IFSO APC PACIFIC CHAPTER SESSION:
Metabolic and Bariatric Surgery for Asian Patients with BMI > 50 Kg/m2

Asian evidence for SG

Yosuke SEKI
Weight Loss and Metabolic Surgery Center, Tokyo, Japan

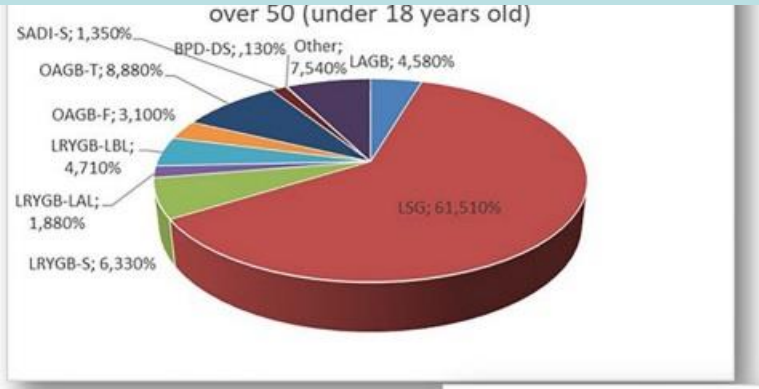
The first survey addressing patients with BMI over 50: a survey of 789 bariatric surgeons

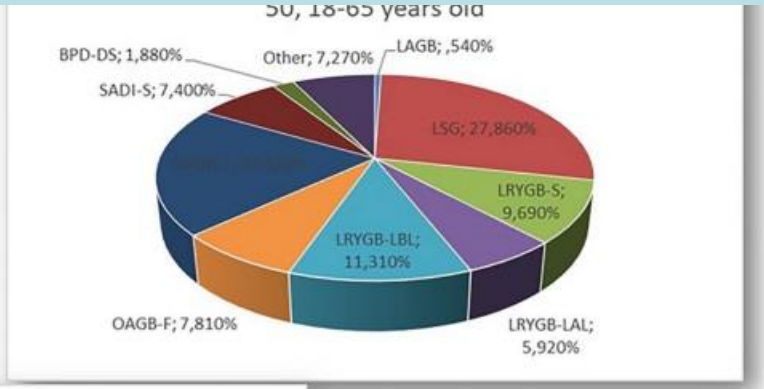
Surgeons' perception

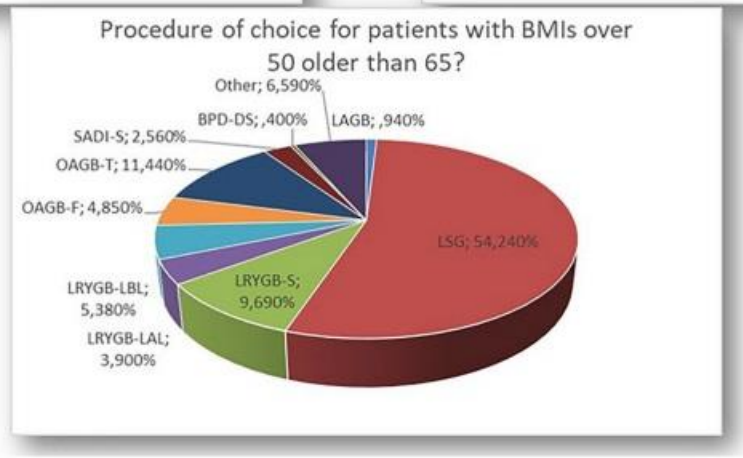
SG was considered the best choice for pts younger than 18 or older than 65 yrs.

SG and OAGB were the most common procedures for individuals between 18 and 65 yrs.

Half of the surgeons believed that a 2-stage approach should be offered to pts with BMI >50, with SG being the first step.







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Cross-Sectional Study

INTERNATIONAL JOURNAL OF SURGERY

OPEN

The current status and challenges of perioperative management of patients with a BMI of greater than or equal to 50 kg/m^2 undergoing bariatric surgery in China: a multicenter cross-sectional study

Ningli Yang, BN[a], Hongxia Hua, MN[a], Shaozhuang Liu, MD[b], Songhai Zhang, MD[c], Xiangwen Zhao, MD[d], Peng Zhang, MD[e], Pin Zhang, MD[f], Yong Wang, MD[g], Jiajia Shen, MD[a], Shibo Lin, MD[a], Wei Guan, MD[a], Hui Liang, MD[a,*]

Survey, questionnaire in China

Results: The preferred surgical procedures for pts with SO were SG followed by RYGB, SG plus JJ bypass, OAGB, and DS. The most worrying issues were cardiopulmonary failure and difficulty in extubation. Many centres believed that pre-OP WL was beneficial. A LCD was the specific measure mainly implemented, some considered using IGB placement. Post-OP management measures varied greatly.

Conclusion: Chinese physicians show significant differences regarding the peri-OP management for pts with a BMI of over 50. The peri-OP risks of these pts remain relatively high, making further development of clinical pathways is necessary.

Yang et al. International Journal of Surgery (2024)

Obesity Surgery (2022) 32:406–415
https://doi.org/10.1007/s11695-021-05786-z

ORIGINAL CONTRIBUTIONS

Five Years of MBSAQIP Data: Characteristics, Outcomes, and Trends for Patients with Super-obesity

Kevin Verhoeff[1] · Valentin Mocanu[1] · Jerry Dang[1] · Kieran Purich[1] · Noah J. Switzer[1] · Daniel W. Birch[2] · Shahzeer Karmali[2]

Safety
Big data in the US

MBSAQIP database

N=751,952 pts

SO and non-SO were compared

Uni- and multi-variate analysis to identify factors associated with serous AEs

Obes Surg 2022

Obesity Surgery (2022) 32:406–415
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Safety
Big data in the US

Pts with SO were more likely to be or have…

- -Younger
- -Male
- -↓ Functional capacity
- -↑ ASA physical status classification
- -Smokers
- -DM, HT, COPD, and renal insufficiency
- -Previous VTE, venous stasis, require anticoagulation, be oxygen dependent, OSA

Obes Surg 2022

	Patients with non-SO (BMI 30–50 kg/m^2) n =578,842 n (%)	Patients with SO (BMI ≥ 50 kg/m^2) n =173,110 n (%)	p value
Anastomotic leak	2043 (0.35)	748 (0.43)	< 0.001
Bleed	5366 (0.9)	1562 (0.9)	0.345
Reoperation	6842 (1.2)	2101 (1.2)	0.286
Reintervention	6435 (1.1)	2402 (1.4)	< 0.001
Readmission	20,366 (3.5)	7315 (4.2)	< 0.001
Deep SSI	1419 (0.25)	521 (0.3)	< 0.001
Sepsis	575 (0.1)	194 (0.1)	0.146
Wound disruption	265 (0.05)	115 (0.07)	0.001
Venous thromboembolism	1447 (0.26)	625 (0.32)	< 0.001
Unplanned intubation	615 (0.1)	357 (0.2)	< 0.00
Acute kidney injury	569 (0.1)	379 (0.2)	< 0.001
Pneumonia	998 (0.17)	396 (0.23)	< 0.001
Cardiac event (cardiac arrest, MI, or CPR)	340 (0.06)	138 (0.08)	0.001
Coma for > 24 h	615 (0.1)	357 (0.2)	0.031
Cerebral vascular accidents	70 (0.01)	28 (0.02)	0.192
Serious complications	18,495 (3.2)	6443 (3.7)	< 0.001
Mortality	377 (0.07)	287 (0.17)	< 0.001

Obesity Surgery (2024) 34:1075–1085
https://doi.org/10.1007/s11695-024-07118-3

IFSO

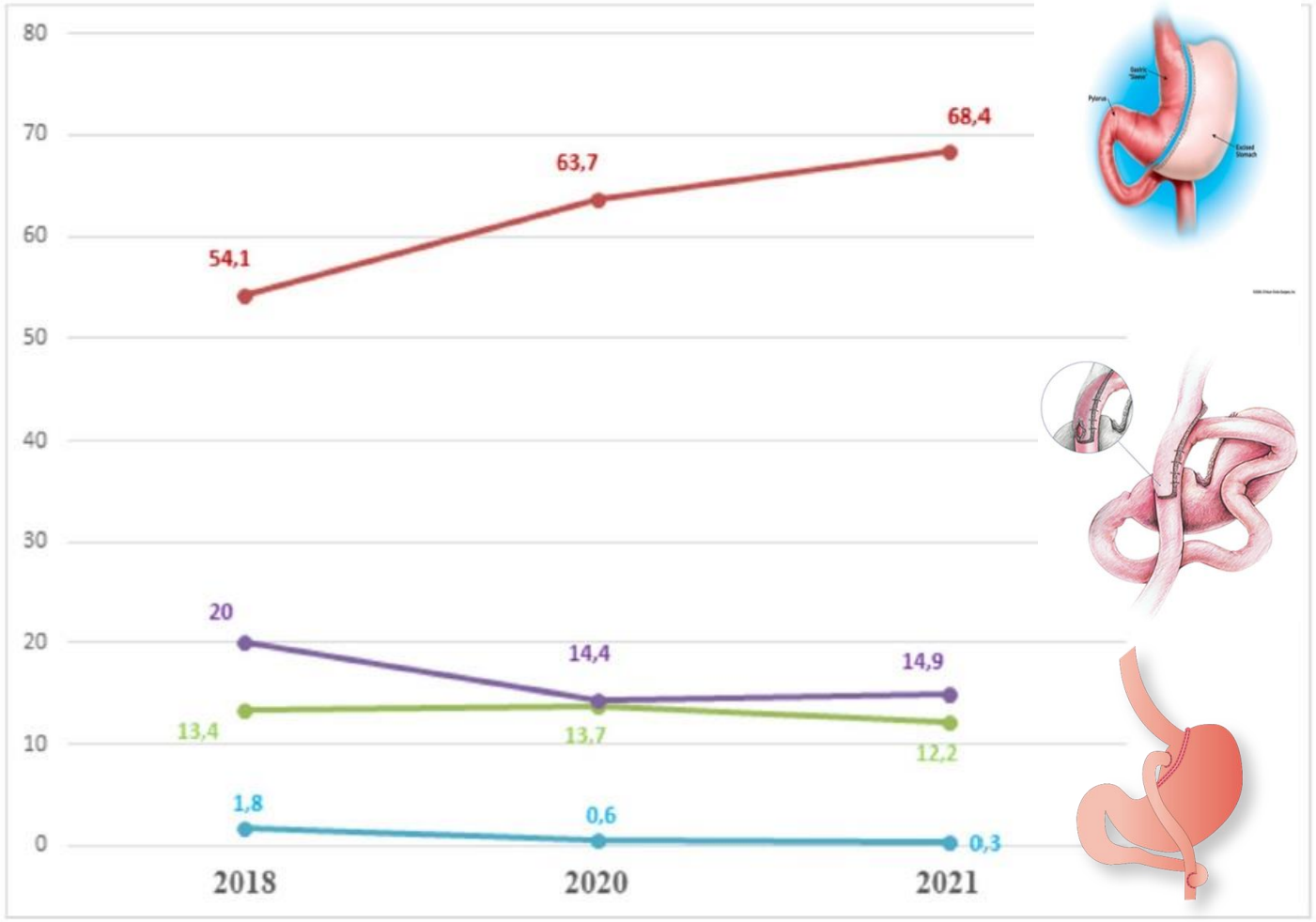
ORIGINAL CONTRIBUTIONS

Check for updates

IFSO Worldwide Survey 2020–2021: Current Trends for Bariatric and Metabolic Procedures

Luigi Ang
Almino Ra

Trend in procedure in Asia-Pacific



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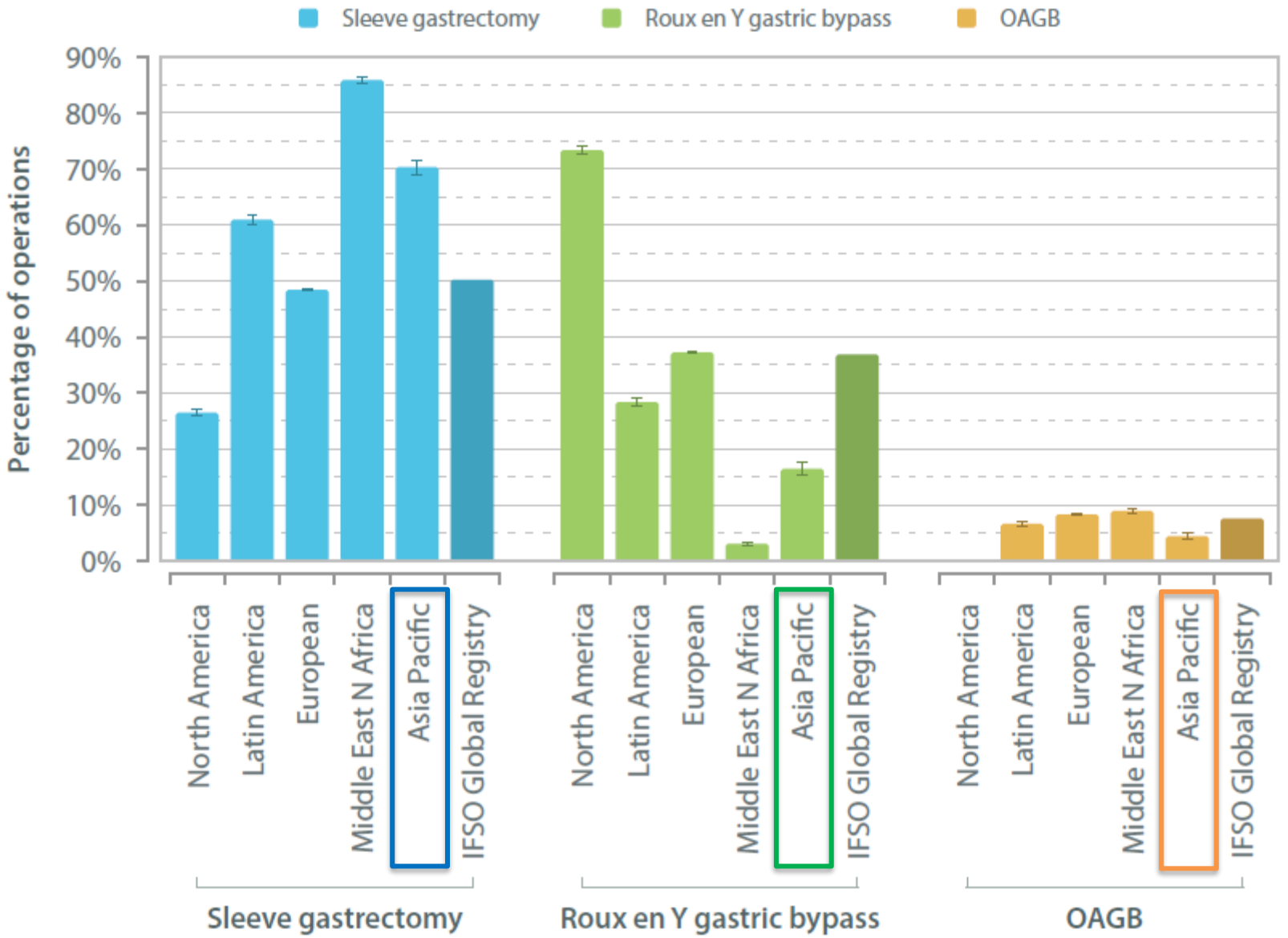
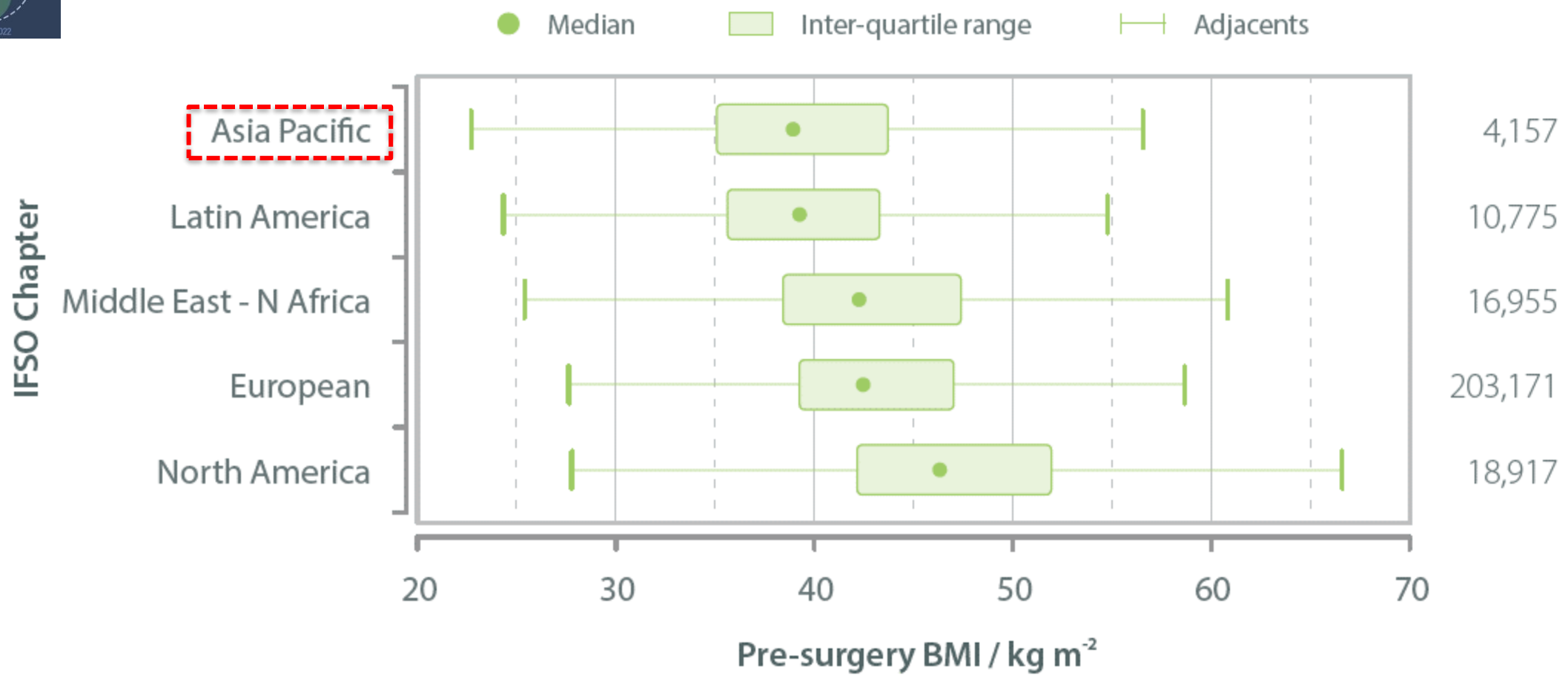
Primary surgery: Type of operation; calendar years 2016-2020 (n=255,609)

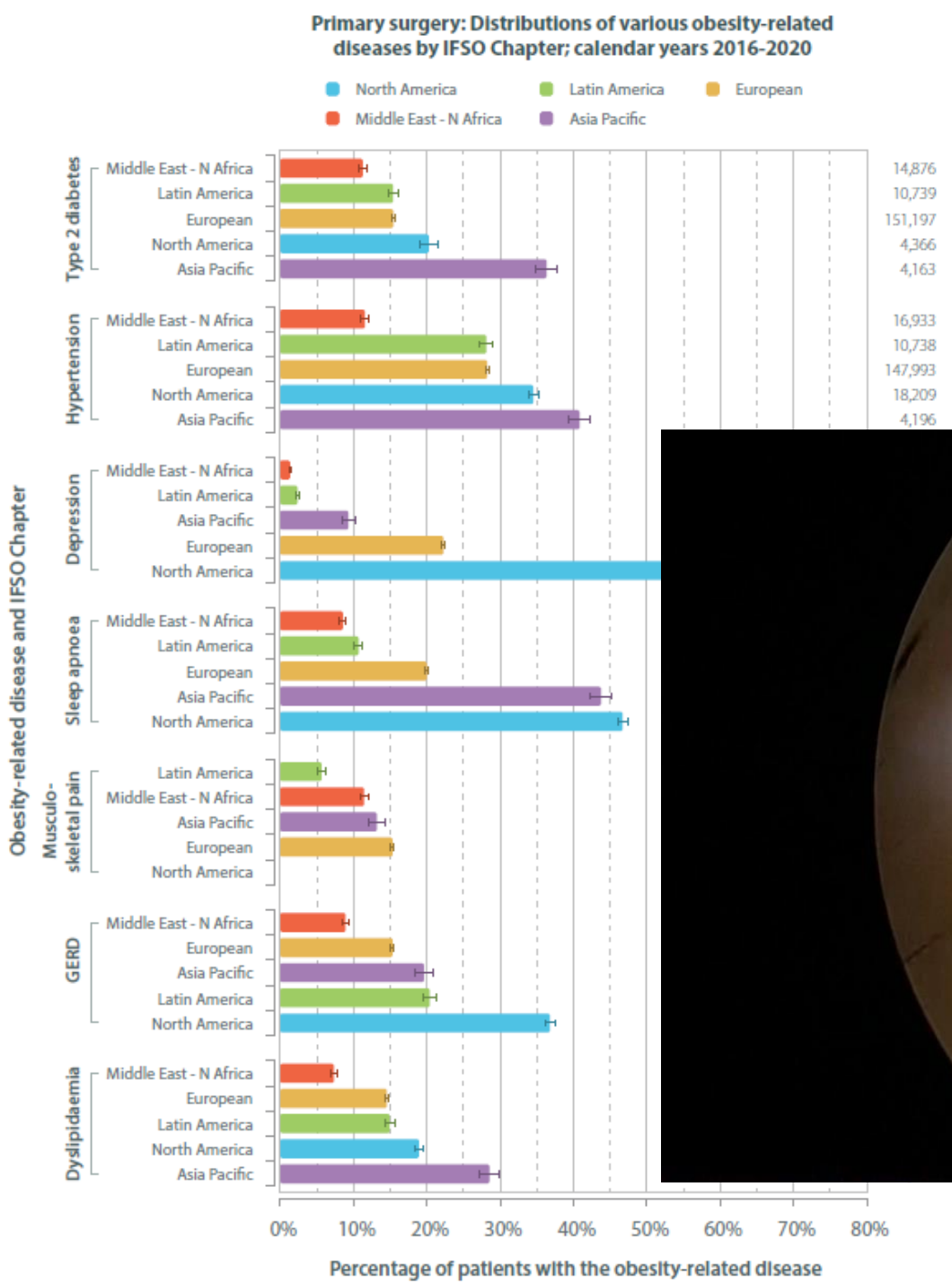


IFSO global registry report

Primary surgery: Patients' BMI before surgery; calendar years 2016-2020

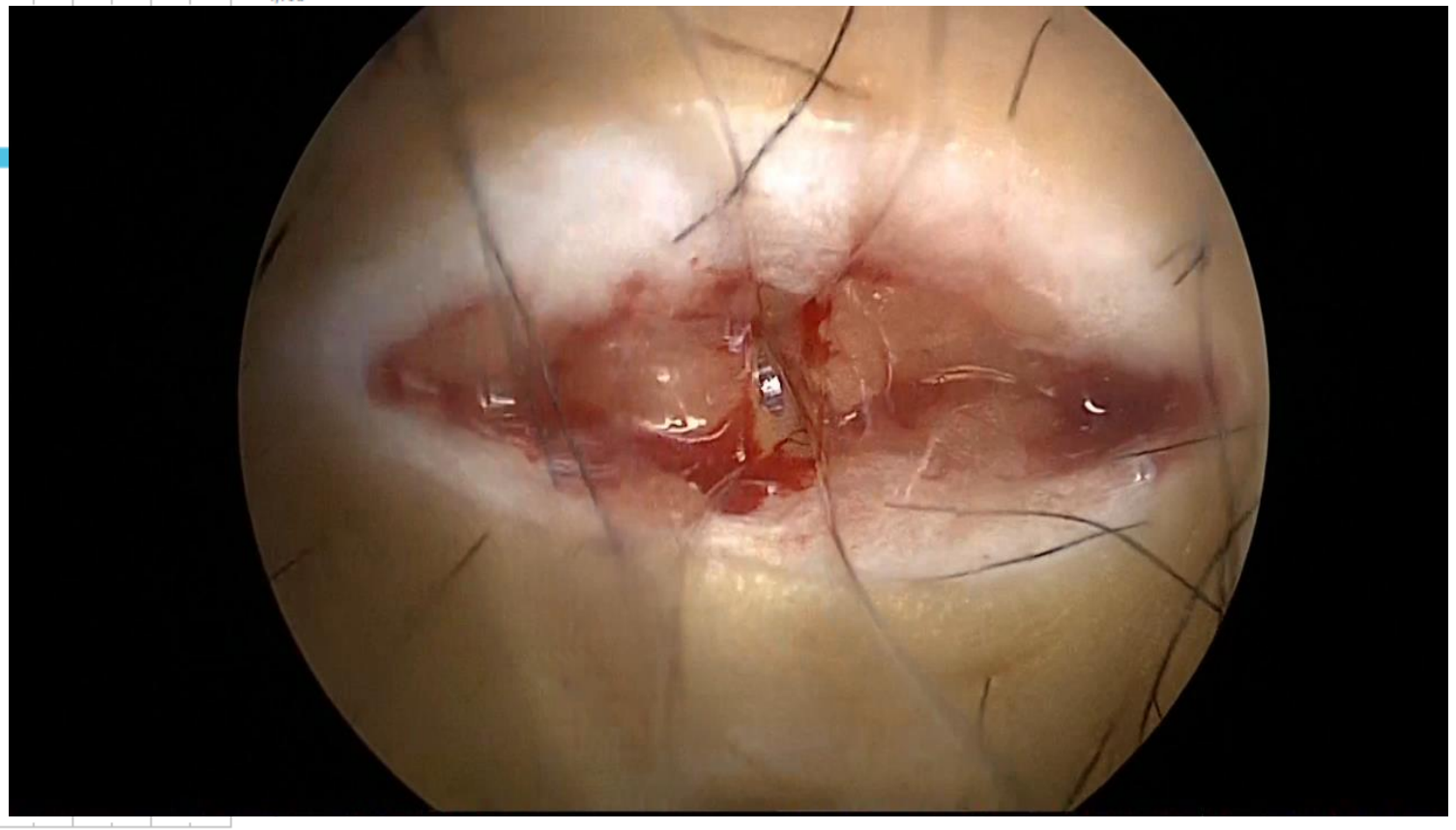


IFSO global registry report



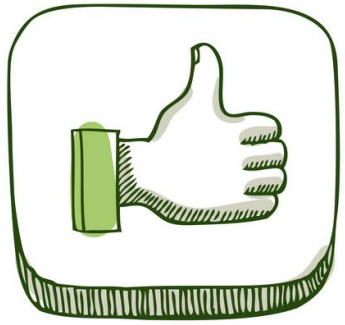
DM is more prevalent in the AP

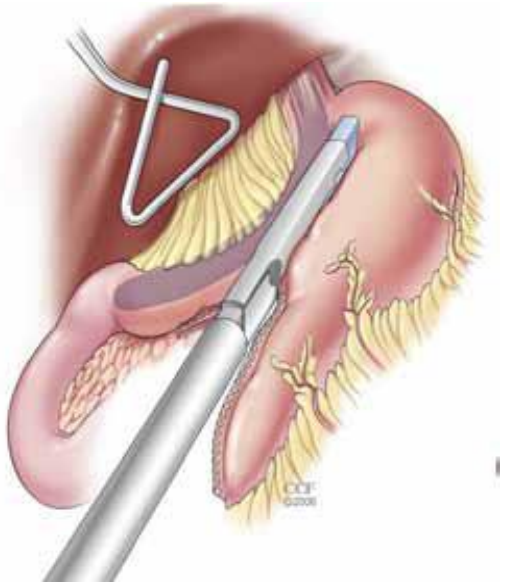
HT is more prevalent in the AP



IFSO global registry report

Pros and cons in LSG

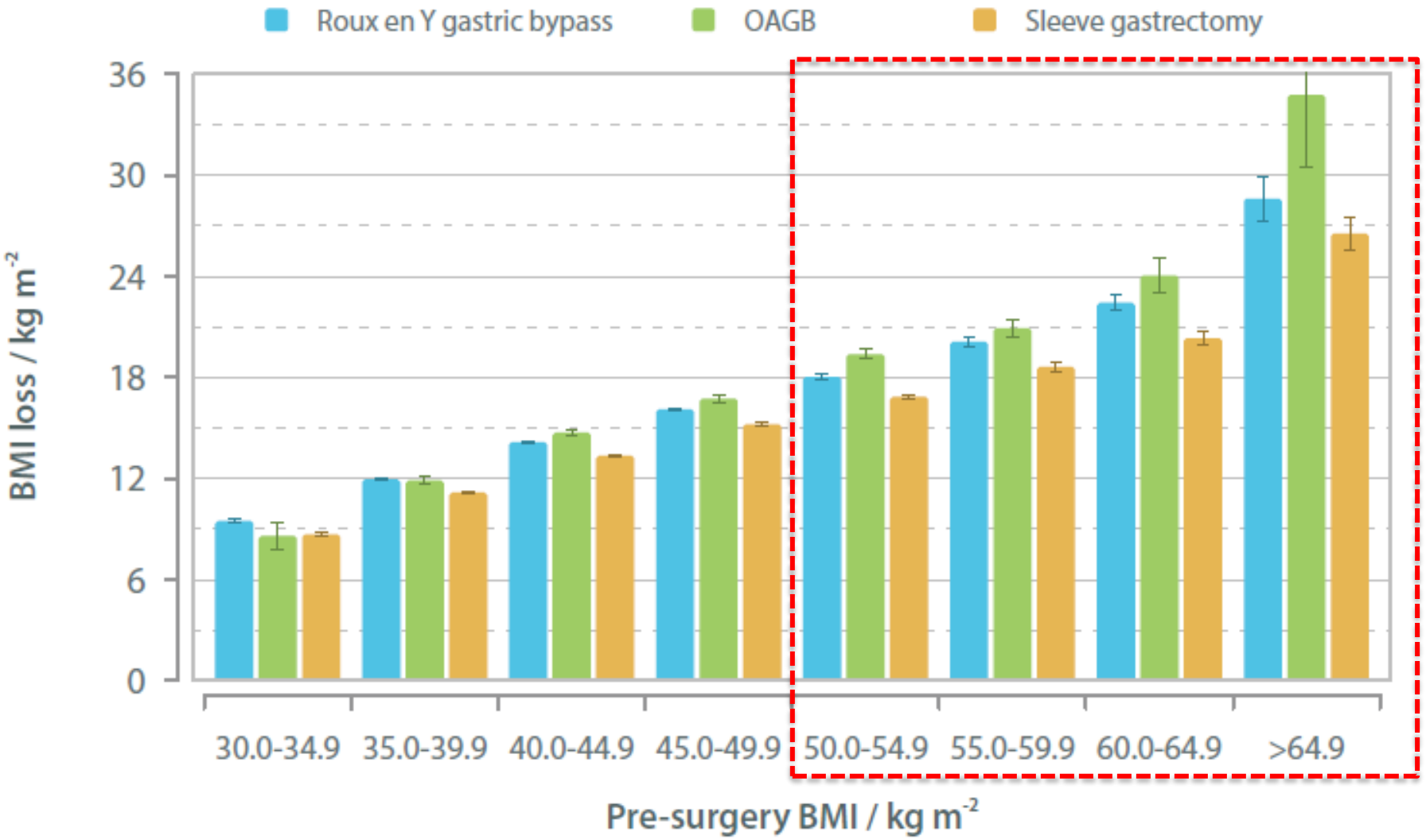




- Technically simple (but not easy!)
- No remnant stomach
- Ghrelin
- Hormonal change
- No marginal ulcer, SBO, int. hernia
- Less dumping syndrome

- GERD
- Difficult to treat when leakage
- Anemia
- Less effective for advanced diabetes?
- Weight loss for BMI >50
- Long-term weight loss?
- Reversibility

Primary surgery: BMI loss at one year and pre-surgery BMI; operations in calendar years 2013-2018



IFSO global registry report

Obesity Surgery (2022) 32:170–185
https://doi.org/10.1007/s11695-021-05745-8

REVIEW

Roux-en-Y Gastric Bypass Vs Sleeve Gastrectomy in Super Obesity: a Systematic Review and Meta-Analysis

Sofia Raquel Gomes-Rocha[1] · André Manuel Costa-Pinho[1,2] · Carolina Coelho Pais-Neto[1] · André de Araújo Pereira[1,3] · Jorge Pedro Martins Nogueiro[1,3] · Silvestre Porfírio Ramos Carneiro[1,3] · Hugo Miguel Teixeira Ferraz Santos-Sousa[1,2] · Eduardo Jorge Lima-da-Costa[1,2] · Raquel Bouça-Machado[4] · John Rodrigues Preto[1,2] · CRI-O Group

Meta-analysis RYGB vs sleeve

A meta-analysis was performed aiming to summarize the available evidence on WL and comorbidities resolution of LRYGB and LSG in patients with SO (BMI ≥ 50).

LRYGB showed a significantly higher weight loss at 6- to 12 mo, but not after 24 mo and a higher DL resolution at 12 mo.

When compared with LSG, LRYGB achieved better weight loss after 6- and 12 mo and higher DL.

Obes Surg 2022

ORIGINAL CONTRIBUTIONS

Outcome of Sleeve Gastrectomy Versus Roux-en-Y Gastric Bypass for Patients with Super Obesity (Body Mass Index > 50 kg/m^2)

Omar Thaher[1] · Wael Tallak[2] · Martin Hukauf[3] · Christine Stroh[4]

Large N data
RYGB vs sleeve

1278 pts underwent RYGB, and 1661 underwent SG

After 3 yrs, the %EWL was 62.2% in RYGB and 55.9% in SG ($p < 0.001$)

Change in HT and GERD was in favor of RYGB

Change in DM was not significant

Minimal difference in OSA in favor of SG

Mortality and overall complication rates were not significant in either group

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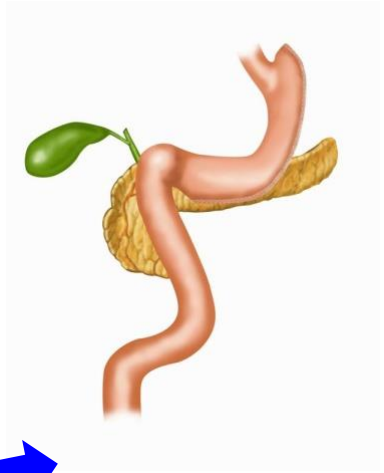
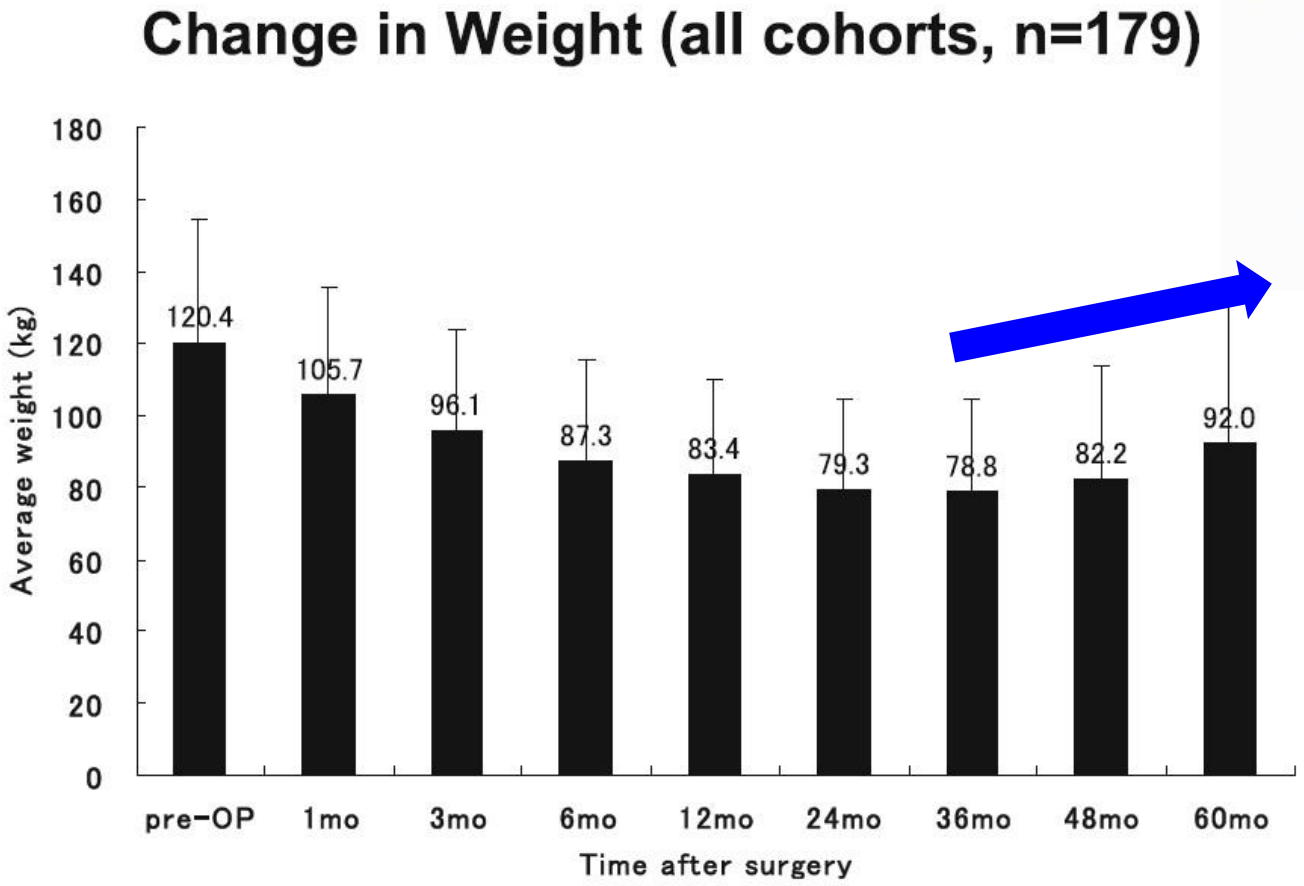
Asian data (Japan)

Long-Term Outcome of Laparoscopic Sleeve Gastrectomy in Morbidly Obese Japanese Patients

Yosuke Seki[1] · Kazunori Kasama[1] · Kenkichi Hashimoto[1]





Seki Y, et al. Obes Surg 2016

Asian data (Japan)

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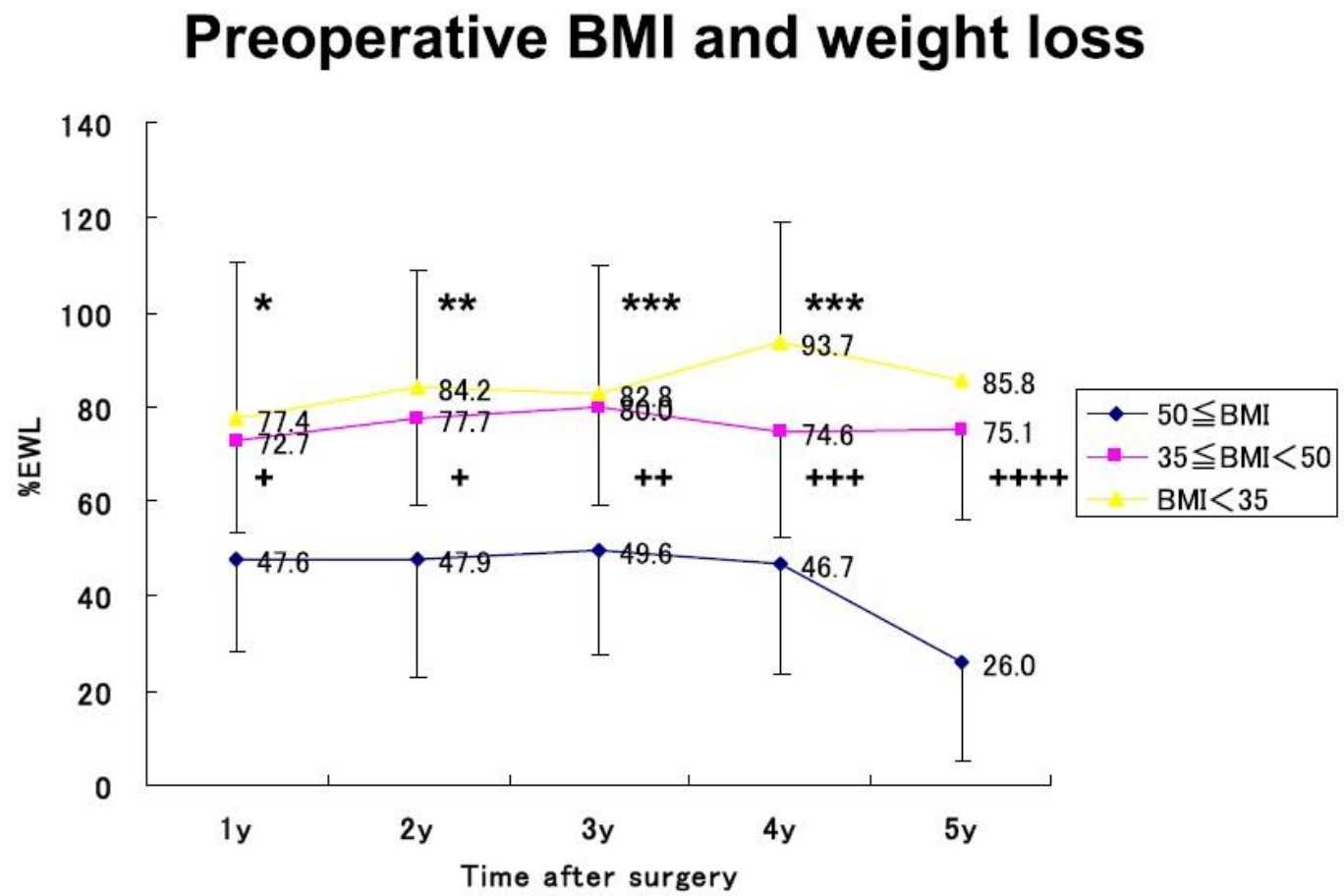
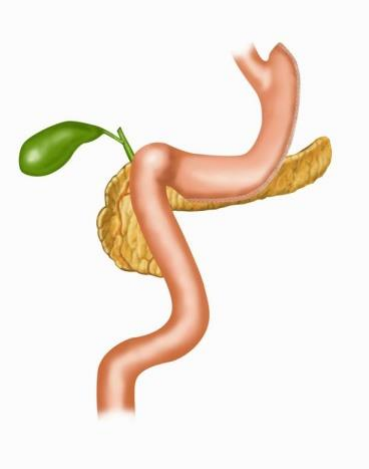
Yosuke Seki[1] · Kazunori Kasama[1] · Kenkichi Hashimoto[1]





Seki Y, et al. Obes Surg 2016

OBES SURG
DOI 10.1007/s11695-017-2685-7

Asian data (Japan)

ORIGINAL CONTRIBUTIONS

A Comparison of the Bariatric Procedures that Are Performed in the Treatment of Super Morbid Obesity

Kohei Uno[1,2] · Yosuke Seki[1] · Kazunori Kasama[1] · Kotaro Wakamatsu[1] · Akiko Umezawa[1] · Katsuhiko Yanaga[2] · Yoshimochi Kurokawa[1]

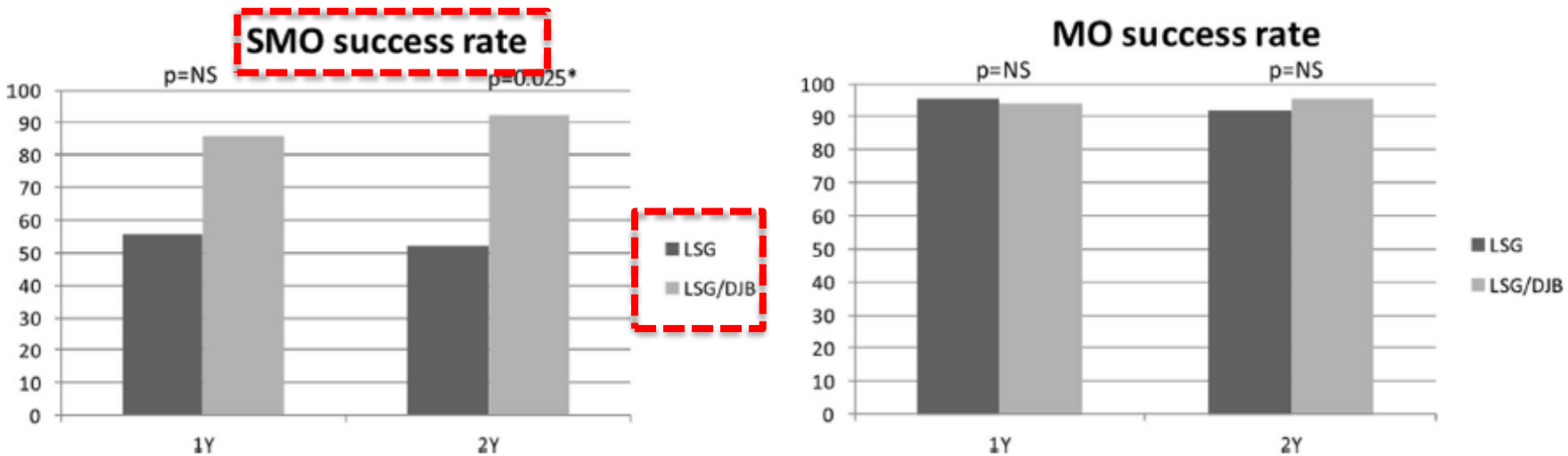


Fig. 2 The %EWL and the rates of successful weight loss. The %EWL and the success rates of LSG and LSG/DJB in the SMO and MO groups are shown. The results were compared using Student's *t* test. *P* values of <0.05 were considered to indicate statistical significance

Uno K, Seki Y, Kasama K, et al. Obes Surg 2017

Contents lists available at ScienceDirect

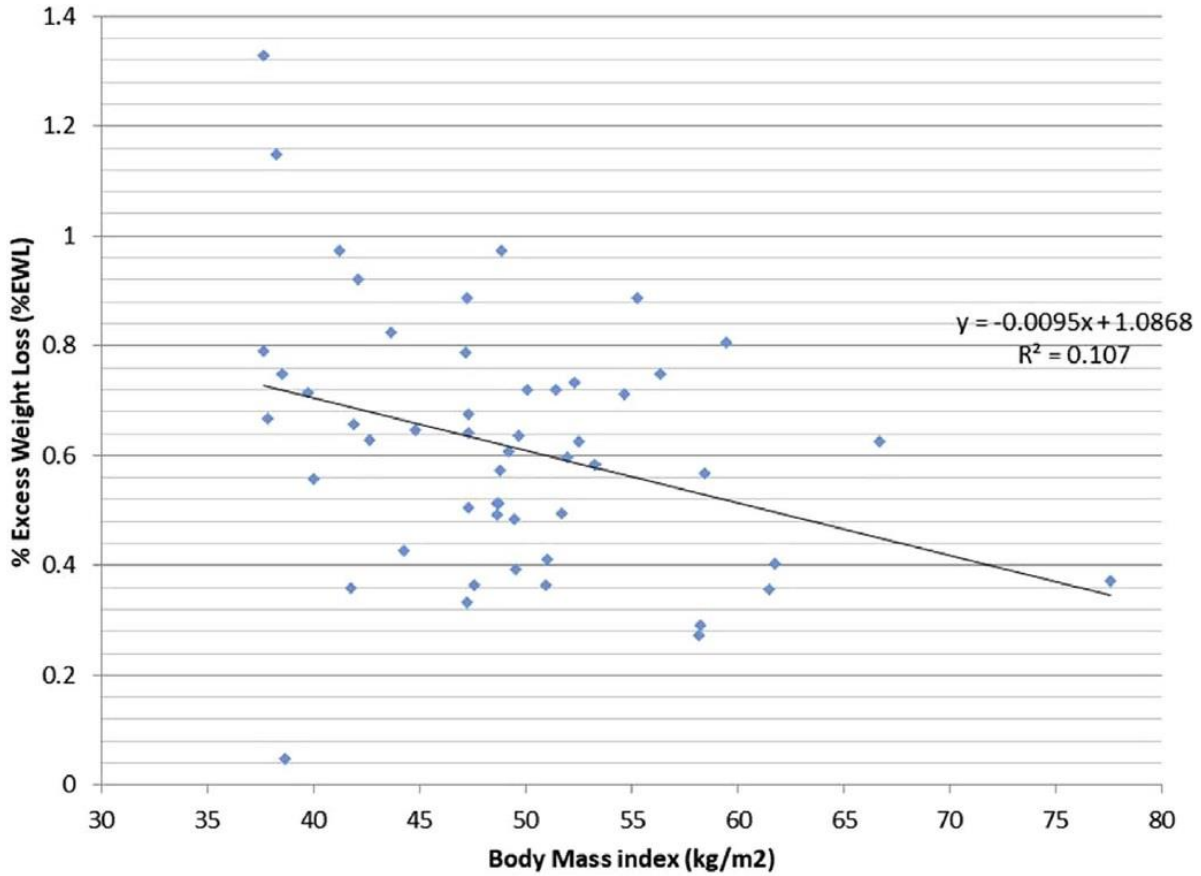
International Journal of Surgery

journal homepage: www.elsevier.com/locate/ijsu

Asian data (India)

Original Research

Mid to long term outcomes of Laparoscopic Sleeve Gastrectomy in Indian population: 3–7 year results – A retrospective cohort study



Results:
124 (29.2%) out of 424 pts were super obese (BMI>50).

Pre-OP BMI significantly correlated with %EWL at 5 yrs.

Int J Surg 2017

scientific reports

Asian data (China)

At 12 mo post-surgery, the weight loss-related indicators for the SG, BPD/DS, and SADI-S groups surpassed those of the RYGB group.

No significant distinctions were found between the SG, BPD/DS, and SADI-S groups.

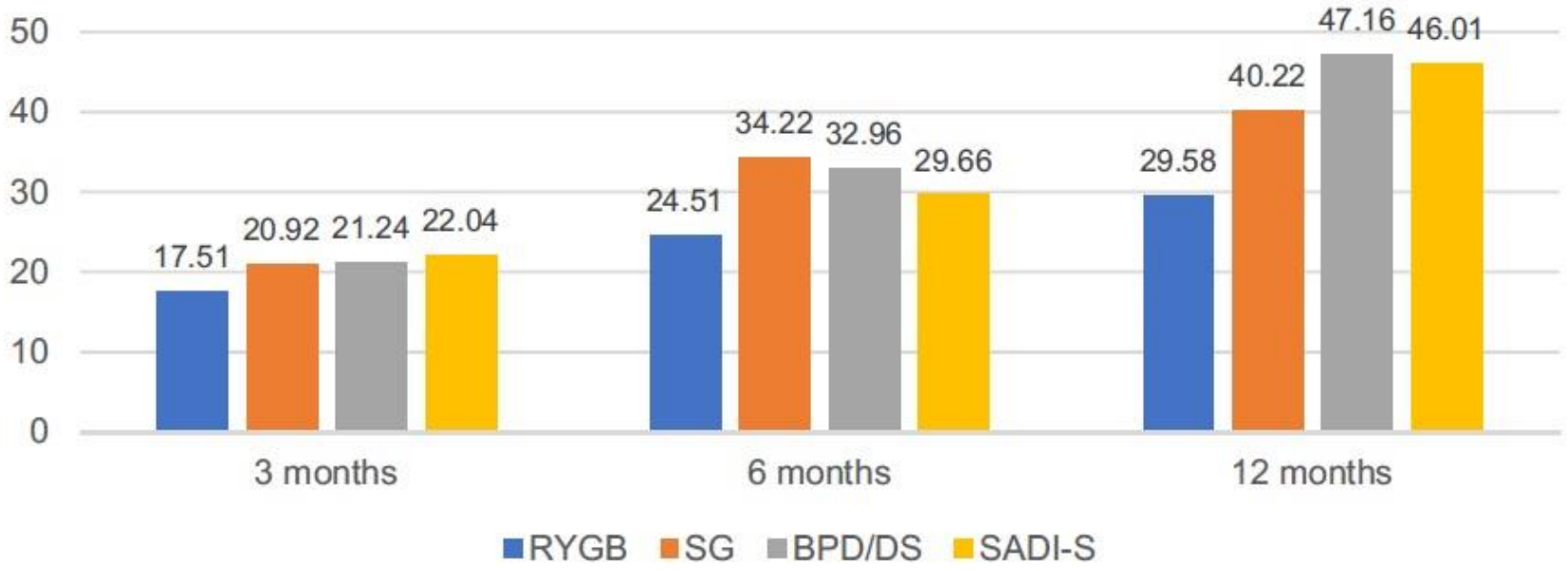
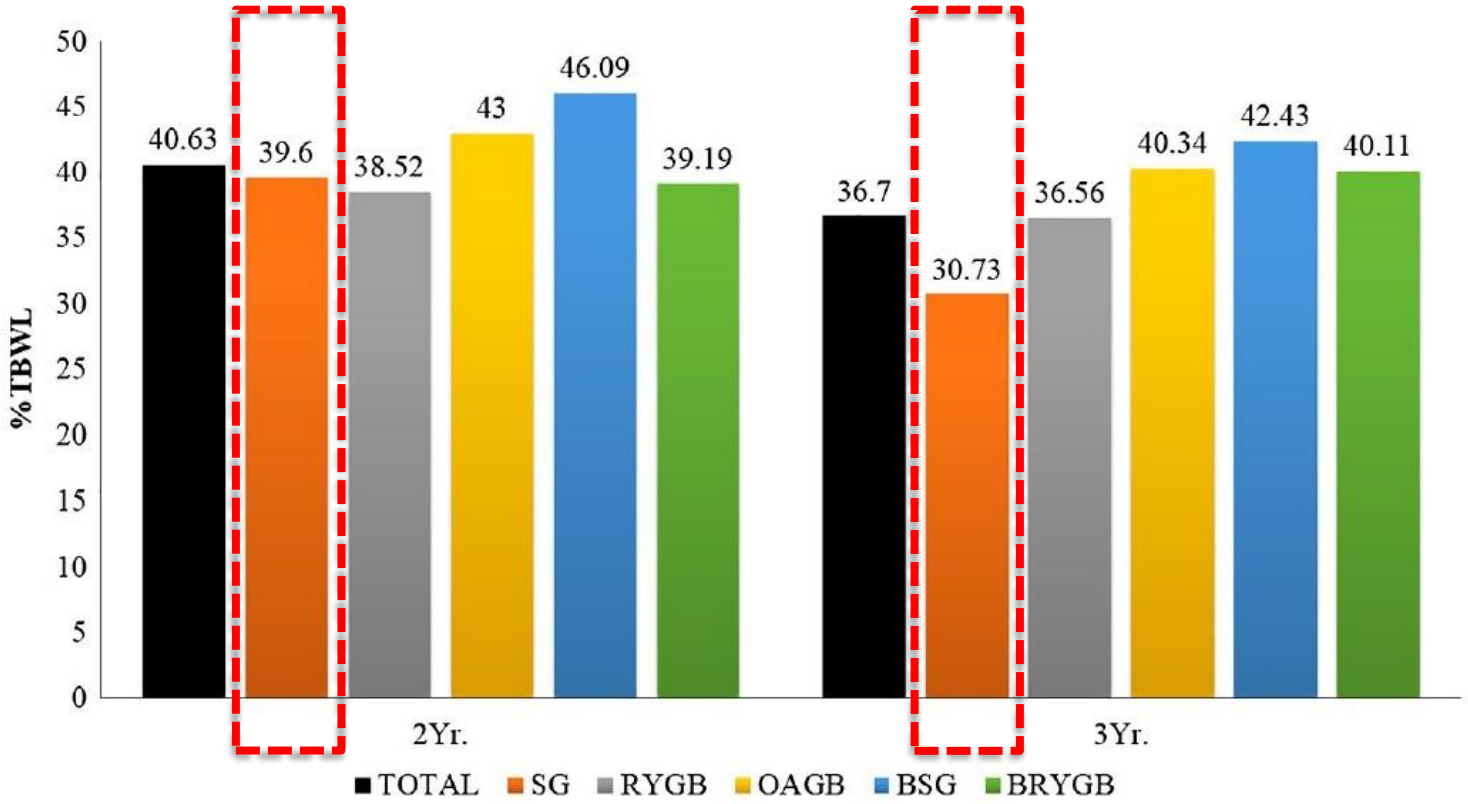


Figure 2. Changes in %TWL at 3, 6, and 12 months in different surgical groups.

Scientific Reports 2024

Asian data (India)

BSG, OAGB, and BRYGB have very good to excellent midterm outcomes for patients with super obesity and super-super obesity, whereas RYGB and SG have average outcomes at 3 years.



Obesity 2019

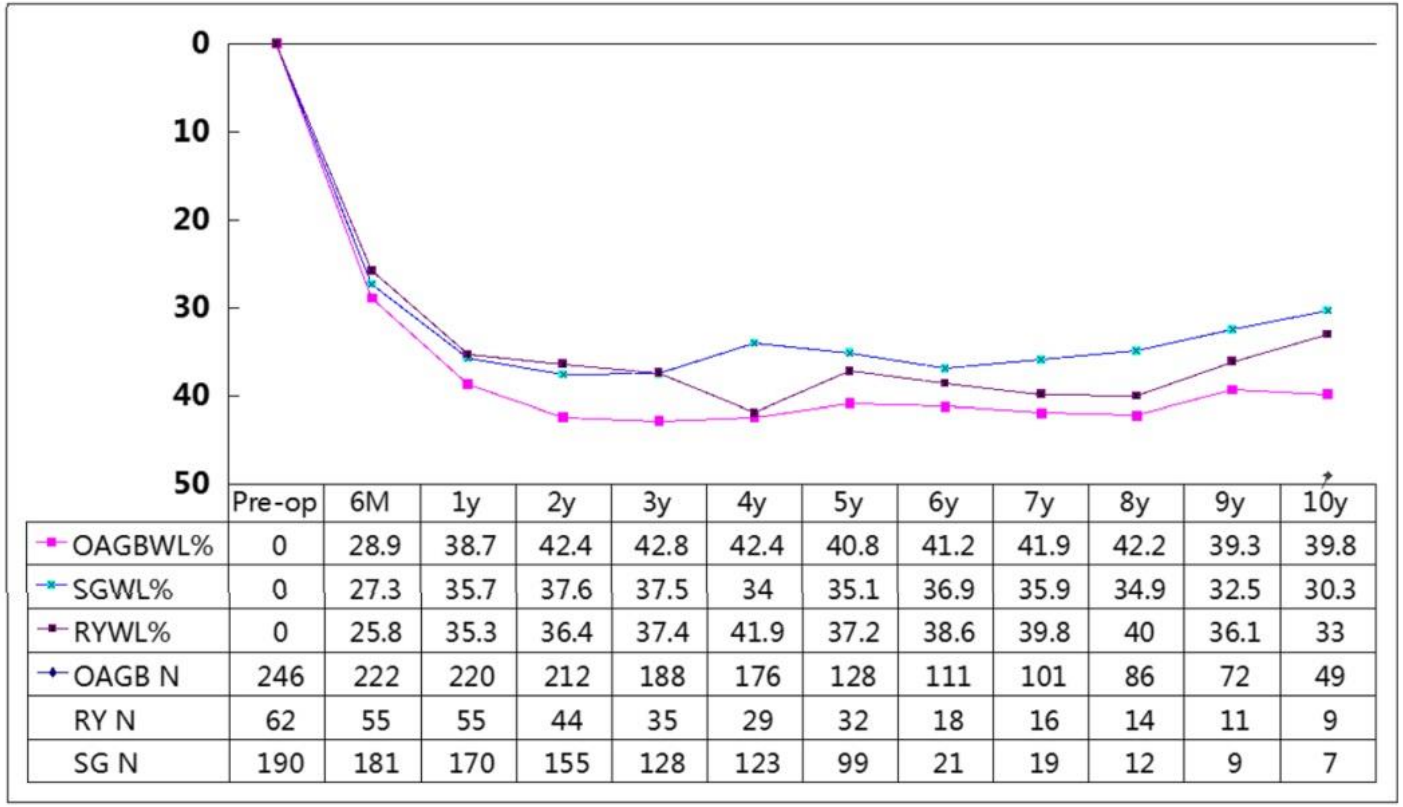
Obesity Surgery (2021) 31:3391–3399
https://doi.org/10.1007/s11695-021-05464-0

ORIGINAL CONTRIBUTIONS

Asian data (Taiwan)

Long-Term Efficacy of Bariatric Surgery for the Treatment of Super-Obesity: Comparison of SG, RYGB, and OAGB

Tien-Chou Soong[1,2,3] · Ming-Hsien Lee[4] · Wei-Jei Lee[2,5] · Owaid M. Almalki[6] · Jung-Chien Chen[4,5] · Chun-Chi Wu[5] · Shu-Chun Chen[5]



	Pre-op	6M	1y	2y	3y	4y	5y	6y	7y	8y	9y	10y
OAGBWL%	0	28.9	38.7	42.4	42.8	42.4	40.8	41.2	41.9	42.2	39.3	39.8
SGWL%	0	27.3	35.7	37.6	37.5	34	35.1	36.9	35.9	34.9	32.5	30.3
RYWL%	0	25.8	35.3	36.4	37.4	41.9	37.2	38.6	39.8	40	36.1	33
OAGB N	246	222	220	212	188	176	128	111	101	86	72	49
RY N	62	55	55	44	35	29	32	18	16	14	11	9
SG N	190	181	170	155	128	123	99	21	19	12	9	7

Obes Surg 2021

Obesity Surgery (2021) 31:3391–3399
https://doi.org/10.1007/s11695-021-05464-0

ORIGINAL CONTRIBUTIONS

Long-Term Efficacy of Bariatric Surgery for the Treatment of Super-Obesity: Comparison of SG, RYGB, and OAGB

Tien-Chou Soong[1,2,3] · Ming-Hsien Lee[4] · Wei-Jei Lee[2,5] · Owaid M. Almalki[6] · Jung-Chien Chen[4,5] · Chun-Chi Wu[5] · Shu-Chun Chen[5]

Asian data (Taiwan)

At post-OP 5 yrs, OAGB had a higher TWL (40.8%) than SG (35.1%), but not RYGB (37.2%).

SG had a lower remission rate in DL comparing to OAGB and RYGB, but T2DM remission rate was no different between the groups.

The overall revision rate is 5.4% of the whole group, and SG had a lower revision rate (2.6%) than RYGB (8.1%) and OAGB (6.9%).

Obes Surg 2021

Summary

BMS for individuals with BMI >50 is a valid option

Individuals with BMI >50 have significantly increased pre-OP comorbidities resulting in worse post-OP outcomes

SG is the most common procedure for individuals with BMI >50

2-stage approach is adopted to individuals with BMI >50, with SG being the first step

Weight loss seems inferior to GI bypass procedures (RYGB, OAGB) for individuals with BMI >50

Glycemic control seems equivalent among SG and RYGB whereas lipid controls in SG seems inferior

There are handful data from Asia

Thank you for listening!

yosuke_seki@hotmail.com