Reports and experiences with recurrent weight regain after OAGB - Comparison to other surgical procedures

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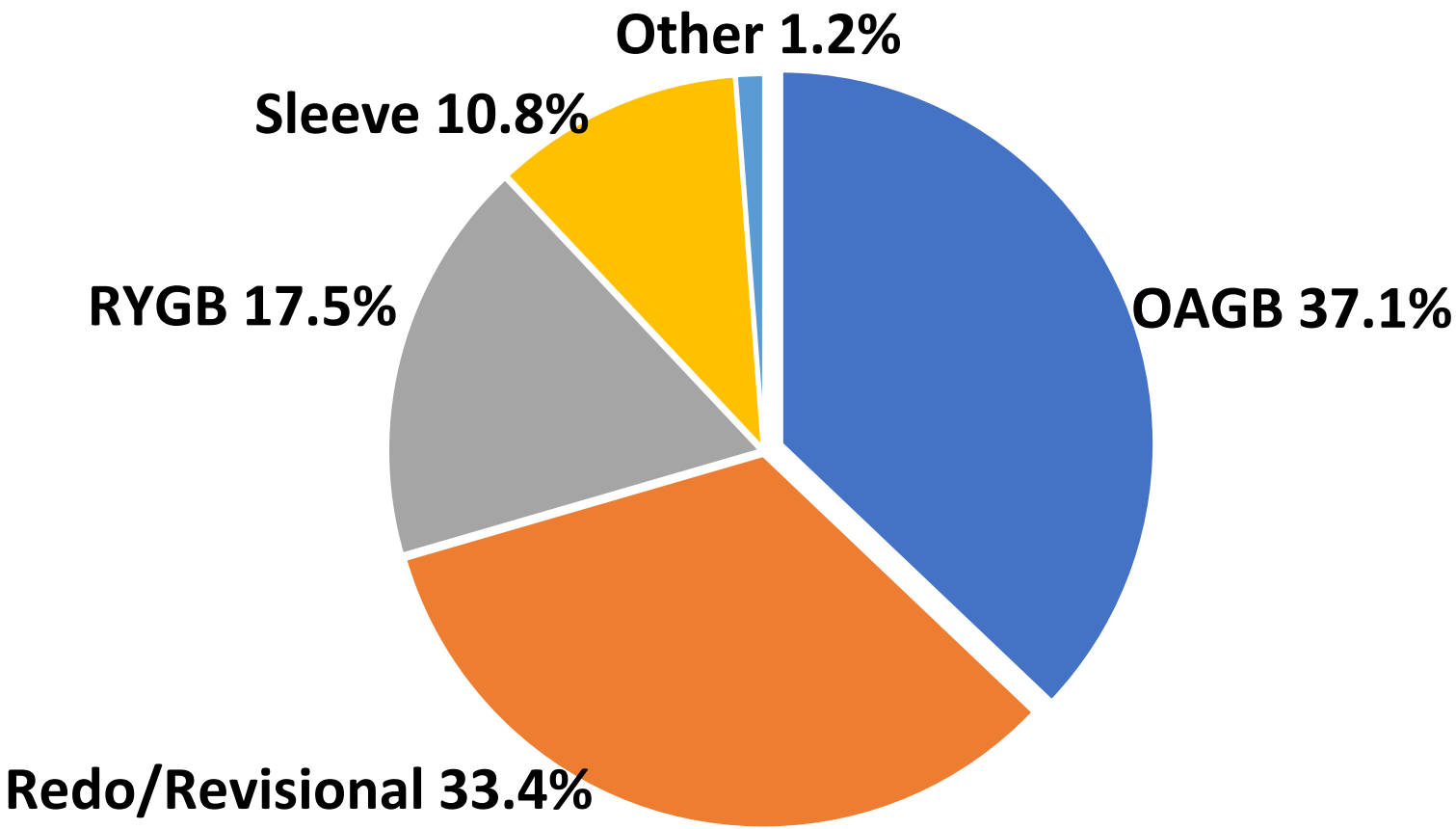
Disclosures

Workshops and Educ.grants with Johnson&Johnson

Without relation to this study

07.08.2022 KP Rheinwalt

Case mix disclosure of presenter (n>2500) (Center: n~4700)



Eat Weight Disord. 2023; 28(1): 5.

SICOB*-endorsed national Delphi consensus on obesity treatment optimization: focus on diagnosis, pre-operative management, and weight regain/insufficient weight loss approach

Marco Antonio Zappa, Angelo Iossa, Luca Busetto, Sonja Chiappetta, Francesco Greco, Marcello Lucchese, Fausta Micanti, Geltrude Mingrone, Giuseppe Navarra, Marco Raffaelli, Delphi Expert Panel, and Maurizio De Luca

…….intrinsic to the obesity definition as a chronic/recurrent disease with a WR percentage of 25%…….

*SICOB = Società Italiana di Chirurgia dell'OBesità e delle malattie metaboliche

Pubmed-search: definitions of weight regain in bariatric surgery>>>1061 findings

Obes Surg. 2019 Feb;29(2):691-697.

Lack of Standard Definitions of Primary and Secondary (Non)responders After Primary Gastric Bypass and Gastric Sleeve: a Systematic Review

Daniëlle S Bonouvrie, Martine Uittenbogaart, Arijan A P M Luijten, François M H van Dielen, Wouter K G Leclercq

Lack of standard definitions of primary and secondary (non)responders after RYGB and SG **makes it impossible to compare the literature**. The aim was to analyze the different definitions used. MEDLINE® was searched for literature published between 01-07-2014 and 01-07-2017 concerning (1) patients who received a primary RYGB or SG and (2) the outcomes of primary and secondary (non)responders. One hundred twelve out of 650 papers were eligible. Forty out of 47 papers described a definition of weight loss success. Sixty-seven out of 112 papers mentioned weight loss failure of which 42 described a definition, **in total 23 different definitions**. Weight regain was mentioned in 77 papers; only 21 papers provided a definition. The recent literature regarding definitions of these outcomes is highly inconsistent. To compare the literature international consensus is required.

Obes Surg. 2023; 33(5): 1390–1400.

When Definitions Differ, are Comparisons Meaningful? Definitions of Weight Regain After Bariatric Surgery and Their Associations with Patient Characteristics and Clinical Outcomes - A Need for a Revisit?

Wahiba Elhag, Merilyn Lock, and Walid El Ansari

Definitions and prevalence of weight regain (WR) after bariatric surgery remains inconsistent and their clinical significance unclear.

To assess **WR five years after sleeve gastrectomy** (LSG), **employing six definitions**; and appraise their association with patient characteristics/clinical outcomes.

Consecutive patients (N = 589) who underwent LSG were followed up for 5 years. WR prevalence was calculated yearly employing six definitions. Regression analysis assessed associations between WR at 5 years, and patient characteristics (age, sex, preop BMI, number of follow-up visits, number of comorbidities) and remission of comorbidities (type 2 diabetes, hypertension, and dyslipidemia).

Sample's mean age and BMI were 34 ± 11.6 years and 43.13 ± 5.77 kg/m2, and 64% were females. Percentage of patients with **WR at 2, 3, 4, and 5 years fluctuated between 2.53% and 94.18%, subject to definition**, and time point. The definition "Any WR" generated the highest prevalence of WR (86–94%) across all time points. At 5 years, for patient characteristics, preoperative BMI was associated with three definitions (P 0.49 to < 0.001), sex was associated with two (P < 0.026–0.032), and number of comorbidities was associated with one definition (P = 0.01). In terms of comorbidities, only hypertension was associated with WR (one definition, P = 0.025). No other definitions of WR were associated with any of the variables under examination.Weight regain is reasonably expected after BMS. WR definitions were of minor clinical significance due to weak associations with limited comorbidities. Dichotomous definitions might offer some guidance while managing individual patients. However, its utility as a comparator metric across patients/procedures requires refinements.

Weight regain in BMS, current definitions

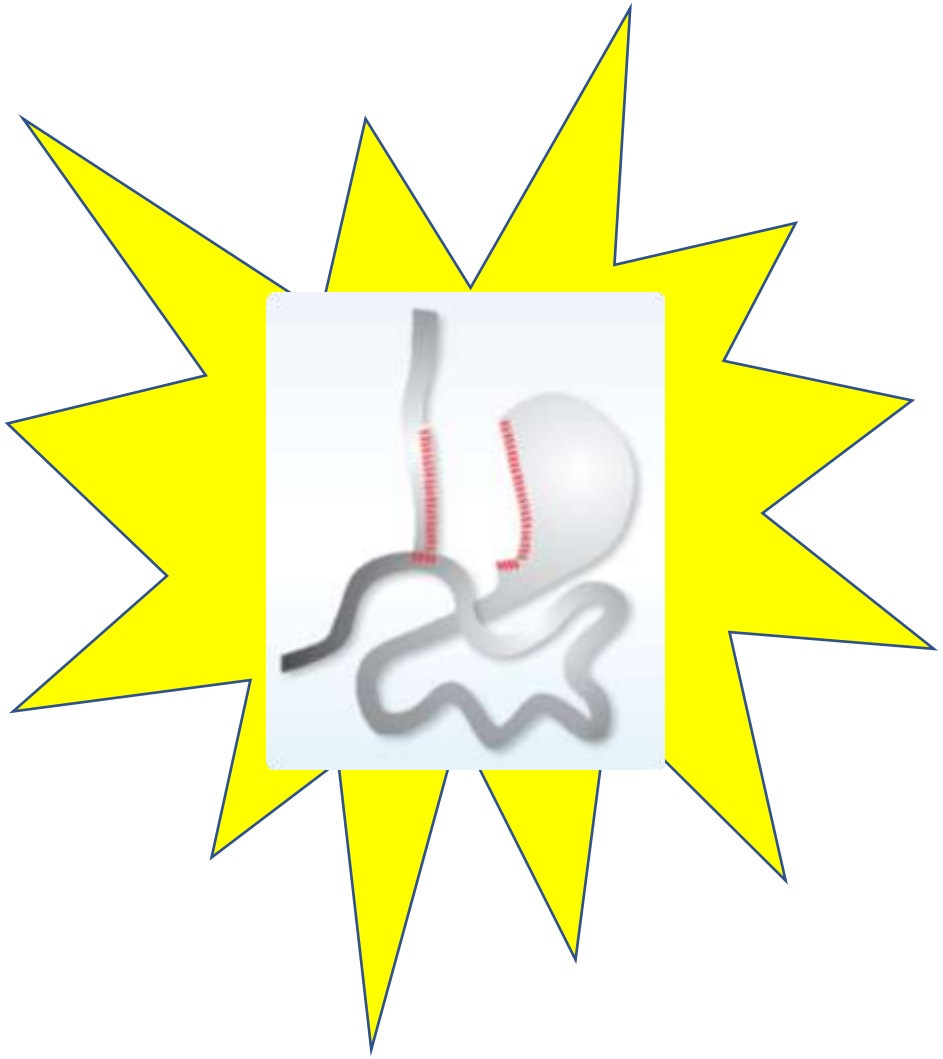
- Reinhold criteria>>>>>BMI again ≥35kg/m² or EWL<50%

- Christou et al>>>>>BMI>35kg/m² for starting BMI<50kg/m²
  BMI>40kg/m2 for starting BMI>50kg/m²

- ……

Reinhold RB. Critical analysis of long term weight loss following gastric bypass Surg Gynecol Obstet. 1982 Sep;155(3):385-94.
Christou NV, Look D, McLean LD. Weight regain after short and long limb gastric bypass in patients followed for longer than 10 years. Ann Surg. 2006:244(5):734-40

No WR in OAGB ???



Pubmed-search: „OAGB and weight regain“

168 publications

0% weight loss failure in large series

√

- **Rutledge** R, Walsh TR. Continued excellent results with the mini-gastric bypass: **Six-year study** in 2,410 patients. Obes Surg. 2005;15:1304–8.
- **Carbajo** MA, Luque-de-León E, Jiménez JM, Ortiz-de-Solórzano J, Pérez-Miranda M, Castro-Alija MJ. Laparoscopic one-anastomosis gastric bypass: Technique, results, and **long-term follow-up** in 1200 patients. Obes Surg. 2017;27:1153–67.
- **Noun** R, Skaff J, Riachi E, Daher R, Antoun NA, Nasr M. One thousand consecutive mini-gastric bypass: Short- and **long-term outcome**. Obes Surg. 2012;22:697–703.

Multicenter Study Obes Surg. 2017 Nov;27(11):2956-2967. **Complications Following the Mini/One Anastomosis Gastric Bypass (MGB/OAGB): a Multi-institutional Survey on 2678 Patients with a Mid-term (5 Years) Follow-up**

Mario Musella, Antonio Susa, Emilio Manno, Maurizio De Luca, Francesco Greco, Marco Raffaelli, Stefano Cristiano, Marco Milone, Paolo Bianco, Antonio Vilardi, Ivana Damiano, Gianni Segato, Laura Pedretti, Piero Giustacchini, Domenico Fico, Gastone Veroux, Luigi Piazza

Background: In recent years, several articles have reported considerable results with the Mini/One Anastomosis Gastric Bypass (MGB/OAGB) in terms of both weight loss and resolution of comorbidities. Despite those positive reports, some controversies still limit the widespread acceptance of this procedure. Therefore, a multicenter retrospective study, with the aim to investigate complications following this procedure, has been designed.

Patients and methods: To report the complications rate following the MGB/OAGB and their management, and to assess the role of this approach in determining eventual complications related especially to the loop reconstruction, in the early and late postoperative periods, the clinical records of 2678 patients who underwent MGB/OAGB between 2006 and 2015 have been studied.

Results: Intraoperative and early complications rates were 0.5 and 3.1%, respectively. **Follow-up at 5 years was 62.6%.** Late complications rate was 10.1%. A statistical correlation was found for perioperative bleeding both with operative time ($p < 0.001$) or a learning curve of less than 50 cases ($p < 0.001$). A statistical correlation was found for postoperative duodenal-gastro-esophageal reflux (DGER) with a preexisting gastro-esophageal-reflux disease (GERD) or with a gastric pouch shorter than 9 cm, ($p < 0.001$ and $p = 0.001$), respectively. An excessive weight loss correlated with a biliopancreatic limb longer than 250 cm ($p < 0.001$).

11/2678 with weight loss failure = 0.41 %

Conclusions: Our results confirm MGB/OAGB to be a reliable bariatric procedure. According to other large and long-term published series, MGB/OAGB seems to compare very favorably, in terms of complication rate, with two mainstream procedures as standard Roux-en-Y gastric bypass (RYGBP) and laparoscopic sleeve gastrectomy (LSG).

Obes Surg. 2022; 32(2): 256–265.

Revisional Surgery After One Anastomosis/Minigastric Bypass: an Italian Multi-institutional Survey

Mario Musella, Antonio Vitiello, Antonio Susa, Francesco Greco, Maurizio De Luca, Emilio Manno, Stefano Olmi, Marco Raffaelli, Marcello Lucchese, Sergio Carandina, Mirto Foletto, Francesco Pizza, Ugo Bardi, Giuseppe Navarra, Angelo Michele Schettino, Paolo Gentileschi, Giuliano Sarro, Sonja Chiappetta, Andrea Tirone, Giovanna Berardi, Nunzio Velotti, Diego Foschi, Marco Zappa, Luigi Piazza, and SICOB Collaborative group for the study of OAGB/MGB, Giulia Bagaglini, Domenico Benavoli, Amanda Belluzzi, Cosimo Callari, Mariapaola Giusti, Enrico Facchiano, Leo Licari, Giuseppe Iovino, Giacomo Piatto, Francesco Stanzione, Matteo Uccelli, Gastone Veroux, Costantino Voglino

Background. Efficacy and safety of OAGB/MGB (one anastomosis/mini gastric bypass) have been well documented both as primary and as revisional procedures. However, even after OAGB/MGB, revisional surgery is unavoidable in patients with surgical complications or insufficient weight loss.

Methods. A questionnaire asking for the total number and demographics of primary and revisional OAGB/MGBs performed between January 2006 and July 2020 was e-mailed to all S.I.C. OB centres of excellence (annual caseload > 100; 5-year follow-up > 50%). Each bariatric centre was asked to provide gender, age, preoperative body mass index (BMI) and obesity-related comorbidities, previous history of abdominal or bariatric surgery, indication for surgical revision of OAGB/MGB, type of revisional procedure, pre- and post-revisional BMI, peri- and post-operative complications, last follow-up (FU).

Results. **Twenty-three bariatric centres** (54.8%) responded to our survey reporting a total number of **8676 primary OAGB/MGBS** and a follow-up of 62.42 ± 52.22 months. A total of 181 (2.08%) patients underwent revisional surgery: 82 (0.94%) were suffering from intractable DGER (duodeno-gastric-esophageal reflux), **42 (0.48%) were reoperated for weight regain**, 16 (0.18%) had excessive weight loss and malnutrition, 12 (0.13%) had a marginal ulcer perforation, 10 (0.11%) had a gastro-gastric fistula, 20 (0.23%) had other causes of revision. Roux-en-Y gastric bypass (RYGB) was the most performed revisional procedure (109; 54%), followed by bilio-pancreatic limb elongation (19; 9.4%) and normal anatomy restoration (19; 9.4%).

Conclusions. Our findings demonstrate that there is acceptable revisional rate after OAGB/MGB and conversion to RYGB represents the most frequent choice.

Surg Obes Relat Dis. **2011** Jul-Aug;7(4):486-91.

Revisional surgery for laparoscopic minigastric bypass

Wei-Jei Lee, Yi-Chih Lee, Kong-Han Ser, Shu-Chun Chen, Jung-Chien Chen, Yen-How Su

Background: Laparoscopic minigastric bypass (LMGB), a sleeved gastric tube with Billroth II anastomosis, has been proposed as an alternative to laparoscopic Roux-en-Y gastric bypass (LRYGB) for morbid obesity. However, the data regarding revision surgery after LMGB during long-term follow-up is not clear.

Methods: From January 2001 to December 2009, **1322 patients** (996 women and 326 men, mean age 31.6 ± 9.1 years, mean body mass index 40.2 ± 7.4 kg/m(2)), who were enrolled in a surgically supervised weight loss program and had undergone LMGB were included. **All the patients received regular yearly follow-up**, and all the clinical data were prospectively collected and stored. The reasons and type of surgery for revision surgery were identified and analyzed.

Results: The excess weight loss and mean body mass index at 5 years after LMGB was 72.1% and 27.1 ± 4.6 kg/m(2). Of the 1322 patients, **23 (1.7%) had undergone revision surgery during a follow-up of 9 years**. The estimated accumulated revision rate of 9 years was 2.69% for LMGB. The most common cause of revision was malnutrition in 9 (39.1%), followed by **inadequate weight loss in 8 (34.7%)**, and intractable bile reflux and dissatisfaction each in 3 (13.0%). The type of revision

Insufficient Weight Loss in only 8 of 1322 = 0.6%

satisfactory results after revision surgery. No patients had undergone revision surgery for internal hernia or ileus during the follow-up period.

Conclusion: LMGB resulted in significant and sustained weight loss with an acceptably low revision rate at long-term follow-up. Revision surgery after LMGB can be performed using a laparoscopic approach with a low risk.

Review J Res Med Sci. 2020 Jun 30;25:62.

Revisional surgery after one anastomosis/mini gastric bypass: A narrative review

Mohammad Kermansaravi, Kamal Kumar Mahawar, Amir Hosein Davarpanah Jazi, Foolad Eghbali, Ali Kabir , Abdolreza Pazouki

17,166 reported cases of OAGB included in this review

Weight regain/inadequate weight loss

Another source of debate is the potential risk OAGB patients have to develop weight regain or inadequate weigh loss in the late period. Previous papers define weight regain as more than 10 Kg,[6] or more than 20% of primary weight.[11] Inadequate weigh loss or weight loss failure considered in patients with ≤25% EBMIL.[12,30] We did not find the exact period of these definitions in the literature. Some series did not report any patient (s) with regain or inadequate weight loss.[6,13,15]

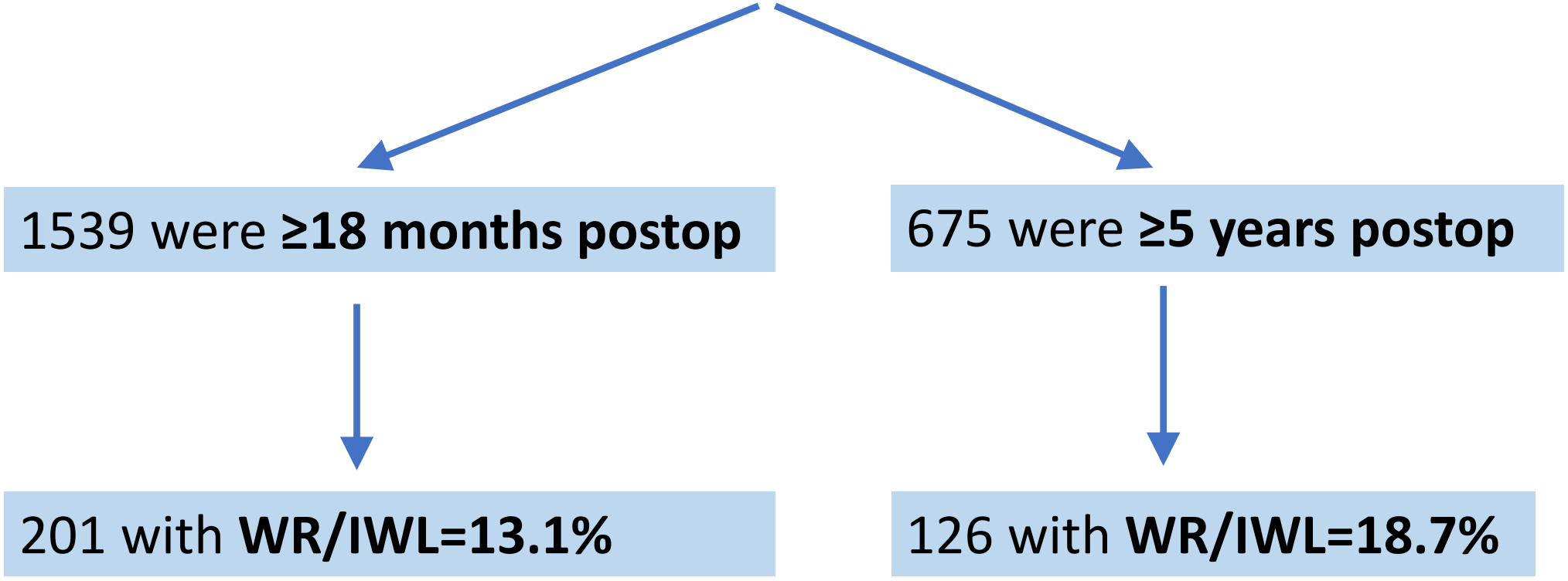
Lee et al. reported eight patients (out of total 23 revision surgery) with weigh regain/inadequate weigh loss. The treatment was either duodenal switch or biliopancreatic diversion.[11] In **Musella et al., series 11/2678** patients showed weight loss failure after 5-year follow-up, they revealed that this late onset complication is significantly correlated with a learning curve <50 cases, the performed management was loop resizing in seven, and pouch resizing in four patients.[1]

Nineteen patients (out of 4010) underwent reoperations for weight regain/inadequate weight loss in two studies[1,11] in the long-term. **= 0.47%**

experience in own center until 5-2023

- Total: 4269
- Primary MBS: 3400
- Revisions: 479
- Redo-surgeries: 360
- Other (gastric ballon, exploratrice laparoscopy / laparotomy): 30

1731 primary OAGBs 2011 to 5/2023



Real Life data from Germany.....

From 675 OAGBs operated more than 5 years ago:

- 18.7% (126) of the whole group with WR
- But Follow-up data at 5 years only from 209 cases = FU-rate at 5yr = only 31.0%
- From OAGBs with FU at 5 years 60.3% had IWL/WR
- This seems to be the worst possibly outcome estimation…

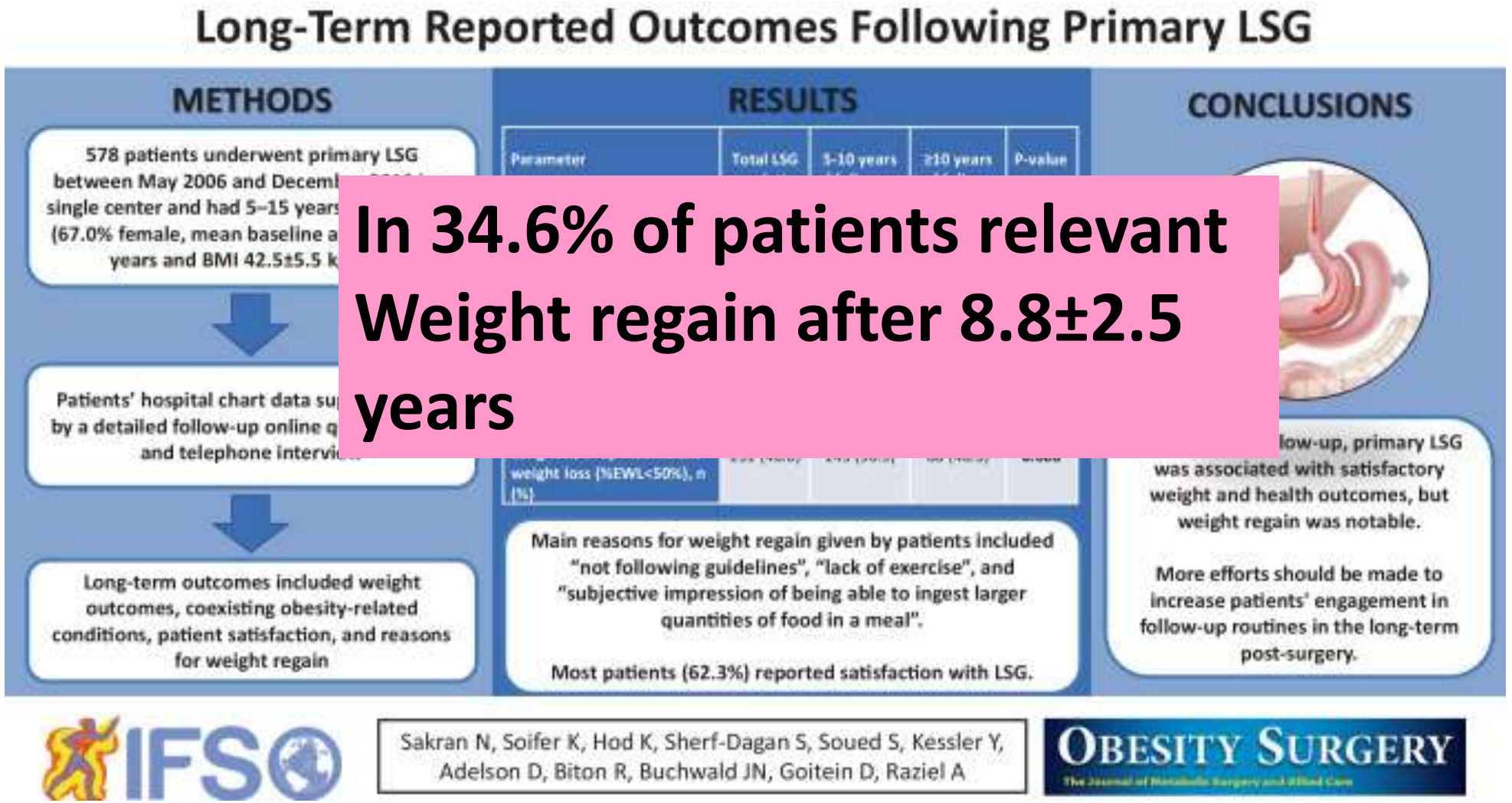
2023 results German ♂ soccer team		
Germany		Belgium
	2 : **3**	
Germany		Ukraine
	3 : 3	
Germany		Pologne
	0 : **1**	
Germany		Colombia
	0 : **2**	

51kg weight regain 7 yr post OAGB (from another center, but could be ours as well…)

169kg > 85kg > 136kg

Bad OAGB-surgeon(s) in Germany???

Pubmed: Weight regain after **Sleeve**: 2288 publications



Int J Obes (Lond). 2022; 46(4): 739–749.

Seven-year trajectories of body weight, quality of life and comorbidities following Roux-en-Y gastric bypass and sleeve gastrectomy

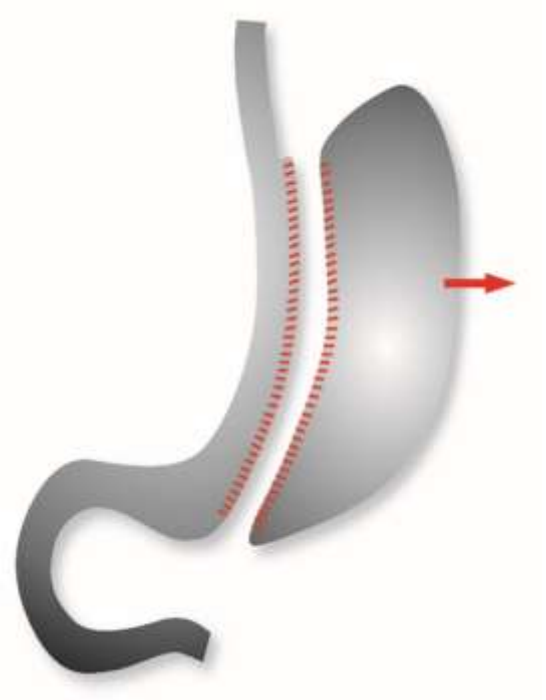
Hans Jørgen Nielsen, Bjørn Gunnar Nedrebø, Alexander Fosså, John Roger Andersen, Jörg Assmus, Vigdis Halvorsen Dagsland, Simon Nitter Dankel, Oddrun Anita Gudbrandsen, Johan Fernø, Iren Hjellestad, Marianne Jensen Hjermstad, Ronette L. Kolotkin, Håvard Luong Thorsen, Gunnar Mellgren, and Tone Nygaard Flølo

…….Suboptimal weight loss at long-term follow-up (%EBMIL < 50) was seen in 118 of 319 (**37.0%) patients after SG** versus **34 of 142 (23.9%) after RYGB** (p = 0.006)……..

Own experiences with primary Sleeve Gastrectomies

- 750 primary sleeves
- 502 with ≥18 months postop.
- 123 (24.5%) with documented IWL/WR

- 197 with ≥5 Years Postop.
- 75 with IWL/WR
- **at least 38.01% IWL/WR after 5 years+**



J Gastrointest Surg. 2023; 27(1): 47–55.

A Long-Term Comparative Study Between One Anastomosis Gastric Bypass and Sleeve Gastrectomy

Andreas Plamper, Philipp Lingohr, Jennifer Nadal, Jonel Trebicka, Maximilian J. Brol, Anna Woestemeier, Sophia M.-T. Schmitz, Patrick H. Alizai, Ulf P. Neumann, Tom F. Ulmer, and Karl P. Rheinwalt

Background. One anastomosis gastric bypass (OAGB) has become increasingly accepted in bariatric surgery and meanwhile represents the third most common procedure worldwide. While it shows promising weight loss results and comorbidity resolution, questions about issues such as reflux or nutritional deficiencies (ND) persist in the long term. On the other hand, the most frequently performed sleeve gastrectomy (SG) has to accept growing criticism regarding long-term results and reflux issues. There is a particular lack of long-term comparative data for both procedures. This study presents our long-term experience.

Methods. We evaluated OAGB and SG patients retrospectively comparing for weight loss and resolution of comorbidities as well as perioperative and long-term complications in a follow-up period of 5 years.

Results. **Nine hundred eleven OAGB** and **241 SG** were included in the study. OAGB had a shorter operation time and hospital stay. Overall complication rate did not differ in both groups. Ulcers were more frequent in OAGB (7.7% vs. 1.7%, p = 0.001), whereas **insufficient weight loss (IWL)/weight regain (WR) proved to be more prevalent in SG (25.7% vs. 6.4%, p < 0.001).** The same held true for reflux (17.8% vs. 8.3%, p < .001). On the other hand, ND were more common in OAGB (20.0% vs. 12.0%, p = 0.005). Revisional surgery was more often indicated after SG. Analysis by linear mixed model showed that OAGB achieved a lower BMI/higher loss of BMI. Improvement of T2DM (94.6% vs. 85.2%, p = 0.008) and sleep apnea (88.8% vs. 78.8%, p = 0.01) was superior in OAGB.

Conclusions. OAGB had a superior effect on weight loss as well as improvement of T2DM and sleep apnea. Furthermore, long-term problems such as IWL/WR and reflux were more related to SG. On the other hand, a malabsorptive procedure such as OAGB showed a higher risk for ND. Our findings support the available data in the literature.

Int J Obes (Lond). 2022; 46(4): 739–749.

Seven-year trajectories of body weight, quality of life and comorbidities following Roux-en-Y gastric bypass and sleeve gastrectomy

Hans Jørgen Nielsen, Bjørn Gunnar Nedrebø, Alexander Fosså, John Roger Andersen, Jörg Assmus, Vigdis Halvorsen Dagsland, Simon Nitter Dankel, Oddrun Anita Gudbrandsen, Johan Fernø, Iren Hjellestad, Marianne Jensen Hjermstad, Ronette L. Kolotkin, Håvard Luong Thorsen, Gunnar Mellgren, and Tone Nygaard Flølo

…….Suboptimal weight loss at long-term follow-up (%EBMIL < 50) was seen in 118 of 319 (**37.0%) patients after SG** versus **34 of 142 (23.9%) after RYGB** (p = 0.006)……..

Own experiences with primary Roux-en-Y Gastric Bypasses

- 966 primary RYGB
- 635 with ≥18 months postop.
- 79 of them with documented IWL/WR

- 374 with ≥5 years postop.
- 75 with IWL / WR
- **at least 20.1% IWL/WR after 5 years+**

Int J Environ Res Public Health. 2020 Oct; 17(20): 7644.

Long-Term Weight Loss Results, Remission of Comorbidities and Nutritional Deficiencies of Sleeve Gastrectomy (SG), Roux-En-Y Gastric Bypass (RYGB) and One-Anastomosis Gastric Bypass (OAGB) on Type 2 Diabetic (T2D) Patients

Maria-Jose Castro, Jose-Maria Jimenez, Miguel-Angel Carbajo, Maria Lopez, Maria-Jose Cao, Sara Garcia, and Jaime Ruiz-Tovar

In the present study, a significantly greater weight loss in the OAGB group could be observed at 1, 2 and 5 years. **Five years after surgery, the mean BMI in the OAGB group was 25.9 Kg/m2, whereas in the RYGB and SG groups, the mean BMI was in the range of obesity, and the weight curve shows a clear weight regain 5 years after surgery**. At a 2 years' follow-up, the weight loss that we obtained in the OAGB group is higher than that reported in the YOMEGA trial [9]. Lee et al. [16] also conducted a randomized clinical trial comparing RYGB (with 100 cm of biliopancreatic limb and 150 cm of alimentary limb) with OAGB (200 cm of biliopancreatic limb and without measurement of the total bowel length). In addition, they did not observe significant weight loss differences between groups after 2 years of follow-up. The greater malabsorption **(shorter common limb) of our OAGB allows for the obtention of greater weight loss, and it also limits the weight regain**. Despite the fact that weight loss is not completely linked to T2D remission, as the improvement of the glycemic parameters after bariatric surgery appears before obtaining significant weight loss, weight regain has been related with a recurrence of comorbidities [13]. Thus, the weight loss obtained is a relevant parameter to evaluate the success of a bariatric approach, as has been shown in our OAGB group.

Int J Environ Res Public Health. 2020 Oct; 17(20): 7644.

Long-Term Weight Loss Results, Remission of Comorbidities and Nutritional Deficiencies of Sleeve Gastrectomy (SG), Roux-En-Y Gastric Bypass (RYGB) and One-Anastomosis Gastric Bypass (OAGB) on Type 2 Diabetic (T2D) Patients

Maria-Jose Castro, Jose-Maria Jimenez, Miguel-Angel Carbajo, Maria Lopez, Maria-Jose Cao, Sara Garcia, and Jaime Ruiz-Tovar

	SG (n = 83)	RYGB (n = 152)	OAGB (n = 123)	p-Value (ANOVA)	p-Value (SG Vs. RYGB)	p-Value (SG Vs. OAGB)	p-Value (OAGB Vs. RYGB)
1 year postoperative							
BMI (Kg/m^2)	31.3 ± 7.2	30.4 ± 6.9	24.7 ± 5.8	0.001	0.762	0.001	0.001
EBMIL (%)	73.6 ± 23.6	77.3 ± 15.3	101.8 ± 2.5	0.001	0.483	0.001	0.001
2 years postoperative							
BMI (Kg/m^2)	29.4 ± 5.7	28.8 ± 5.2	24.8 ± 5.3	0.001	0.713	0.001	0.001
EBMIL (%)	80.5 ± 17.8	81.9 ± 14.6	101.2 ± 2.1	0.001	0.846	0.001	0.001
5 years postoperative							
BMI (Kg/m^2)	32.4 ± 5.7	30.9 ± 5.9	25.9 ± 5.9	0.001	0.592	0.001	0.001
EBMIL (%)	68.8 ± 18.6	72.5 ± 16.4	97.6 ± 9.9	0.001	0.378	0.001	0.001

ANOVA: analysis of variance; BMI: body mass index; EBMIL: excess BMI loss.

Obesity (Silver Spring). 2022 Mar; 30(3): 614–627.

Roux-en-Y gastric bypass, sleeve gastrectomy, or one-anastomosis gastric bypass? A systematic review and meta-analysis of randomized-controlled trials

Isabelle Uhe, Jonathan Douissard, Michele Podetta, Mickael Chevallay, Christian Toso, Minoa Karin Jung, and Jeremy Meyer

Objective

This study aimed to determine which bariatric procedure allows patients to obtain the best weight-loss outcomes and a remission of type 2 diabetes.

Methods

Databases were searched for randomized-controlled trials comparing Roux-en-Y gastric bypass (RYGB) with sleeve gastrectomy (SG) or one-anastomosis gastric bypass (OAGB). The mean difference (MD) or the relative risk was determined.

Results

Twenty-five randomized-controlled trials were analyzed. Excess weight loss (EWL, percentage) was greater for RYGB patients at 3 years (MD: 11.93, $p < 0.00001$) and 5 years (MD: 13.11, $p = 0.0004$). Higher excess BMI loss (percentage) was found in RYGB at 1 year (MD: 11.66, $p = 0.01$). Total weight loss (percentage) was greater for RYGB patients after 3 months (MD: 2.41, $p = 0.02$), 6 months (MD: 3.83, $p < 0.00001$), 1 year (MD: 6.35, $p < 0.00001$), and 5 years (MD: 3.90, $p = 0.005$). No difference in terms of remission of type 2 diabetes was seen between RYGB and SG. EWL was significantly more important after OAGB than after RYGB after 1 year (MD: −10.82, $p = 0.003$).

Conclusions

RYGB is more efficient than SG in the midterm. OAGB offers greater EWL than RYGB after 1 year, but further evidence is needed to confirm this result.

Obes Surg. 2023; 33(7): 1966–1973.

Long Biliopancreatic Limb Roux-En-Y Gastric Bypass Versus One-Anastomosis Gastric Bypass: a Randomized Controlled Study

Mohamed AbdAlla Salman, Ahmed Abelsalam, George Abdelfady Nashed, Mohamed Yacoub, and Ahmed Abdalla

Background. Roux-en-Y gastric bypass (RYGB) is the gold standard in bariatric surgery. The one-anastomosis gastric bypass (OAGB) procedure, first introduced by Dr. Rutledge, has demonstrated a 25% greater weight loss efficiency than the traditional Roux-en-Y gastric bypass (RYGB) procedure due to the substantially longer biliopancreatic limb (BPL).

Aim of the study. The current work aimed to compare the outcomes of OAGB and long BPL RYGB regarding weight loss and comorbidity resolution.

Patients and methods. This randomized controlled trial was done at our institution between September 2019 and January 2021. Patients who were candidates for bariatric surgery were randomly and equally allocated to two groups. Group A underwent OAGB, while group B underwent long BPL RYGB. Patients were followed up for 6 months postoperatively.

Results. This study included 62 patients equally allocated to OAGB or long BPL RYGB, with no dropouts during follow-up. At 6 months, there was no statistically significant difference between the two groups regarding postoperative BMI (P = 0.313) and the EBWL (P = 0.238). There was comparable remission of diabetes mellitus (P = 0.708), hypertension (P = 0.999), OSA (P = 0.999), joint pain (P = 0.999), and low back pain (P = 0.999). Seven patients in the OAGB group experienced reflux symptoms (P = 0.011), which were managed by proton pump inhibitors.

Conclusion. **Extending the BPL in RYGB provides weight loss and comorbidity remission comparable to that of OAGB**. Some OAGB-related reflux cases remain a concern. However, they were sufficiently controlled with PPIs. Due to OAGB superior technical simplicity, long BPL RYGB should be preserved for cases whom are more risky for bile reflux.

Take home

- as in Sleeve and RYGB, weight regain seems to be (less ?) frequent in OAGB
- OAGB and RYGB show better long-term weight-results than Sleeve
- Advantages for OAGB vs. RYGB seem to depend on different BPL-lengths
- in own OAGB cohort ≥ 5yr. (675 pt.), WR between 18.7% (min.) and 60.3% (estimated maximum)
- Long-term rate of **relevant WR after OAGB estimated at least being 20%**

Thank you

Cologne cathedral, 157m