Tutto quello che bisogna sapere su OAGB

Diffusione della tecnica

DOTT. SIMONE VITA

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Original Research

The Mini-Gastric Bypass original technique

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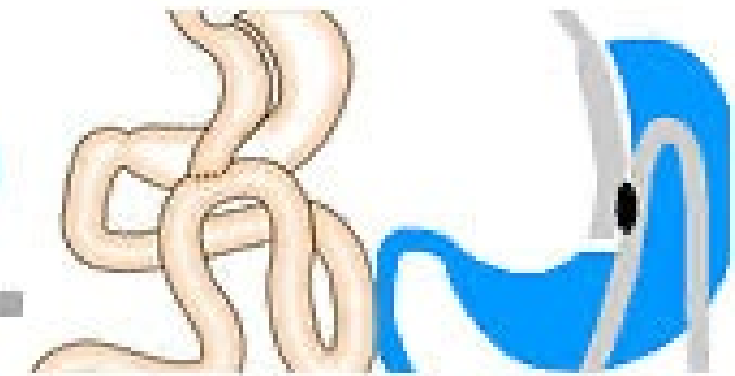
mgb | oagb

International club



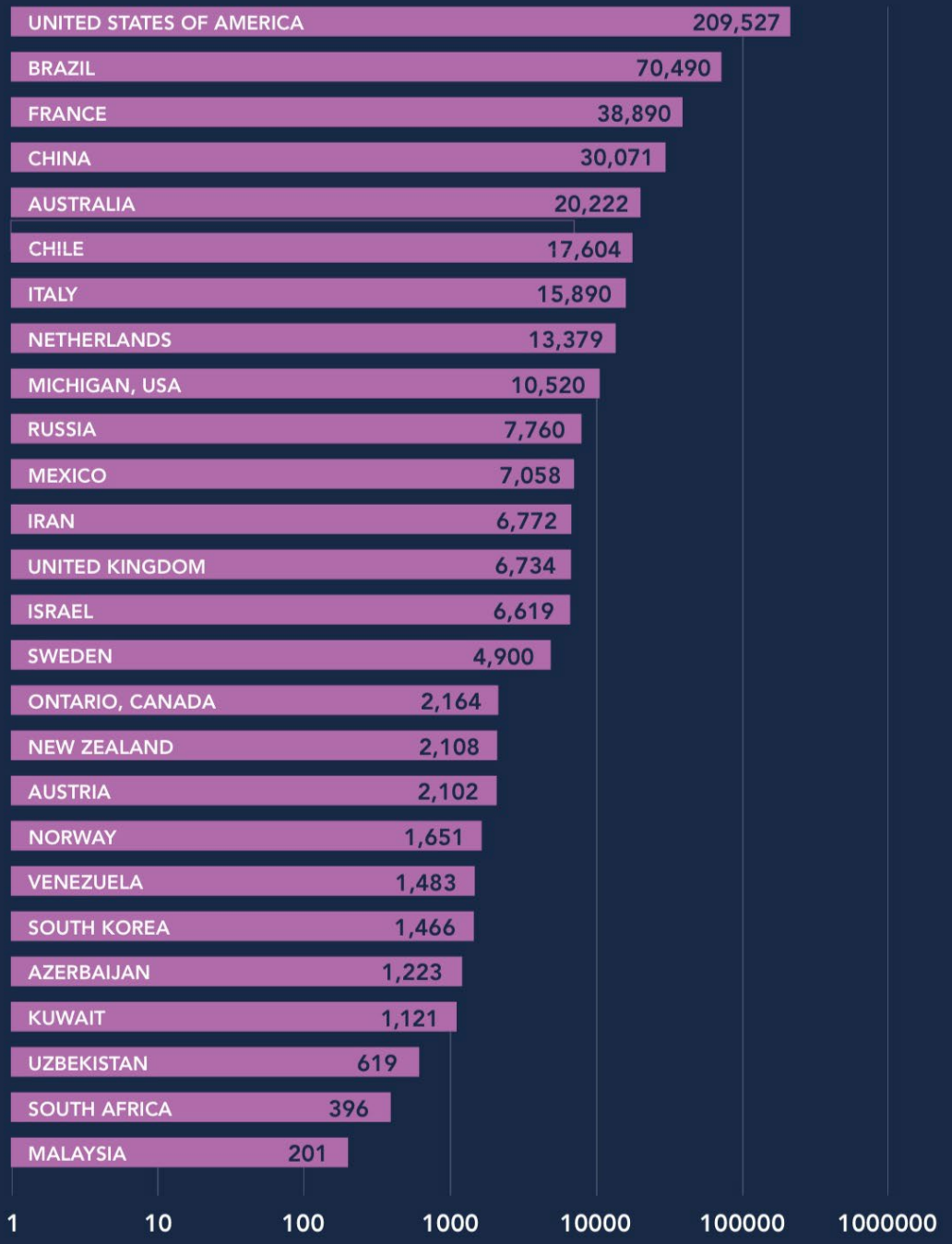
Obesity Surgery (2023) 33:930–937
https://doi.org/10.1007/s11695-022-06435-9

ORIGINAL CONTRIBUTIONS

Table 2 Yearly procedures 2011–2021% (*n*)

Year	AGB	SG	RYGB	OAGB	BPD	GP	Others	Total
2011	36.4% (2623)	30.3% (2188)	24.9% (1796)	0.0% (0)	6.2% (447)	0.0% (0)	2.2% (160)	100.0% (7214)
2012	34.7% (2556)	32.3% (2383)	21.6% (1593)	4.7% (348)	3.3% (246)	2.8% (203)	0.5% (38)	100.0% (7367)
2013	29.1% (2283)	36.8% (2889)	23.0% (1805)	6.9% (538)	2.6% (202)	1.4% (112)	0.3% (23)	100.0% (7852)
2014	25.6% (2182)	44.6% (3799)	19.1% (1628)	5.6% (477)	1.5% (124)	3.1% (268)	0.5% (40)	100.0% (8518)
2015	21.0% (2406)	48.7% (5594)	16.7% (1912)	7.6% (870)	1.2% (143)	1.6% (180)	3.3% (378)	100.0% (11,483)
2016	15.9% (2293)	55.5% (7976)	14.6% (2104)	8.6% (1239)	0.7% (101)	0.6% (82)	4.1% (586)	100.0% (14,381)
2017	11.3% (1988)	51.6% (9046)	13.5% (2361)	9.8% (1715)	0.2% (41)	0.2% (34)	13.3% (2335)	100.0% (17,529)
2018	7.4% (1351)	54.0% (9850)	14.2% (2581)	12.4 (2266)	0.2% (45)	0.5% (93)	11.2% (2040)	100.0% (18,226)
2019	6.3% (1065)	61.0% (102,919	13.1% (2205)	10.6% (1790)	0.3% (43)	0.4% (61)	8.4% (1425)	100.0% (16,880)
2020	8.8% (1325)	54.5% (8178)	12.1% (1814)	12.2% (1827)	0.2% (32)	0.2% (27)	12.0% (1801)	100.0% (15,004)
2021	5.3% (1191)	55.0% (12,359)	12.2% (2748)	14.8% (3325)	0.2% (53)	0.2% (46)	12.2% (2747)	100.0% (22,469)

AGB, adjustable gastric banding; *SG*, sleeve gastrectomy; *RYGB*, Roux-en-Y gastric bypass; *OAGB*, one anastomosis gastric bypass; *BPD*, biliopancreatic diversion; *GP*, gastric plication

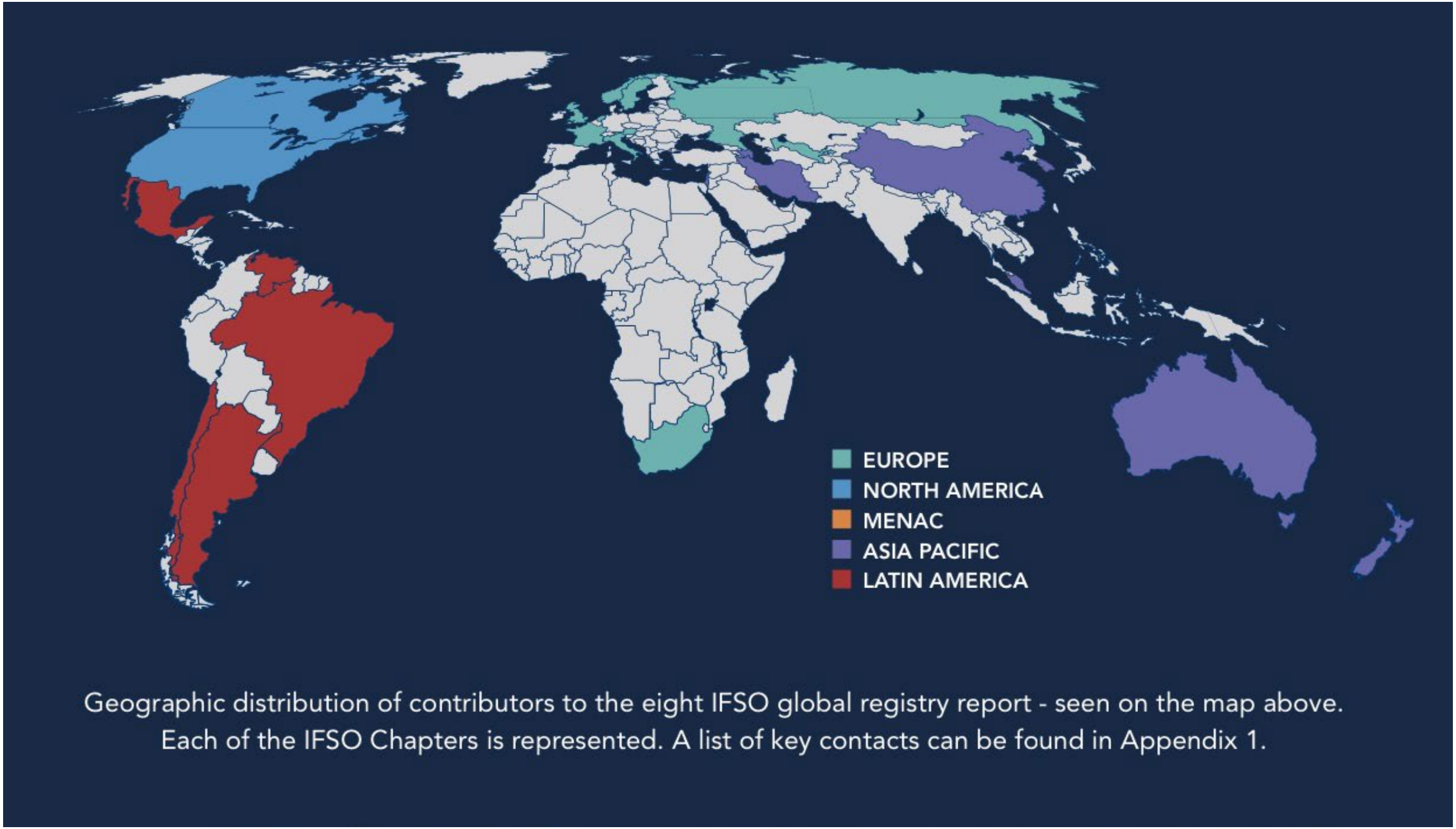


IFSO

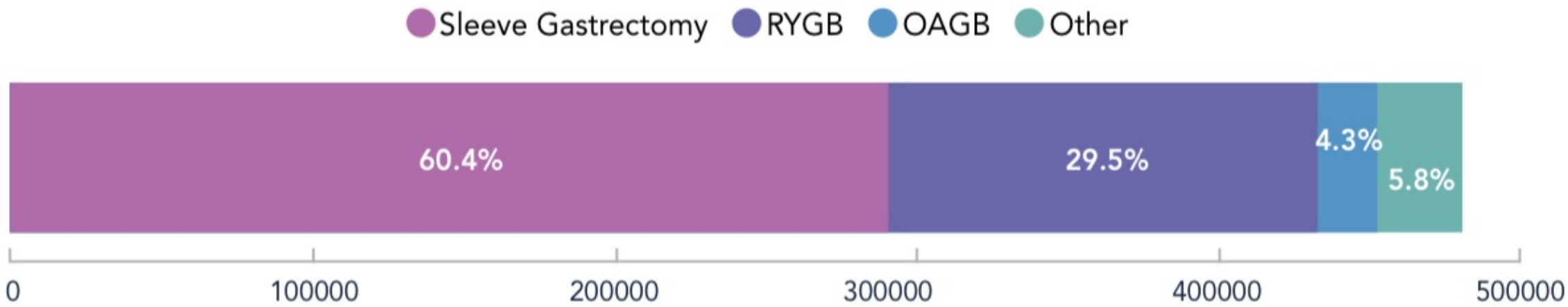
8TH GLOBAL REGISTRY REPORT

Number of metabolic bariatric surgical procedures per country or region, primary and revisional.

A total of 480,970 procedures contributed by 24 countries and 2 regional registries. Michigan is a state of the USA and 39 of 41 sites that contribute to the Michigan registry also contribute to MBSAQIP (United States of America), meaning 10,437 procedures are potentially represented twice in this graph.



Geographic distribution of contributors to the eight IFSO global registry report - seen on the map above. Each of the IFSO Chapters is represented. A list of key contacts can be found in Appendix 1.



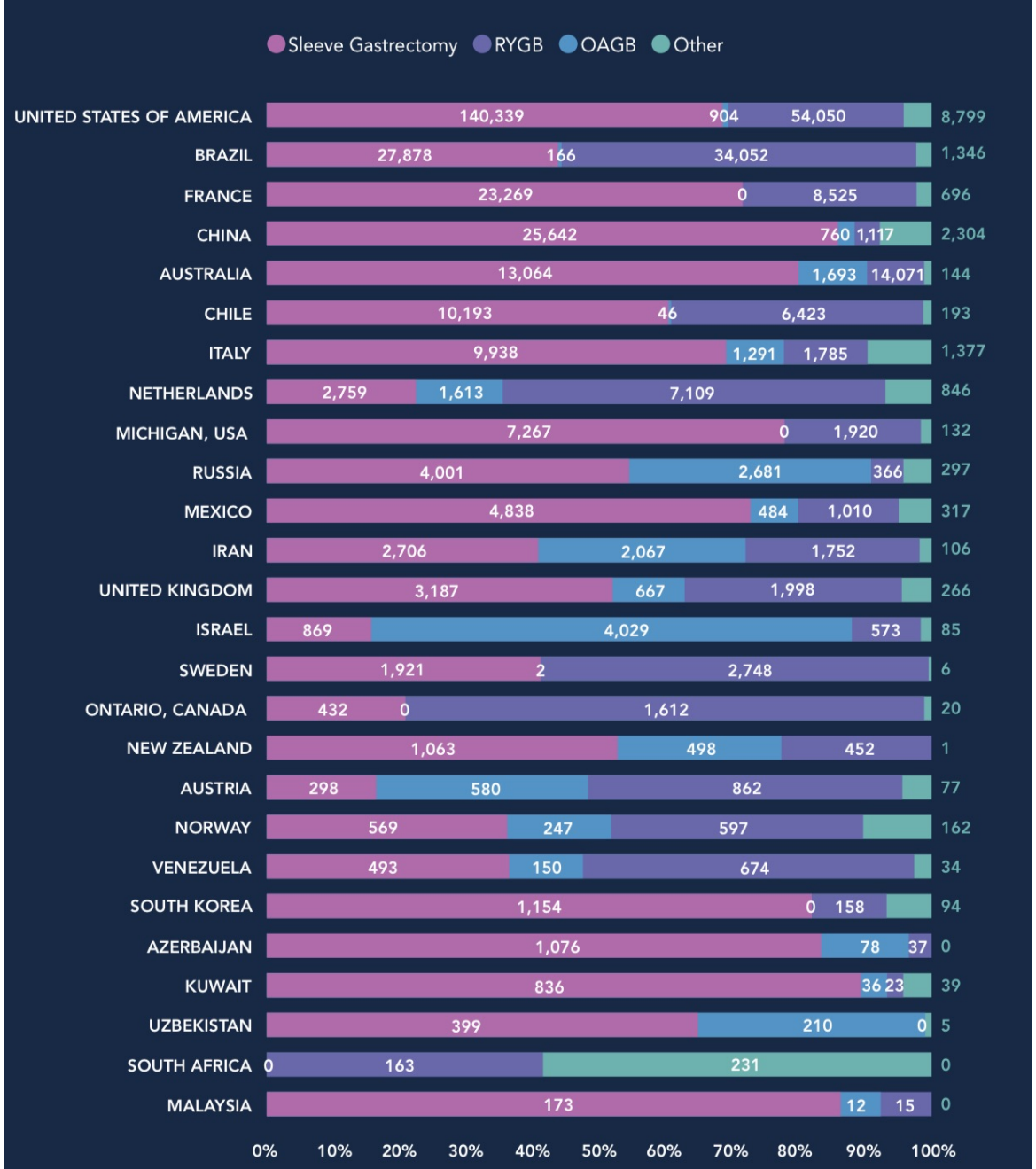
All procedure types (n=480,970).

*potential for 10,437 procedures to be represented twice due to possible overlaps with the datasets of USA and Michigan.

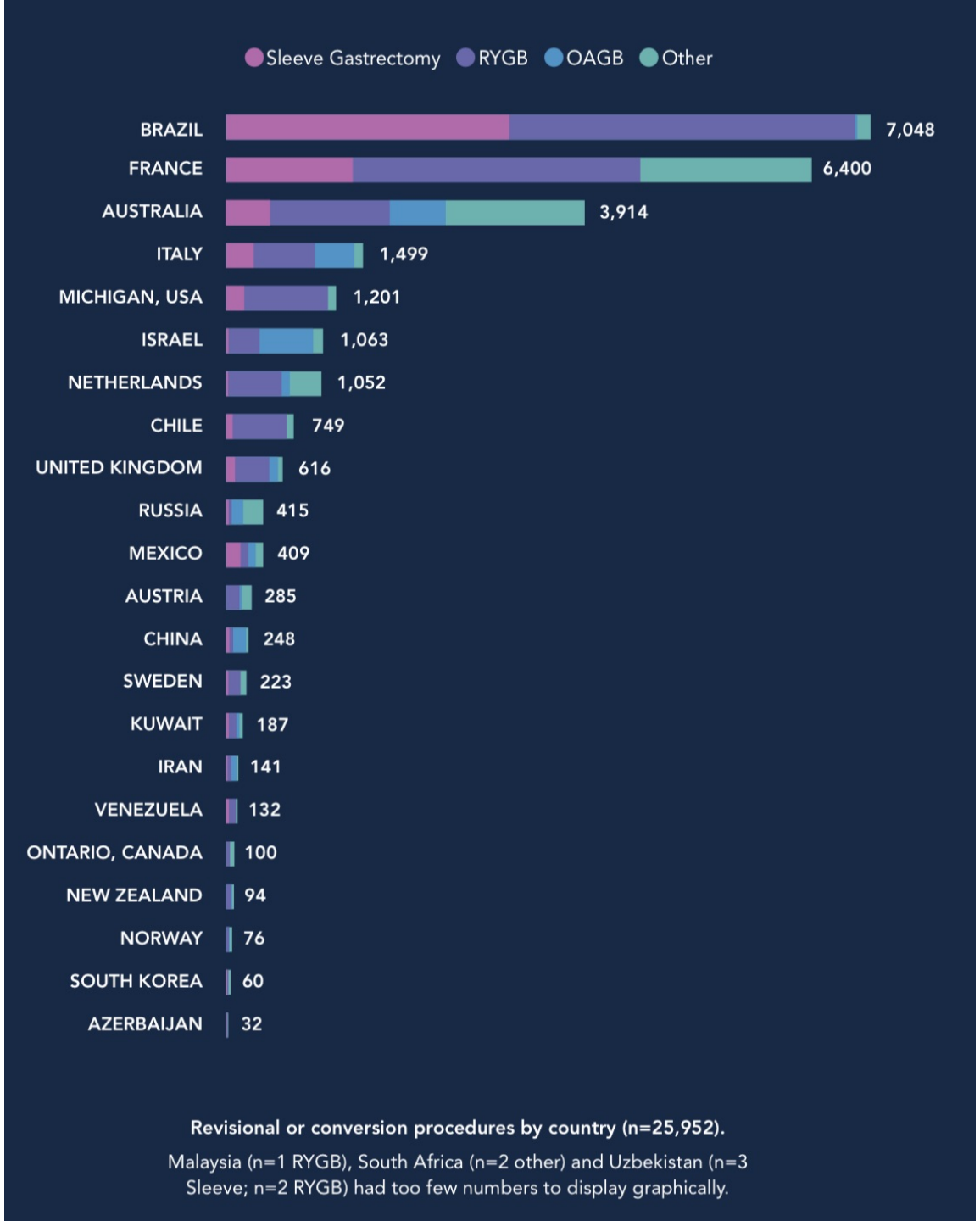
COUNTRY OR REGION	PRIMARY (n)	REVISIONAL (n)	PRIMARY (n)	REVISIONAL (n)
USA	204,092	5,435	97.4%	2.6%
BRAZIL	63,442	7,048	90.0%	10.0%
FRANCE	32,490	6,400	83.5%	16.5%
CHINA	29,823	248	99.2%	0.8%
CHILE	16,855	749	95.7%	4.3%
AUSTRALIA	16,308	3,914	80.6%	19.4%
ITALY	14,391	1,499	90.6%	9.4%
NETHERLANDS	12,327	1,052	92.1%	7.9%
MICHIGAN, USA	9,319	1,201	88.6%	11.4%
RUSSIA	7,345	415	94.7%	5.3%
MEXICO	6,649	409	94.2%	5.8%
IRAN	6,631	141	97.9%	2.1%
UNITED KINGDOM	6,118	616	90.9%	9.1%
ISRAEL	5,556	1,063	83.9%	16.1%
SWEDEN	4,677	223	95.4%	4.6%
ONTARIO, CANADA	2,064	100	95.4%	4.6%
NEW ZEALAND	2,014	94	95.5%	4.5%
AUSTRIA	1,817	285	86.4%	13.6%
NORWAY	1,575	76	95.4%	4.6%
SOUTH KOREA	1,406	60	95.9%	4.1%
VENEZUELA	1,351	132	91.1%	8.9%
AZERBAIJAN	1,191	32	97.4%	2.6%
KUWAIT	934	187	83.3%	16.7%
UZBEKISTAN	614	5	99.2%	0.8%
SOUTH AFRICA	394	2	99.5%	0.5%
MALAYSIA	200	1	99.5%	0.5%

Primary and revisional procedures by country or region.

*potential for procedures to be represented twice due to possible overlaps with the datasets of USA and Michigan.



Types of primary metabolic bariatric procedures by country or region.



Revisional or conversion procedures by country (n=25,952).

Malaysia (n=1 RYGB), South Africa (n=2 other) and Uzbekistan (n=3 Sleeve; n=2 RYGB) had too few numbers to display graphically.

	Laparoscopic	Open	Endoscopic	Robotic	Unspecified	Laparoscopic Rate	Robotic Rate
AUSTRALIA	16,151	2	1	117	37	99.0%	0.7%
AUSTRIA	1,738	4	1	42	32	95.7%	2.3%
ONTARIO, CANADA	2,050	13	0	0	1	99.3%	0.0%
FRANCE	32,408	82	0	0	0	99.7%	0.0%
IRAN	6,624	7	0	0	0	99.9%	0.0%
ISRAEL	5,548	6	0	0	2	99.9%	0.0%
ITALY	12,926	5	0	88	1,372	89.8%	0.6%
KUWAIT	900	0	32	2	0	96.4%	0.2%
MEXICO	6,526	13	112	11	1	97.9%	0.2%
NETHERLANDS	12,306	9	12	0	0	99.8%	0.0%
NEW ZEALAND	2,014	0	0	0	0	100.0%	0.0%
NORWAY	1,576	0	0	0	0	100.0%	0.0%
RUSSIA	7,249	73	3	0	0	99.0%	0.0%
SOUTH AFRICA	393	1	0	0	0	99.7%	0.0%
SWEDEN	4,665	7	0	0	5	99.7%	0.0%
UNITED KINGDOM	6,012	13	18	75	0	98.3%	1.2%
MICHIGAN, USA	6,369	3	0	2,947	0	68.3%	31.6%
UZBEKISTAN	614	0	0	0	0	100.0%	0%
VENEZUELA	1,484	0	0	0	0	100.0%	0%

Operative approach – Primary procedures.

*Not all countries provided this information.

	Laparoscopic	Open	Endoscopic	Robotic	Unspecified	Laparoscopic Rate	Robotic Rate
AUSTRALIA	3,769	21	78	35	11	96.3%	0.9%
AUSTRIA	271	10	0	1	3	95.1%	0.4%
ONTARIO, CANADA	98	2	0	0	0	98.0%	0.0%
CHINA	218	14	4	12	0	87.9%	4.8%
FRANCE	6,261	139	0	0	0	97.8%	0.0%
IRAN	141	0	0	0	0	100.0%	0.0%
ISRAEL	1,057	6	0	0	0	99.4%	0.0%
ITALY	884	14	4	2	595	59.0%	0.1%
KUWAIT	178	2	0	7	0	95.2%	3.7%
MEXICO	375	0	20	0	0	94.9%	0.0%
NETHERLANDS	1,039	10	3	0	0	98.8%	0.0%
NEW ZEALAND	93	0	0	0	1	98.9%	0.0%
NORWAY	74	2	0	0	0	97.4%	0.0%
RUSSIA	294	18	1	0	0	93.9%	0.0%
SWEDEN	218	4	0	0	1	97.8%	0.0%
UNITED KINGDOM	597	7	2	9	1	96.9%	1.5%
MICHIGAN, USA	828	17	0	356	0	68.9%	29.6%
UZBEKISTAN	5	0	0	0	0	100%	0%

Operative approach – Revisional procedures.

*Not all countries provided this information.

Key outcomes in this report

- 480,970 operations from 24 countries and 2 complete regional registries representing 81.4% of known registries.
  - New countries this year: Azerbaijan, Iran, South Korea, United Kingdom
  - Countries that contributed to seventh report but not eighth: Argentina, Spain, Taiwan
- The majority of patients with obesity who underwent metabolic bariatric procedures are female.
- The median start BMI of participants undergoing a primary metabolic bariatric procedure in the registry ranged from 36.1 kg/m2 for females in South Korea to 47.65 kg/m2 for males in South Africa. The majority of registries reported start BMI 40-45 kg/m2.
  - Countries with lower start BMI tended to have higher rates of type II diabetes.
- The median age on the day of surgery varied from 34 years in Kuwait to 45 years in Italy and the Netherlands.
- The most common preoperative co-morbidity reported by contributing registries was type II diabetes. The highest rates of type II diabetes in people with obesity undergoing metabolic bariatric surgery are in Azerbaijan and the lowest rates in France, Australia and Norway.
- Males are disproportionately more likely to have OSA, Hypertension, Diabetes and Dysplidemia at the time of their metabolic bariatric procedure.
- The majority of primary operations recorded by all registries are sleeve gastrectomy
- Roux-en-Y gastric bypass is the most frequently performed revisional metabolic bariatric operation
- There are an increasing number of “other” procedures being performed, particularly in the revisional setting.
- The majority of operations are performed laparoscopically, although it is noted that the uptake robotic surgery continues to increase particularly in the revisional setting.
- Length of stay is higher for revisional procedures than primary procedures.
- Metabolic bariatric surgery is very safe with reported rates of mortality <1% in most registries.

Observational Study > Obes Surg. 2022 Oct;32(10):3239-3247.
doi: 10.1007/s11695-022-06002-2. Epub 2022 Aug 26.

The United States Experience with One Anastomosis Gastric Bypass at MBSAQIP-Accredited Centers

James J Jung [1 2 3], Albert K Park [4 5], Matthew M Hutter [4 5]

Affiliations + expand

PMID: 36008649 DOI: 10.1007/s11695-022-06002-2

Comment > Obes Surg. 2022 Nov;32(11):3771-3772. doi: 10.1007/s11695-022-06262-y.
Epub 2022 Sep 9.

France and One Anastomosis Gastric Bypass (OAGB): a "Witch Hunt"

Arnaud Liagre [1], Francesco Martini [2]

Affiliations + expand

PMID: 36083568 DOI: 10.1007/s11695-022-06262-y

Obesity Surgery (2018) 28:1188–1206
https://doi.org/10.1007/s11695-018-3182-3

ORIGINAL CONTRIBUTIONS

Mini Gastric Bypass-One Anastomosis Gastric Bypass (MGB-OAGB)-IFSO Position Statement

Maurizio De Luca[1] · Tiffany Tie[1] · Geraldine Ooi[1] · Kelvin Higa[1] · Jacques Himpens[1] · Miguel-A Carbajo[1] · Kamal Mahawar[1] · Scott Shikora[1] · Wendy A. Brown[1]

- MGB-OAGB provides effective weight loss after 5years
- MGB-OAGB has a favourable effect on T2DM
- There si an acceptable early and late complication rate
- The ideal operative technique has not been defined

Reccomendation of the IFSO MGB-OAGB Taskforce

- OAGB should be the identifier for this procedure in future pubblications
- Bile reflux and long term nutricional complications, remains a theorical risk
- OAGB si a recognized bariatric/metabolic procedure and should not be considered investigational

Obesity Surgery (2021) 31:3251–3278
https://doi.org/10.1007/s11695-021-05413-x

REVIEW

IFSO Update Position Statement on One Anastomosis Gastric Bypass (OAGB)

Maurizio De Luca[1] · Giacomo Piatto[2] · Giovanni Merola[3] · Jacques Himpens[4] · Jean-Marc Chevallier[5] · Miguel-A Carbajo[6] · Kamal Mahawar[7,8] · Alberto Sartori[2] · Nicola Clemente[2] · Miguel Herrera[9] · Kelvin Higa[10,11] · Wendy A. Brown[12] · Scott Shikora[13,14]

Reccomendation of the IFSO OAGB Taskforce

- IFSO selected OAGB as the approved identifier for this procedure
- The outcomes from OAGB are promising in terms of short operative time, low perioperative complication rate good weight loss and good comorbidities remission
- OAGB in the primary setting provides better outcomes when compared to revisional OAGB
- Bile reflux does not seem to be a major issue
- Patients with OAGB should have al least an annual nutritional review and appropriate micro and macronutrient supplementation

Obesity Surgery
https://doi.org/10.1007/s11695-017-3070-2

ORIGINAL CONTRIBUTIONS

The First Consensus Statement on One Anastomosis/Mini Gastric Bypass (OAGB/MGB) Using a Modified Delphi Approach

Kamal K. Mahawar[1] · Jacques Himpens[2] · Scott A. Shikora[3] · Jean-Marc Chevallier[4] · Mufazzal Lakdawala[5] · Maurizio De Luca[6] · Rudolf Weiner[7] · Ali Khammas[8] · Kuldeepak Singh Kular[9] · Mario Musella[10] · Gerhard Prager[11] · Mohammad Khalid Mirza[12] · Miguel Carbajo[13] · Lilian Kow[14] · Wei-Jei Lee[15] · Peter K. Small[1]

101 OAGB/MGB experts from 39 countries to vote 55 statements

CONSENSUS ACHIEVED

OAGB/MGB si an acceptable surgical option also for young adults
OAGB/MGB is an acceptable surgical option for suitable for patients with mild to moderate GERD and hiatus hernia
OAGB/MGB does not increase the risk of gastric and oesofaphageal cancer
Long and narrow gastric pouch
Use of the anti-reflux technique was not strictly necessary

NO CONSENSUS ACHIEVED

OAGB works similar to an RYGB in its mechanism of action
OAGB/MGB is an acceptable surgical option for patients with severe GERD, Barret's oesophagus,severe psychiatric disorders
Routine crural approximation is unnecessary in patient with hiatus hernia
Prophylaxis for gallstones for at least six months

Obesity Surgery
https://doi.org/10.1007/s11695-020-04519-y

ORIGINAL CONTRIBUTIONS

IFSO (International Federation for Surgery of Obesity and Metabolic Disorders) Consensus Conference Statement on One-Anastomosis Gastric Bypass (OAGB-MGB): Results of a Modified Delphi Study

Almino C. Ramos[1] · Jean-Marc Chevallier[2] · Kamal Mahawar[3] · Wendy Brown[4] · Lilian Kow[5] · Kevin P. White[6] · Scott Shikora[7] · IFSO Consensus Conference Contributors

52 internationally recognized bariatric experts prom 28 countries for voting on 90 consensus statement

- Surgical option to help individuals with obesity and severe obesity to lose weight, achieve quality of life improvements and even resolutions of comorbidities
- Risk of malabsorption is an important side effect
- Biliopancreatic limb < 2.0 m was desiderable
- No consensus for young adults under 24 years,for patients Child's C liver disease, Crohn's disease or IBD, grade C oesophagitis or Barrett's oesophagus
- Long and narrow pouch 36.38 Fr, Gastroenterostomy 3-5 cm wide, BPL <2m, barbed absorbable suture
- OAGB-MGB is not known to increase cancer risk

Obesity Surgery (2022) 32:256–265
https://doi.org/10.1007/s11695-021-05779-y

Fig. 3 Distribution over the follow-up of reasons for revisional surgery. Each dot represents a patient who needed revision at a follow-up moment

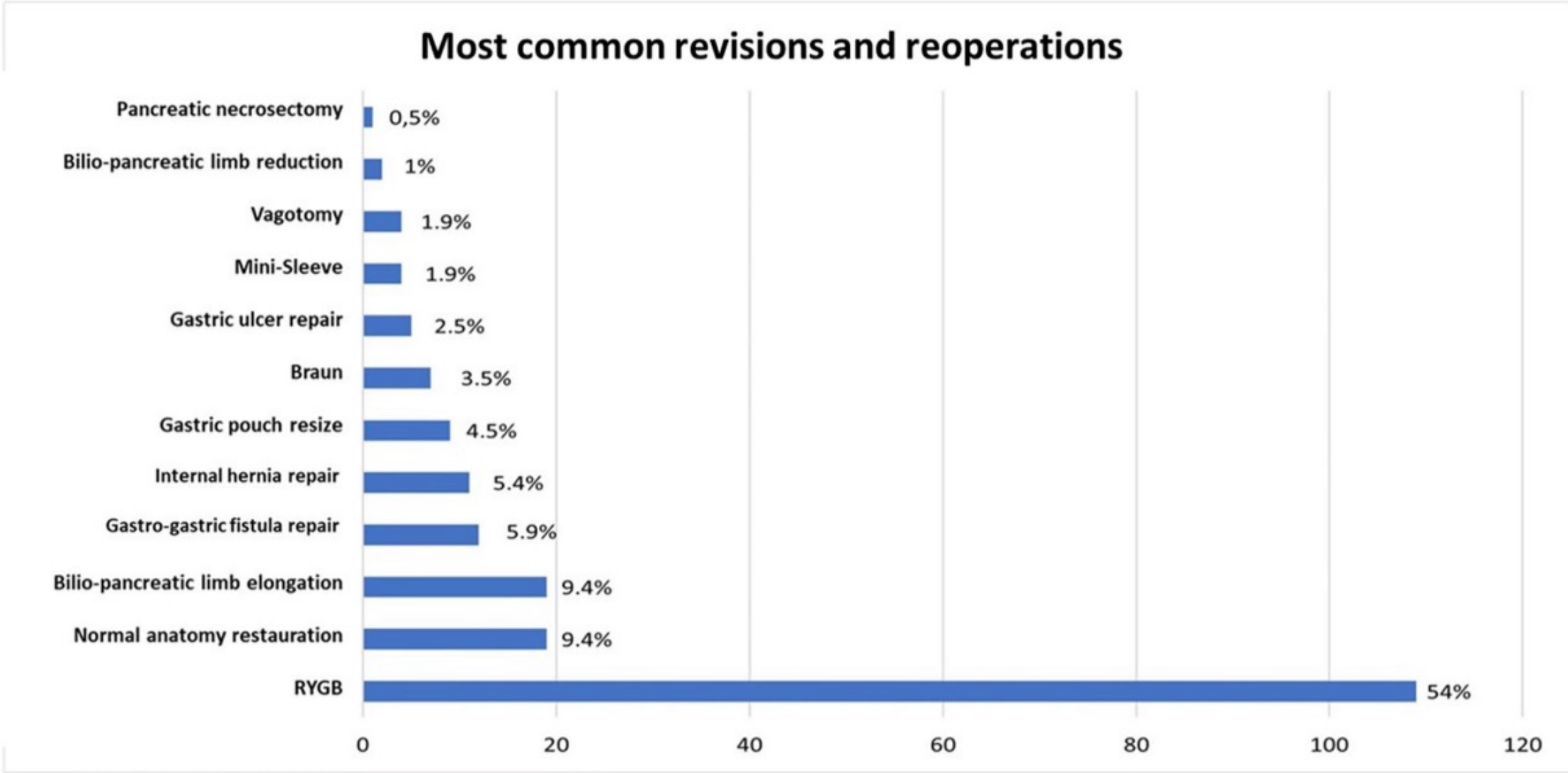
Table 1 Reason for revisional surgery after OAGB-MGB and onset time

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

Obesity Surgery (2022) 32:256–265
https://doi.org/10.1007/s11695-021-05779-y



CONCLUSIONI

- **OAGB e' il terzo intervento piu' eseguito al mondo**
- **Tecnica relativamente semplice e con bassa percentuale di complicanze**
- **Produce buoni risultati in termini di perdita di peso corporeo e risoluzione di comorbidita', (simile al RYGB)**
- **OAGB rappresenta l'intervento di scelta per pazienti con BMI superiore a 50 e con diabete mellito insulino-resistente o non controllabile**
- **Il paventato rischio di carcinoma esofago-gastrico non risulta finora presente in letteratura**

Punti di discussione:

Meccanismo di azione

La lunghezza del tratto bilio-pancreatico

Il dosaggio corretto di vitamine e micronutrienti

La durata della somministrazione dei PPI per la prevenzione dell'ulcera anastomotica

L'uso degli acidi biliari per la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N A X O S


QUESTIONS

Grazie