Recurrent weight Gain after OAGB: Decreasing the Common Channel Limb Length(CCLL)

Prof. Maurizio De Luca, *Director Department of Surgery Rovigo,Trecenta and Adria Hospitals– Italy*

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Scientific Commitee Italian Society of Obesity (SIO)
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6th of September, 2024

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I have no potential conflict of interest to report

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AGREE (Appraisal of Guidelines for Research and Evaluation) - II

USER'S MANUAL page 7

DOMAINS		No. of Items
1	Scope & Purpose	3
2	Stakeholder Involvement	3
3	Rigour of Development	8
4	Clarity & Presentation	4
5	Applicability	3
6	Editorial Independence	2

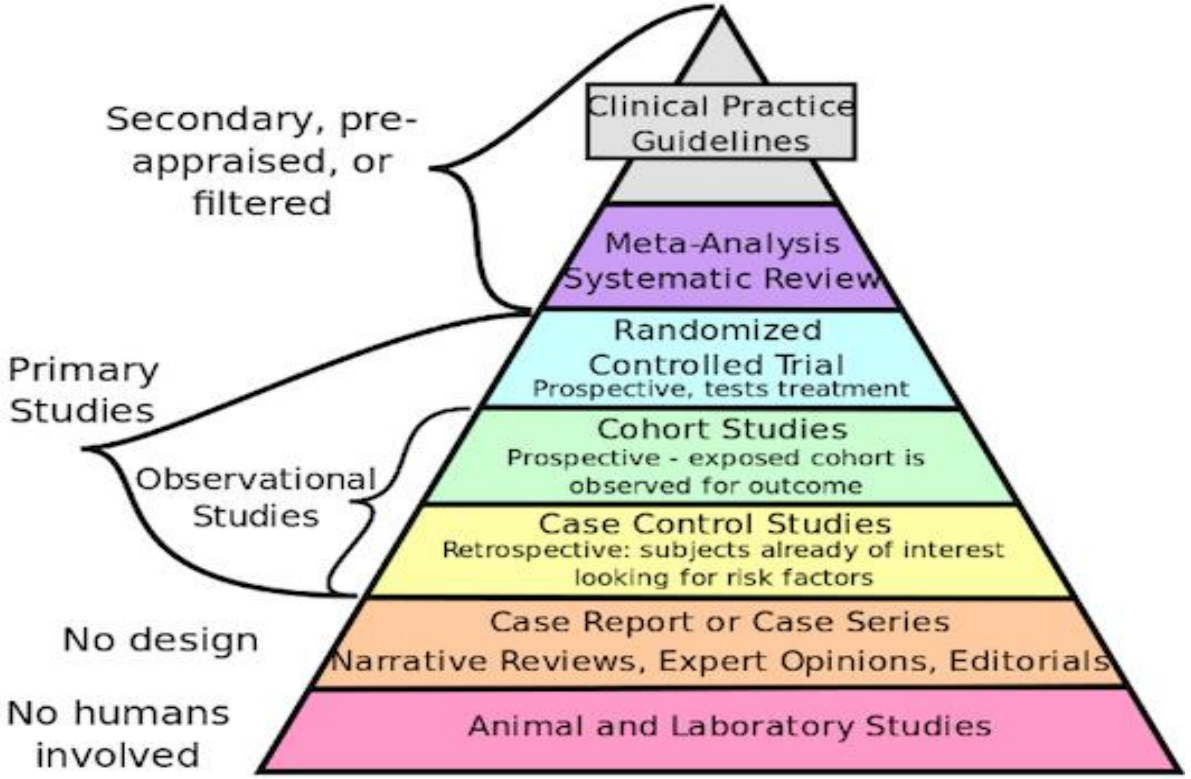
DOMAIN 3: RIGOUR OF DEVELOPMENT

Systematic methods were used to search for evidence.

There is an explicit link between the recommendations and the supporting evidence.

The guideline has been externally reviewed by experts prior to its publication.

A procedure for **updating** the guideline is provided.



Centre for Evidence-Based Medicine. Study Designs. 2016
https://www.cebm. net/2014/04/study-designs/.

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Definitions

Obesity Surgery (2024) 34:2399–2410
https://doi.org/10.1007/s11695-024-07345-8

IFSO

ORIGINAL CONTRIBUTIONS

2024

Check for updates

Revision/Conversion Surgeries After One Anastomosis Gastric Bypass—An Experts' Modified Delphi Consensus

Mohammad Kermansaravi[1] · Sonja Chiappetta[2] · Chetan Parmar[3] · Miguel A. Carbajo[4] · Mario Musella[5] · Jean-Marc Chevallier[6] · Rui Ribeiro[7] · Almino C. Ramos[8] · Rudolf Weiner[9] · Abdelrahman Nimeri[10] · Edo Aarts[11] · Syed Imran Abbas[12] · Ahmad Bashir[13] · Estuardo Behrens[14] · Helmuth Billy[15] · Ricardo V. Cohen[16] · Daniel Caina[17] · Maurizio De Luca[18] · Bruno Dillemans[19] · Mathias A. L. Fobi[20] · Manoel Galvao Neto[21] · Khaled Gawdat[22] · Mohamad Hayssam ElFawal[23] · Kazunori Kasama[24] · Radwan Kassir[25] · Amir Khan[26] · Lilian Kow[27] · Kul Deepak Singh Kular[28] · Muffazal Lakdawala[29] · Laurent Layani[30] · Wei-Jei Lee[31] · Enrique Luque-de-León[32] · Kamal Mahawar[33] · Hazem Almomani[34] · Karl Miller[35] · Juan Carlos Olivares González[36] · Arun Prasad[37] · Karl Rheinwalt[38] · Robert Rutledge[39] · Bassem Safadi[40] · Paulina Salminen[41] · Asim Shabbir[42] · Halit Eren Taskin[43] · Jose Sergio Verboonen[44] · Ramon Vilallonga[45] · Cunchuan Wang[46] · Scott A. Shikora[10] · Gerhard Prager[47]

48 recognized bariatric surgeons from 28 countries

A-Definitions for statements*

1. Recurrent weight gain: weight gain of more than 30% of the initial surgical weight loss	**Consensus (agree) 85.42%**	-	**Consensus**
2. Suboptimal initial weight loss: TWL (total weight loss) % less than 20% within 2 years after surgery	**Consensus (agree) 85.42%**	-	**Consensus**
3. Worsening of a significant obesity complication: recurrence or worsening of an obesity-associated medical disease that occurs after an initially adequate postoperative clinical response that was an indication for primary MBS (metabolic bariatric surgery) in BMI 30 kg/m^2 and more	**Consensus (agree) 89.58%**	-	**Consensus**
4. Persistent BR (bile reflux): detection of bile in the esophagus during endoscopy or bile scintigraphy, at least 6 months after OAGB without good response to lifestyle modification, nutrition, and medications	**Consensus (agree) 83.33%**	-	**Consensus**
5. Nutritional complications: micro and macro-nutrient deficiencies without good response to nutritional support and medical treatment	**Consensus (agree) 87.50%**	-	**Consensus**
6. Persistent MU (marginal ulcer): persistent endoscopy-proven MU, despite 6-month medical therapy including the eradication of *H. Pylori* with optimal dose along with suspension/withdrawal of NSAIDs, aspirin, and smoking	**Consensus (agree) 93.75%**	-	**Consensus**
7. Before deciding to do revisional/conversional MBS, a treatment with modern "obesity management medication" (OMM) (such as GLP-1 analog) can be offered	60.42% Agree	**Consensus (agree) 93.75%**	**Consensus**
8. In T2DM patients a C-peptide of more than 1 ng/ml makes the postoperative probability of diabetes remission more likely	50.00% Agree	**Consensus (agree) 81.25%**	**Consensus**

Kermansaravi M et al. Revision/Conversion Surgeries After One Anastomosis Gastric Bypass-An Experts' Modified Delphi Consensus

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Definitions

B-Recurrent weight gain/worsening of a significant obesity complication: after OAGB			
9. Surgical pouch resizing (stapled) in case of an enlarged gastric pouch is an acceptable option after OAGB	56.25% Agree	64.58% Agree	**No consensus**
10. Surgical stoma resizing (stapled) is an acceptable option after OAGB	[illegible]	**Consensus (disagree) 77.08%**	**Consensus**
11. Endoscopic (intra-luminal) Pouch resizing, in case of an enlarged gastric pouch, is an acceptable option after OAGB	[illegible]	62.50% Disagree	**No consensus**
12. Endoscopic (intra-luminal) stoma resizing is an acceptable option after OAGB	60.42% Disagree	**Consensus (disagree) 70.83%**	**Consensus**
13. Elongation of the BP limb (biliopancreatic limb: BPL) is an acceptable option after OAGB	Consensus (agree) 89.58%	[illegible]	**Consensus**
14. The total bowel length measurement is necessary before elongation of BPL	Consensus (agree) 97.92%	[illegible]	**Consensus**
15. The maximum BP limb elongation should be 30% of the total bowel length, but keeping a minimum of 300–400 cm of small bowel in the food stream	52.08% Disagree	52.08% Agree	**No consensus**
16. Conversion to single-anastomosis gastro-ileal (SAGI) bypass with a fixed common limb of 300–400 cm is an acceptable option after OAGB	54.17% Agree	54.17% Agree	**No consensus**
17. At least 300–400 cm common limb length is necessary to decrease the nutritional deficiencies	[illegible]	**Consensus (agree) 87.50%**	**Consensus**
18. Conversion to distal Roux-en Y gastric bypass with a total alimentary limb length (alimentary limb + common channel limb) of 400 cm is an acceptable option after OAGB (elongation of BP limb the Sugerman method)	50% Agree	52.08% Agree	**No consensus**
19. Convert to BPD/DS is an acceptable option after OAGB	50% Agree	58.33% Disagree	**No consensus**
20. Convert to SADI/S is an acceptable option after OAGB	52.08% Disagree	**Consensus (disagree) 72.92%**	**Consensus**
21. Non-adjustable band alone is an acceptable option after OAGB	68.75% Disagree	**Consensus (disagree) 85.42%**	**Consensus**
22. Adding a non-adjustable band to revision/conversion surgeries can increase the efficacy of the surgery	50% Agree	56.25% Disagree	**No consensus**

Kermansaravi M et al. Revision/Conversion Surgeries After One Anastomosis Gastric Bypass-An Experts' Modified Delphi Consensus

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MAIN POINTS

- **Elongation of the BPL** as a revisional bariatric surgery might be acceptable since a systematic review and meta-analysis showed that considering a 200-cm BPL when performing OAGB delivers a better weight loss outcome than a 150-cm BPL
- **Tailoring the limb length based on TBL is an important issue but evidence is still lacking**
- A **common channel of at least 300–400 cm might be necessary to decrease nutritional deficiencies in the long term**

Kermansaravi M et al. Revision/Conversion Surgeries After One Anastomosis Gastric Bypass-An Experts' Modified Delphi Consensus

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Obesity Surgery (2022) 32:256–265
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ORIGINAL CONTRIBUTIONS

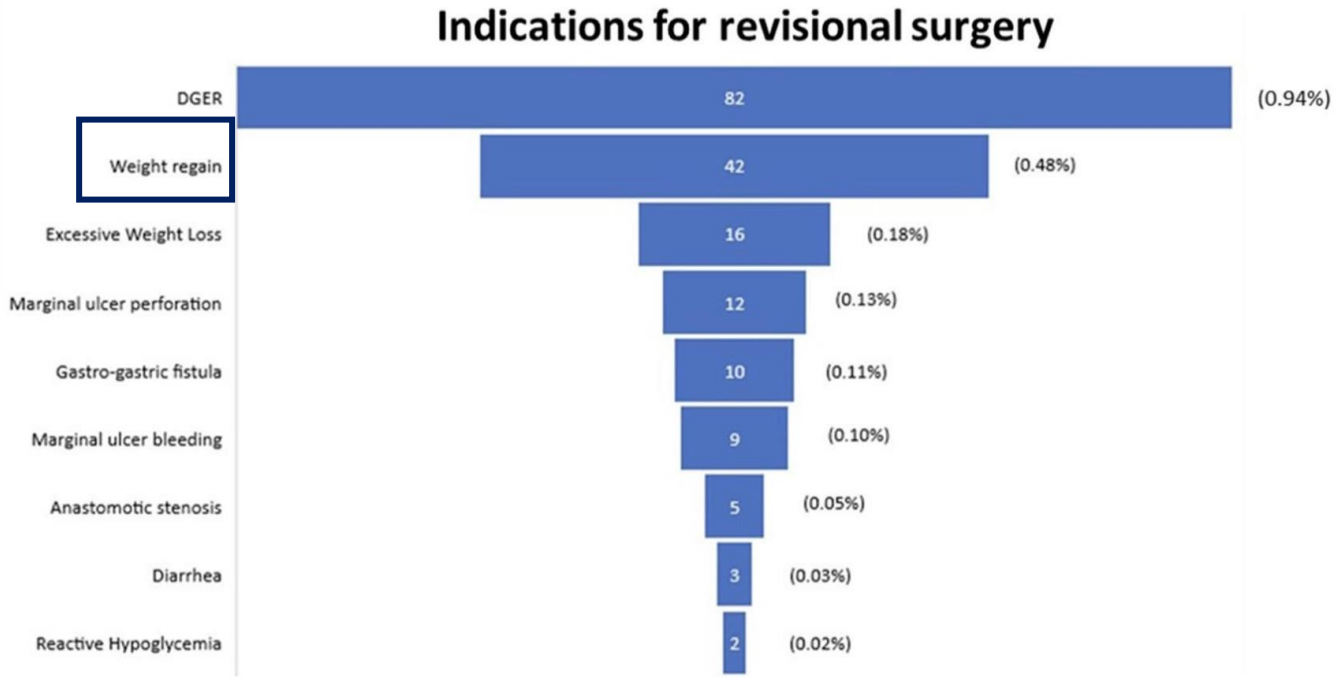
2022

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

Mario Musella[1] · Antonio Vitiello[1] · Antonio Susa[2] · Francesco Greco[3] · Maurizio De Luca[4] · Emilio Manno[5] · Stefano Olmi[6] · Marco Raffaelli[7] · Marcello Lucchese[8] · Sergio Carandina[9] · Mirto Foletto[10] · Francesco Pizza[11] · Ugo Bardi[12] · Giuseppe Navarra[13] · Angelo Michele Schettino[14] · Paolo Gentileschi[15] · Giuliano Sarro[16] · Sonja Chiappetta[17] · Andrea Tirone[18] · Giovanna Berardi[1] · Nunzio Velotti[1] · Diego Foschi[19] · Marco Zappa[20] · Luigi Piazza[21] · 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

23 metabolic/bariatric centers

181 pts



Musella M et al Revisional Surgery After One Anastomosis/Minigastric Bypass: an Italian Multi-institutional Survey. Obes Surg. 2022 Feb;32(2):256-265.

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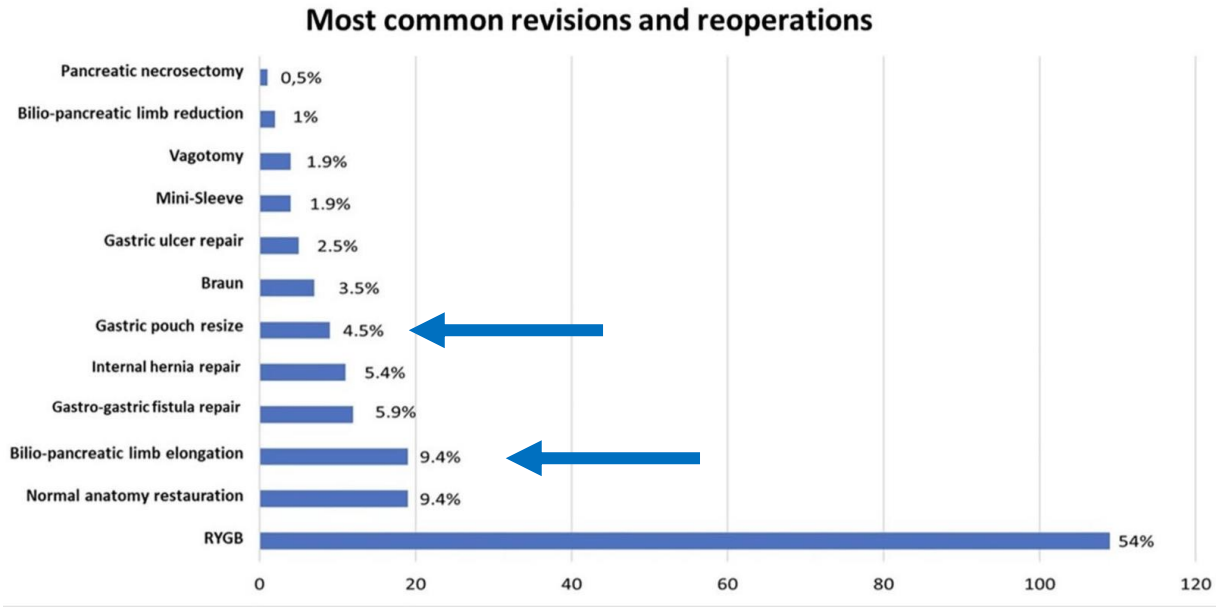
Table 1 Reason for revisional surgery after OAGB-MGB and onset time

Complication	Prevalence in revised population ($n=181$ patients)	Prevalence in the total population ($n=8676$ patients)	Onset time from OAGB-MGB (months)[1]
DGER	82 (45.3%)	82 (0.94%)	43.19 ± 37.52
Weight regain	42 (23.2%)	42 (0.48%)	58.23 ± 35.14
Excessive weight loss	16 (8.8%)	16 (0.18%)	19.50 ± 9.06
Marginal ulcer perforation	12 (6.6%)	12 (0.13%)	26.36 ± 17.43
Gastro-gastric fistula	10 (5.5%)	10 (0.11%)	71.67 ± 33.71
Marginal ulcer bleeding	9 (4.9%)	9 (0.10%)	23.33 ± 20.20
Anastomotic stenosis	5 (2.7%)	5 (0.06%)	8.00 ± 4.69
Diarrhoea	3 (1.6%)	3 (0.03%)	16.00 ± 6.92
Reactive hypoglycemia	2 (1.1%)	2 (0.02%)	5.50 ± 4.94

[1]Mean ± standard deviation

DGER duodeno-gastro-esophageal reflux



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RESEARCH Open Access

Prevention of malnutrition after one anastomosis gastric bypass: value of the common channel limb length

2024

Elyas Mostafapour[1], Masoumeh Shahsavan[1], Shahab Shahabi Shahmiri[2,3*], Noura Jawhar[4], Omar M. Ghanem[4] and Mohammad Kermansaravi[2,3*]

Table 2 Mean %TWL, weight, and BMI 6-month and 12-month post-op

Variable	6-month post-op	12-month post-op
Weight (Kg)	81.41 ± 9.83	72.20 ± 9.57
BMI (Kg/m^2)	31.03 ± 3.15	27.52 ± 3.17
%TWL	28.71 ± 4.97	36.76 ± 5.86

BMI: Body Mass Index, %TWL: Total Weight Loss Percent

Table 3 Remission and improvement of obesity-associated medical conditions at one year follow-up in 64 patients

Variable	12-month post-op		
Status	No change	Improved	Resolved
T2DM	1 (8.3%)	2 (16.7%)	9 (75.0%)
HTN	1(9.1%)	4 (36.4%)	6 (54.5%)
DLP	1 (5.9%)	2 (82.4%)	14 (82.4%)
OSA	0	0	23 (100.0%)

Table 4 Association between common channel limb length and occurrence of anemia and hypoalbuminemia

		Common channel limb length (CCLL)		*P*-value
		< 4 m (*n* = 4)	≥ 4 m (*n* = 60)	
Anemia	Yes	1 (25.0%)	16 (26.7%)	0.942
	No	3 (75.5%)	44 (73.3%)	
Hypoalbuminemia	Yes	0	1 (1.7%)	0.795
	No	4 (100%)	59 (98.3%)	

Table 5 Binary logistic regression analysis for anemia

	Univariate			Multivariate		
Variable	*B*	OR	*P*-value	*B*	OR	*P*-value
Age	0.026	1.02	0.37	/	/	/
Common channel limb length (CCLL)	-0.002	0.99	0.48	-0.003	0.99	0.29
T2DM	1.772	5.88	0.01*	2.042	7.70	0.03*
HTN	0.044	1.04	0.95	/	/	/
DLP	0.952	2.59	0.12	-0.207	0.81	0.82
OSA	-20.275	0.01	0.99	/	/	/

T2DM: type 2 diabetes mellitus, HTN: hypertension, DLP: Dyslipidemia, OSA: Obstructive sleep apnea

Table 6 Pre-operative and 12-month post-op serum vitamin D and calcium levels

	Pre-operation		12-month post-op		*P*-value
Common channel limb length (CCLL)	< 4 m (*n* = 4)	≥ 4 m (*n* = 60)	< 4 m (*n* = 4)	≥ 4 m (*n* = 60)	
Vitamin D	43.60 ± 12.01	29.63 ± 12.87	36.83 ± 7.66	38.87 ± 17.93	0.823
Calcium (Ca)	9.35 ± 0.33	9.20 ± 1.15	9.16 ± 0.44	9.27 ± 0.48	0.681

- Prospective cohort study involving **64 patients** with a BMI of 40–50 kg/m2. **The standardized length of the biliopancreatic limb (BPLL) for all patients in this study was set at 175 cm**. Additionally, the **measurement of the common channel limb length (CCLL)** was performed consistently by the same surgeon for all included patients

- Based on the obtained results, there was **no significant association between CCLL and %TWL at 6 months post-op (*P* = 0.08)**, but there was a **statistically significant negative association between CCLL and %TWL at 12 months (*P* = 0.02)**.

Mostafapour E, Shahsavan M, Shahmiri SS, Jawhar N, Ghanem OM, Kermansaravi M. Prevention of malnutrition after one anastomosis gastric bypass: value of the common channel limb length. BMC Surg. 2024 May 16;24(1):156.

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ELSEVIER

2019

SURGERY FOR OBESITY AND RELATED DISEASES

Surgery for Obesity and Related Diseases 15 (2019) 1712–1718

Original article

Measuring the small bowel length may decrease the incidence of malnutrition after laparoscopic one-anastomosis gastric bypass with tailored bypass limb

Tien-Chou Soong, M.D.[a,b], Owaid M. Almalki, M.D.[b,c], Wei-Jei Lee, M.D., Ph.D.[b,*], Kong-Han Ser, M.D.[b], Jung-Chien Chen, M.D.[b], Chun-Chi Wu, M.D.[b], Shu-Chun Chen, R.N.[b]

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Table 5
Distribution of small bowel length in Group II patients (n = 470)

Bowel length, cm	Group II (n)	%
≤500	2	.4
501–550	8	1.7
551–600	41	8.7
601–650	64	13.6
651–700	74	15.7
701–750	81	17.2
751–800	63	13.4
801–900	92	19.6
901–1000	31	6.6
>1000	14	3.0

Table 1
Clinical characteristics of the Group I and II patients before surgery

	Group I tailored limb only (July 2005–June 2014)	Group II tailored limb with measurement of whole bowel length (July 2014–June 2017)	*P* value
n	470	470	
Age, yr	40.8 (8.4)	40.6 (11.3)	.762
Sex, M/F	177/293	177/293	.999
BMI, kg/m^2	40.6 (7.7)	39.8 (7.4)	.084
Waist circumference, cm	119.8 (17.5)	117.2 (17.4)	.057
SBP, mm Hg	138.2 (17.5)	141.1 (18.0)	.014*
DBP, mm Hg	86.9 (14.1)	86.6 (13.3)	.651
Glucose, mg/dL	123.2 (49.6)	124.4 (55.7)	.639
HbA1C, %	6.9 (1.5)	6.9 (1.7)	.828
Total cholesterol, mg/dL	200.2 (42.3)	202.9 (41.2)	.296
Triglyceride, mg/dL	200.2 (159.8)	192.6 (151.3)	.265
LDL-C, mg/dL	143.8 (10.1)	143.8 (10.2)	.964
GPT, IU/L	51.4 (62.5)	54.6 (44.6)	.384
WBC, 10^3/uL	8.4 (2.3)	8.6 (2.4)	.221
Albumin, gm/dL	4.4 (.3)	4.5 (.3)	.218
PTH, IU/L	58.2 (32.0)	56.3 (32.1)	.674
Calcium, µg/dL	9.2 (.5)	9.3 (.4)	.727
Hemoglobin, gm/dL	14.3 (1.7)	14.4 (1.8)	.129
Ferritin	68.9 ± 55.8	89.6 ± 132.4	.233
hs-CRP, mg/dL	.77 (1.1)	.73 (.8)	.520
T2D, n (%)	243 (51.7)	243 (51.7)	.999

Soong TC, Almalki OM, Lee WJ, Ser KH, Chen JC, Wu CC, Chen SC.
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[a]*Center for Weight Loss and Health Management, E-DA Dachang Hospital, Kaohsiung, Taiwan*
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[c]*Department of Surgery, College of Medicine, Taif University, Saudi Arabia*

Received 27 March 2019; accepted 9 August 2019

- The rationale for measuring the entire small bowel length is that bowel length varies between patients. In this study, the total length of small bowel varied **from 400–1110 cm with a mean of 744.4 cm.**
- If a fixed **250-cm BP limb** in OAGB had been used, the risk of the common channel being 400 cm, would have increased to **24.4%.**
- If a fixed **200-cm BP limb** in OAGB had been used, the common channel would have measured **400 cm** in **10.8% of our patients**, and they would have been at an increased risk for protein deficiency.
- Therefore, some authors have recently advocated using a **150-cm BP limb for OAGB** to avoid the possibility of protein deficiency after surgery, especially for the Indian population.
- If a fixed **150-cm BP limb in OAGB had been used, only 2.1%** of our patients would have had a common channel measuring 400 cm.

Soong TC, Almalki OM, Lee WJ, Ser KH, Chen JC, Wu CC, Chen SC.
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STUDY PROTOCOL Open Access

Tailoring limb length based on total small bowel length in one anastomosis gastric bypass surgery (TAILOR study): study protocol for a randomized controlled trial

Nienke Slagter[1,2*], Loek J. M. de Heide[1], Ewoud H. Jutte[1], Mirjam A. Kaijser[1], Stefan L. Damen[1], André P. van Beek[3] and Marloes Emous[1]

2022

- **Double-blind single-center RCT**
- **Patients scheduled for primary OAGB** surgery **randomly allocated either to a standard BP-limb of 150 cm or to a BP-limb length based on their TSBL**: TSBL < 500 cm, BP-limb 150 cm; TSBL 500–700 cm, BP-limb 180 cm; TSBL > 700 cm, BP-limb 210 cm.
- The **primary outcome** is to **compare the %TWL at 5 years between the two groups**.
- Secondary outcomes include nutritional deficiencies, remission of comorbidities, symptoms of dumping, quality of life, and daily bowel movements. The study includes a total of 212 patients and is designed to detect a 5% difference in the primary endpoint.

Table 1 Outcome parameters

	Outcome	Measurement	Time point
Primary	Percent total weight loss	%TWL	5 years
Secondary	Percent total weight loss	%TWL	Other follow-up moments
	Weight loss	• %EWL • %EBMIL • 22 ≤ BMI ≤ 30 kg/m^2	Each follow-up moment
	Defecation	• Mean daily bowel movements • Number of days with daily bowel movements > 3 in the last 2 weeks	Each follow-up moment
	Remission of T2D, hypertension, and OSA	• Current use of medication • HbA1c • Blood pressure • Use of CPAP or other devices	Each follow-up moment
	Nutritional deficiencies	Vitamins A, B_1, B_6, B_{12}, and D; iron; folic acid; calcium; phosphate; albumin; and zinc	6 months and 1, 2, 3, 4, and 5 years
		Copper and selenium	1, 3, and 5 years
	Quality of life	OBESI-Q [15]	Preoperative, 6 months, 12, 18, 30, 42, 54, and 60 months
	Symptoms of dumping syndrome	DSS [16]	Preoperative, 6 months, 12, 18, 30, 42, 54, and 60 months

TWL total weight loss, *EWL* excess weight loss, *EBMIL* excess BMI loss, *BMI* body mass index, *T2D* diabetes mellitus type 2, *OSA* obstructive sleep apnea

Follow-up moments: 6, 12, 18, 24, 30, 36, 42, 48, 54, and 60 months

- **2024: at 1 year after surgery, tailoring is not superior to standard 150 cm in terms of %TWL**

Slagter N et al Tailoring limb length based on total small bowel length in one anastomosis gastric bypass surgery (TAILOR study): study protocol for a randomized controlled trial. Trials. 2022 Jun 22;23(1):526.

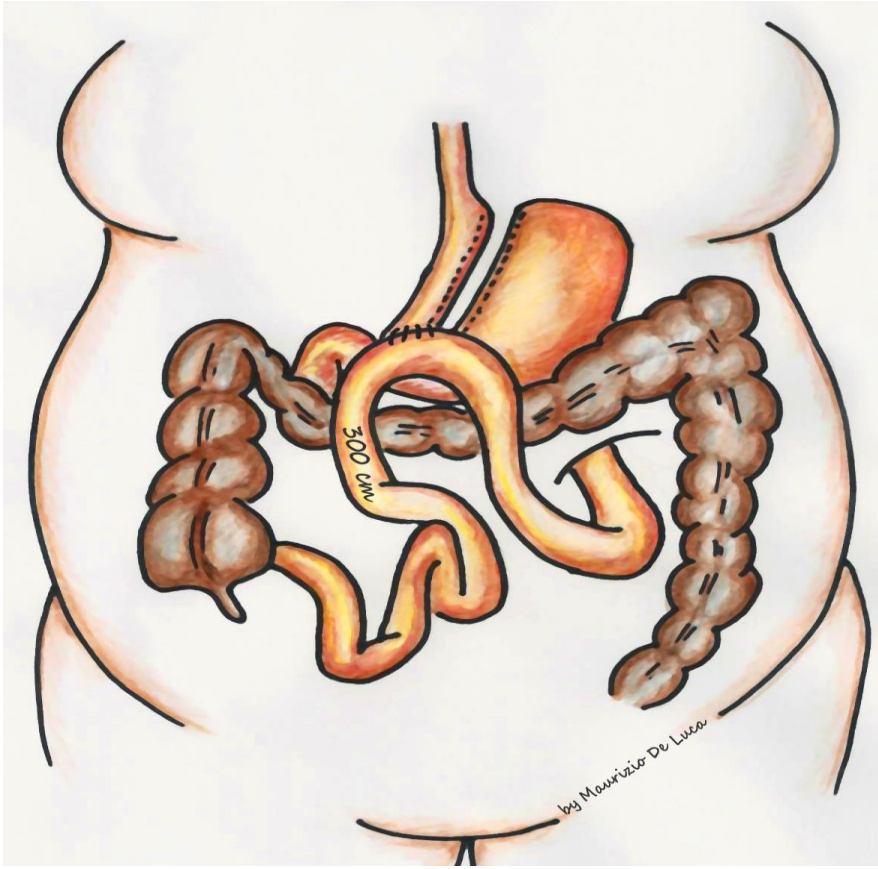
Slagter N et al.Effect of tailoring BPL based on total small bowel length in OAGB: 1-year outcomes of the TAILOR randomized clinical superiority trial. Br J Surg **2024** 111(9), 219

Single Anastomosis Gastro Ileal (SAGI)

SAGI

2016:
Single Anastomosis Gastro-Ileal (SAGI)

- OAGB principles
- non obstructive gastric tube
- gastro-ileal anastomosis
- 250-300 cm from the ileo-cecal valve
- malapsorbitive procedure



A NEW CONCEPT IN SURGERY FOR OBESITY AND WEIGHT RELATED DISEASE.
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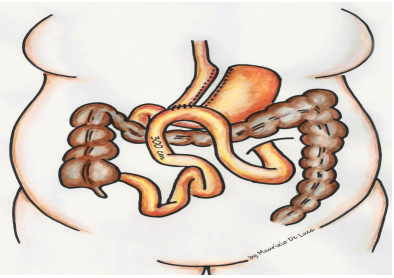
Maurizio De Luca, Jacques Himpens, Luigi Angrisani, Nicola Di Lorenzo, Kamal Mahawar, Cesare Lunardi, Natale Pellicanò, Nicola Clemente and Scott Shikora.
Obesity Surgery, 2017, 27, 1, 143-147

Single Anastomosis Gastro Ileal (SAGI)

1. SAGI primary
2. SAGI/AGB group
3. SAGI/SG group
4. SAGI/ OAGB group

- SAGI patients 68
- SAGI patients with 12 months FU: 37 (F/M 25/12)



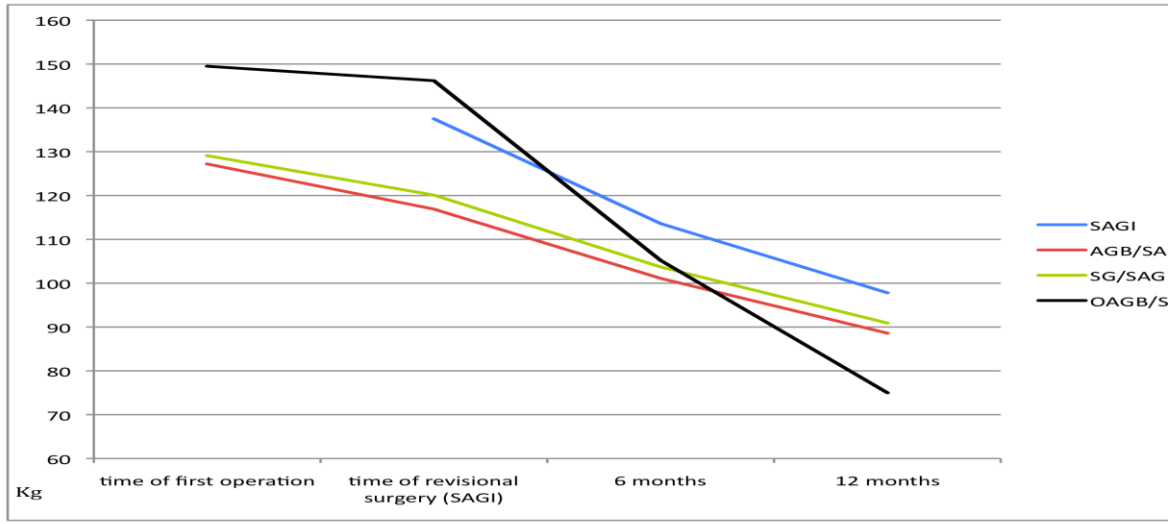
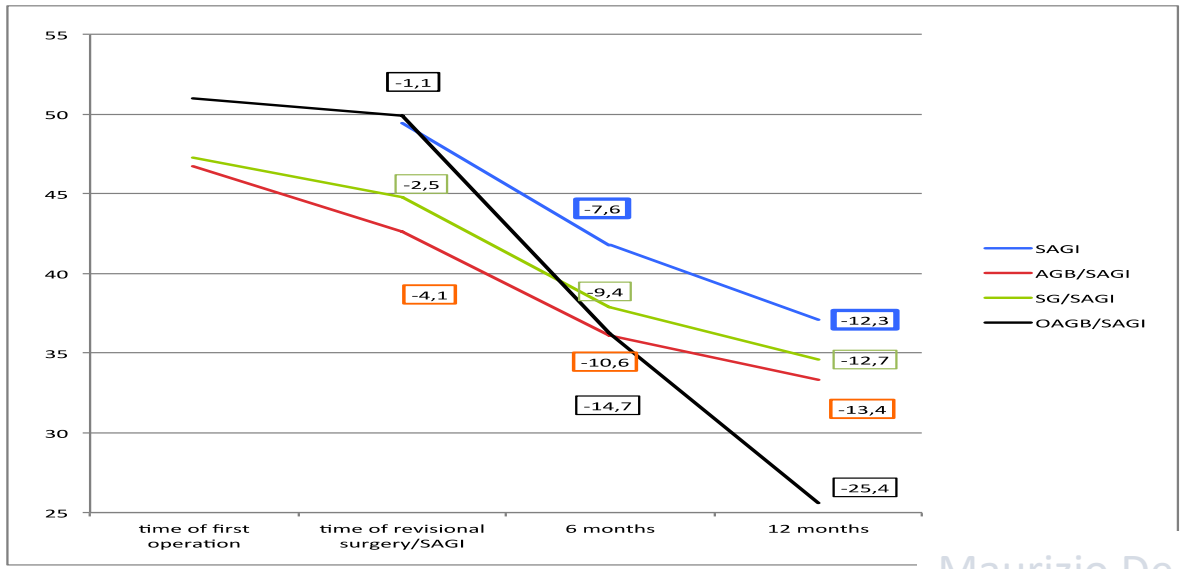


Fig 1 Weight loss (Kg) during follow-up among the different groups



Maurizio De Luca

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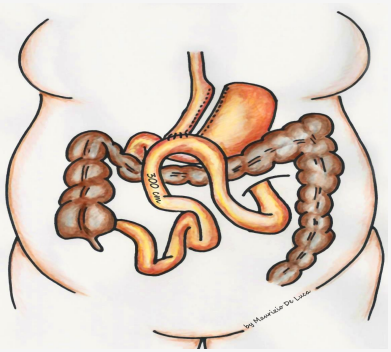
Single Anastomosis Gastro Ileal (SAGI)

SAGI patients with 12 months follow up: 37

1. SAGI primary
2. SAGI/AGB group
3. SAGI/SG group
4. SAGI/ OAGB group

Nutritional Deficiences

Vitamins, electrolites, albumin		A	D	E	K	B1	B6	Folate (B9)	B12	Iron	Calcium	Albumin
Type of surgery	N pts with 12 m blood test	2	8	0	0	1	2	9	4	8	6	6
SAGI group	7	1	2	0	0	0	0	2	1	2	2	2°
AGB/SAGI	14	1	3	0	0	1	1	3	2	3*	2	2
SG/SAGI	7	0	2	0	0	0	1	3	1	2	2	1
OAGB/SAGI	1	0	1	0	0	0	0	1	0	1	0	1



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Single Anastomosis Gastro Ileal (SAGI)

Multicenter data collection on 420 patients 6 years results

Anthropometrics

N of Patients	112 patients as primary surgery	121 patients after AGB	160 patients after SG	**27 patients after OAGB**
Age	37, 1 years	39.4 years	38.2 years	**44.1 years**
BMI first operation		47.1	48.0	**47.3**
BMI at SAGI surgery	53.1	42.3	41,3	**39.3**
Body Weight at SAGI surgery	141.7 kg	117.9 kg	112.6 kg	**107.9 kg**
Months between operations		83.6 months	61.7 months	**37.4 months**

collecting data

Maurizio De Luca

Single Anastomosis Gastro Ileal (SAGI)

Multicenter data collection on 420 patients

SAGI as revisional after OAGB (27 pts)

Weight Loss (BMI)

BMI at SAGI operation	53.1 primary (112 pts)	42.3 after AGB (121 pts)	41.3 after SG (160 pts)	**39.3 after OAGB (27 pts)**
BMI at 1 year	42.4 (88 pts)	37.2 (100 pts)	38.0 (131 pts)	**34.2 (20 pts)**
BMI at 2 years	39.3 (71 pts)	33.3 (86 pts)	34.5 (110 pts)	**33.2 (12 pts)**
BMI at 3 years	38.1 (55 pts)	31.3 (70 pts)	33.1 (64 pts)	**31.5 (7 pts)**
BMI at 4 years	34.4 (33 pts)	31.0 (31 pts)	33.2 (31 pts)	**30.2 (7 pts)**
BMI at 5 years	34.5 (12 pts)	30.5 (21 pts)	31.3 18 pts)	**30.3 (3 pts)**
BMI at 6 years	33.0 (7 pts)	29.1 (19 pts)	30.2 (10 pts)	**28.3 (1 pts)**

collecting data

Maurizio De Luca

Single Anastomosis Gastro Ileal (SAGI)

Multicenter data collection on 420 patients

SAGI as revisional after OAGB (27 pts)

Complications

Mortality: 0

Reoperation rate 1.9% (8 cases)

1 bleeding of the gastric pouch	1st post-op day
1 incisional hernia	34° post-op day
1 internal hernia	8° post-op month
1 untractable GERD	14° post-op month
4 malnutrition vs diarrohea	13°, 21°, 23°, 33° post-op month

1 case of reoperation for SAGI after OAGB for untractable GERD

collecting data

Prof. Maurizio De Luca, *Director Department of Surgery Rovigo,Trecenta and Adria Hospitals– Italy*

Journal of Clinical Medicine

MDPI

Article

DEVELOPMENT OF INTERNATIONAL FEDERATION FOR SURGERY OF OBESITY AND METABOLIC DISORDERS-EUROPEAN CHAPTER (IFSO-EC) GRADE-BASED GUIDELINES ON THE SURGICAL TREATMENT OF OBESITY USING MULTIMODAL STRATEGIES: DESIGN AND METHODOLOGICAL ASPECTS.

Maurizio De Luca[1], Amanda Belluzzi[1], Paulina Salminen[2], Marco Bueter[3], Juan Pujol-Rafols[4], Nasser Sakran[5], Christine Stier[6], Halit Eren Taskin[7], Sonja Chiappetta[8], Francesco Maria Carrano[9], Nicola Di Lorenzo[10], Simon Nienhuijs[11], Ramón Vilallonga Puy[12], Erik Stenberg[13], Marloes Emous[14], Gerhard Prager[15], Jacques Himpens[16], Daniel Moritz Felsenreich[15], Antonio Iannelli[17], Chetan Parmar[18], Catalin Copaescu[19], Martin Fried[20], Elena Ruiz-Úcar[21], Ricardo V Cohen[22], Stefano Olmi[23], Luigi Angrisani[24], Rui Ribeiro[25], Giulia Bandini[26], Daniele Scoccimarro[26], Benedetta Ragghianti[26], Matteo Monami[26], the Panel for the IFSO-EC on the surgical treatment of obesity using multimodal strategies.*

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IFSO EC Panel

Panel developed 3 PICOs

GRADE and AGREE II methodology

Recommendation will be expressed

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TAKE HOME MESSAGE

- **Different Patients with different Total Small Bowel (TSB) lenght**
- In case of revisional surgery for recurrent weight gain after OAGB is paramount **to measure TSB lenght**
- Mantain 300 cm as minimum of common channel after reviona of OAGB avoiding the risk of malnutrition
- Literature is weak
- Consider **combined treatment**

The Scientific Evidence Supporting the New Guidelines

Prof. Maurizio De Luca, *Director Department of Surgery Rovigo,Trecenta and Adria Hospitals– Italy*

IFSO European Chapter 2025

15-17 May 2025, Venice Italy

President of the Congress:
Maurizio De Luca

Thank you for your attention!