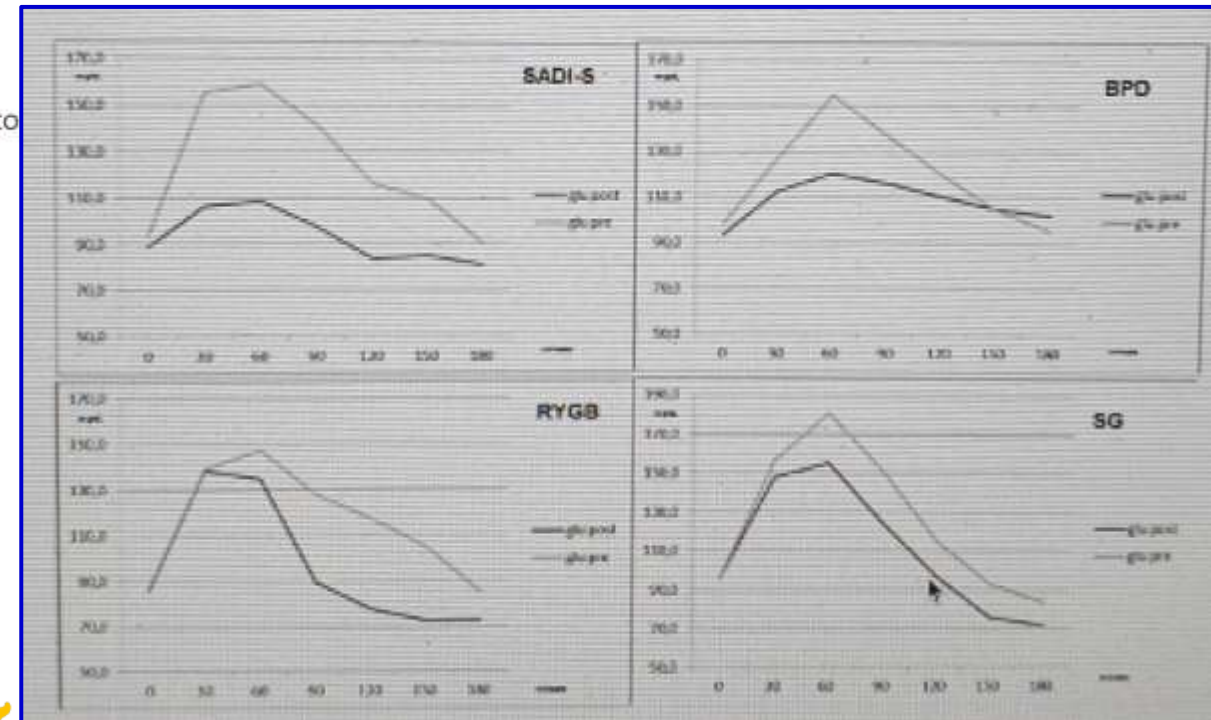
Effect of single anastomosis duodenal-ileal bypass with sleeve gastrectomy on glucose tolerance test: comparison with other bariatric procedures

Luca Sessa¹, Caterina Guidone², Pierpaolo Gallucci¹, Esmeralda Capristo³, Geltrude Mingrone³, Marco Raffaelli⁴ Surg Obes Relat Dis. 2019 Jul;15(7):1091-1097.

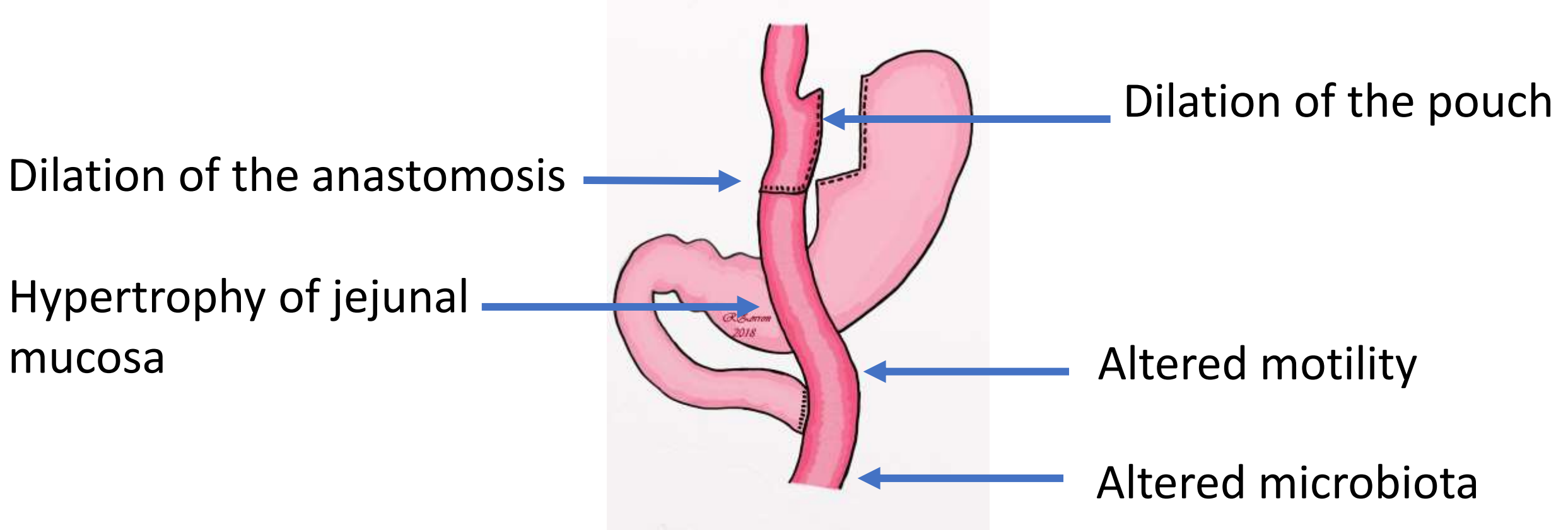
Sessa et al. SOARD 2020

Conclusions: Similar to BPD, SADI-S seems to be associated to insulin sensitivity and glucose homeostasis improvement, together with a reduced risk of hyperinsulinemia and, consequently, to hypoglycemia, often associated with RYGB and SG.

Is the key situated on postoperative glucose levels?



TECHNICAL ASPECTS OF ROUX-EN-Y GASTRIC BYPASS





Gastrojejunal Stoma Diameter Predicts Weight Regain after Gastric Bypass

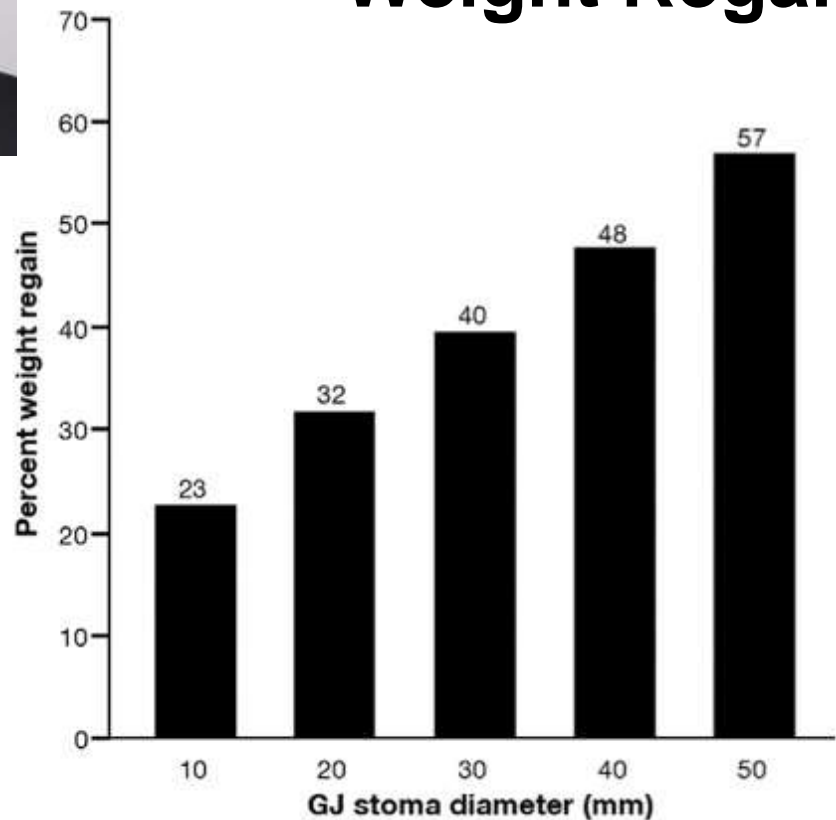


Figure 3. Predicted percentage of maximal weight lost after RYGB that was regained in 5 years after the procedure at different GJ stoma diameters based on the linear regression model.

Abu Dayyeh B, et al 2013

TORE - TRANSORAL OUTLET REDUCTION

APC - Argon Beam Coagulation

Dilation- anastomosis

Dilation- Pouch

Candy Cane

Dumping Syndrome

Endoscopy International Open

ROUX-EN-Y GASTRIC BYPASS POUCH OUTLET REDUCTION USING ARGON PLASMA COAGULATION

Ricardo J Fittipaldi-Fernandez, Idiberto J Zotarelli-Filho, Marcelo Falcão de Santana, João Henrique F de Lima, Fernando S Bastos, Sérgio A Barrichello-Junior, Newton Teixeira, Marcella Guedes, Aline F-F Fittipaldi-Fernandez.



TORE - TRANSORAL OUTLET REDUCTION

Transoral outlet reduction for weight regain after gastric bypass:
long-term follow-up ^(CME)

Nitin Kumar, MD,¹ Christopher C. Thompson, MD²

Boston, Massachusetts, USA

Volume 83, No. 4 : 2016 GASTROINTESTINAL ENDOSCOPY 779



150 pts after TORE

36months

EWL 19.2%,TWL 8.6%

OBES SURG (2016) 26:1978-1984
DOI 10.1007/s11695-016-2266-1



NEW CONCEPT

**Endoluminal Revision (OverStitch™, Apollo Endosurgery)
of the Dilated Gastroenterostomy in Patients with Late Dumping
Syndrome After Proximal Roux-en-Y Gastric Bypass**

Christine Stier¹ · Sonja Chiappetta¹

Stier C, Chiappetta S. Obes Surg 2016

HOW CAN OUR RYGB LOOK GREAT AGAIN?

TORE – TRANSORAL OUTLET REPAIR

RYGB



NAPOLI
2023



ERNST VON
BERGMANN
KLINIKUM

HOW CAN OUR RYGB LOOK GREAT AGAIN?

TORE – TRANSORAL OUTLET REPAIR

BPD.Scopinaro



TORE Endoscopic TRIMMING for weight regain after BPD Biliopancreatic Diversion

Dr Ricardo Zorron

NAPOLI
2023

REFLUX AFTER ROUX-EN-Y GASTRIC BYPASS



- RYGB is the most effective method for DRGE in patients with obesity
- Refractory acid or biliary reflux may appear years after RYGB
- Causes may reflect higher pressure, stenosis, thoracic migration, short limbs, dilated pouch

STILL, REDO SURGERY IS MORE EFFECTIVE THAN ENDOSCOPY FOR REFLUX AFTER RYGB

HOW CAN OUR RYGB LOOK GREAT AGAIN?

... And Reflux after Roux-en-Y GASTRIC BYPASS ?

With remnant...

FUNDOPLICATION
TOUPET using
the Gastric REMNANT
R Zorron

RYGB after sleeve, no remnant...

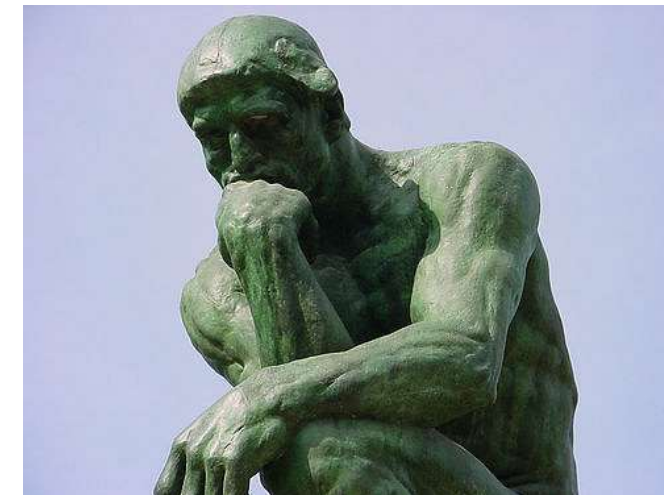
ANTROPLICATION for
REFLUX in RYGB post
SLEEVE- an Innovative Proposal
Prof. R. Zorron

Fundoplication using the gastric Remnant!



HOW CAN OUR RYGB LOOK GREAT AGAIN?

New Medications in the Pipeline



The NEW ENGLAND JOURNAL of MEDICINE

2022

ORIGINAL ARTICLE

Tirzepatide Once Weekly for the Treatment of Obesity

Ania M. Jastreboff, M.D., Ph.D., Louis J. Aronne, M.D.,
Nadia N. Ahmad, M.D., M.P.H., Sean Wharton, M.D., Pharm.D.,
Lisa Connery, M.D., Breno Alves, M.D., Arihiro Kiyosue, M.D., Ph.D.,
Shuyu Zhang, M.S., Bing Liu, Ph.D., Mathijs C. Bunck, M.D., Ph.D.,
and Adam Stefanski, M.D., Ph.D., for the SURMOUNT-1 Investigators*

Liraglutide, Semaglutide, Tirzepatide

mg, and 15 mg of tirzepatide, respectively, and 35% (95% CI, 30 to 39) with placebo; 50% (95% CI, 46 to 54) and 57% (95% CI, 53 to 61) of participants in the 10-mg and 15-mg groups had a reduction in body weight of 20% or more, as compared with 3% (95% CI, 1 to 5) in the placebo group ($P < 0.001$ for all com

20% TWL

A NEW ERA FOR EFFECTIVE ASSOCIATE MEDICATIONS?

CONCLUSIONS

- Endoscopic therapy can treat or correct postoperative issues as weight regain dumping, ulcers and other problems.
- Better strategy, however, is to correctly choose the primary surgery to avoid predictable problems...



EXTREME BARIATRIC ENDOSCOPY:

