

Presenter Disclosure

Philip R. Schauer MD

Board Member/Advisory Panel – GI Dynamics; Persona; Keyron, Mediflix

Consultant – Ethicon, Medtronic, Keyron, Novo Nordisk, Lilly, Heron,

Research Support – Ethicon, NIH, Medtronic,

Stock/Shareholder - SEHQC, LLC. Mediflix, Metabolic Health Institute

Clinical Trials (Last 2 Years):

STAMPEDE

MS-MACE

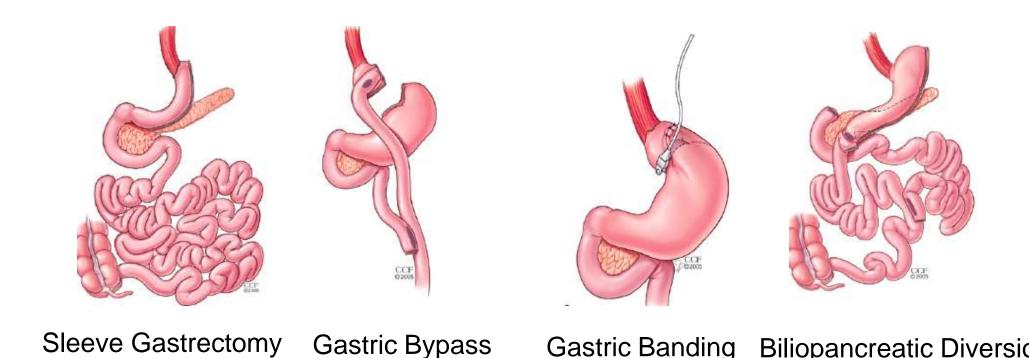
ARMMS

SPLENDOR-NASH

SPLENDID-Cancer



Bariatric/Metabolic Surgery 2023



Gastric Banding

0.4%

Biliopancreatic Diversion – DS

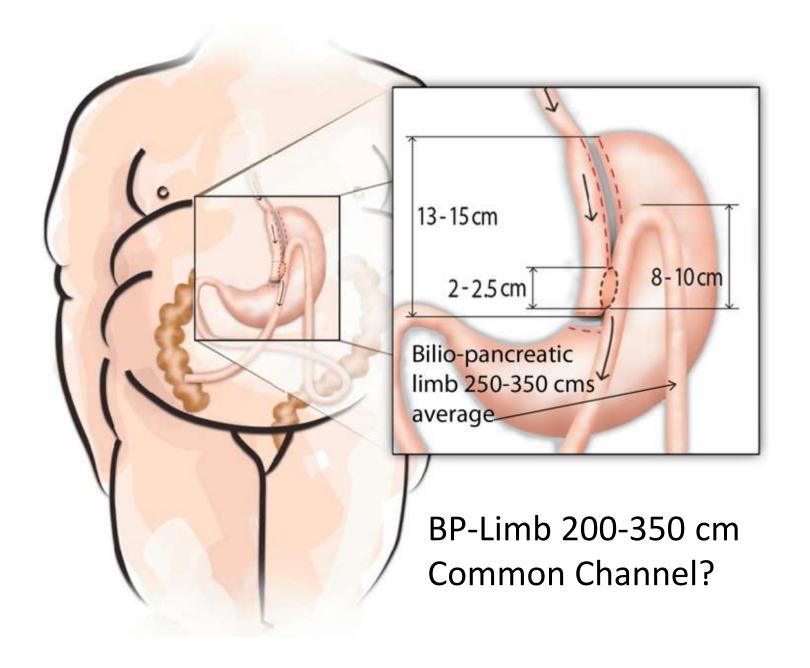
2%

Revisions 12%, Other 4%, Balloons 1.6%

22%

58%

ASMBS.ORG for 2021



Concerns:

Bile gastritis
Bile Esophagitis
GERD
Esophageal Cancer
Marginal Ulcer
Malnutrition

Efficacy and Safety of One Anastomosis Gastric Bypass Versus Roux-en-Y Gastric Bypass for Obesity: a Meta-analysis and Systematic Review Obesity Surgery (2023) 33:611–622

Xianting Li^{1,2} · Xu Hu^{1,2} · Chendong Fu^{1,2} · Lang Han^{1,2} · Ming Xie^{1,2} · Shurui Ouyang^{1,2}

8 trials, n=931, mean BMI OAGB=49, RYGB=50 : years 2005-2022

Table 2 Surgical technical characteristics

Surgery		Robert, 2019	Mohaned, 2018	Lee, 2005		Ruiz-Tovar, 2018	Level, 2020	Eskandaros, 202	1	Katay- ama, 2021	Ibrahim, 2022
15	Gastric pouch volume (mL)	*	25-35			9	9.1	*	*		-
OAGB	Biliopancreatic limb length (cm)	200	200	200		250–350	200	BMI < 45 45 < BMI < 50 BMI > 50	180 200 220	200	200
RYGB	Gastric pouch volume (mL)	30	(5)	15-20		-	20	130			5
	Food limb length (cm)	150	150	BMI < 49 BMI > 50	100 150	150	150	BMI < 45 45 < BMI < 50 BMI > 50	120 135 150	100	150
	Biliopancreatic limb length (cm)	50	50	50		100	100	BMI < 45 45 < BMI < 50 BMI > 50	60 80 100	50	60

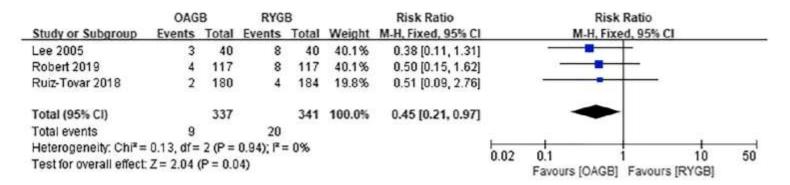
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Fig. 10 BMI at 5 years after surgery

	(DAGB		1	RYGB			Mean Difference		Me	an Differe	nce	
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI		IV, F	Random, 95	5% CI	
Level 2020	24.3	1.36	9	25.4	2.54	19	48.2%	-1.10 [-2.55, 0.35]					
Ruiz-Tovar 2018	25.1	1.8	180	29.9	2.3	184	51.8%	-4.80 [-5.22, -4.38]			•		
Total (95% CI)			189			203	100.0%	-3.02 [-6.64, 0.61]		4	•		
Heterogeneity: Tau ² =	6.55; C	hi²= 2	3.13, d	f=1 (P	< 0.00	001); [2	= 96%		-20	-10	<u> </u>	10	20
Test for overall effect	Z=1.63	(P = ().10)						.0		AGB] Favo	ours [RYGB]	

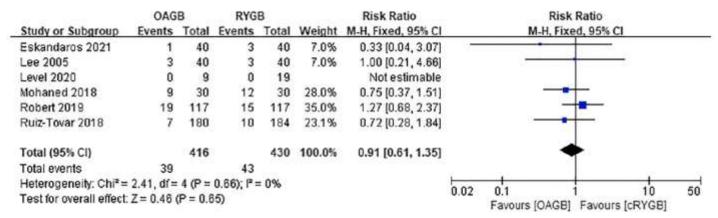
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Fig. 12 Early postoperative complications



Sight benefit to OAGB

Fig. 13 Late postoperative complications



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Fig. 14 Postoperative diabetes remission

	OAG	В	RYG	В		Risk Ratio	Risk Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Fixed, 95% CI	M-H, Fixed, 95% CI
Ibrahim 2022	11	17	14	22	14.1%	1.02 [0.63, 1.63]	_
Level 2020	1	1	2	2	2.3%	1.00 [0.39, 2.58]	
Mohaned 2018	8	9	8	8	10.4%	0.90 [0.66, 1.22]	
Robert 2019	14	20	7	16	9.0%	1.60 [0.86, 2.99]	-
Ruiz-Tovar 2018	67	70	51	59	64.2%	1.11 [0.99, 1.24]	
Total (95% CI)		117		107	100.0%	1.11 [0.99, 1.26]	•
Total events	101		82				
Heterogeneity: Chi ² =	3.39, df=	4 (P =	0.49); 12:	= 0%			
Test for overall effect	Z=1.74	(P = 0.0)	(8)				0.05 0.2 1 5 20 Favours [OAGB] Favours [RYGB]

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Fig. 15 Postoperative hypertension remission

	OAG	В	RYG	В		Risk Ratio			Ri	sk Ratio			
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Fixed, 95% CI			M-H, F	ixed, 959	% CI		
Ibrahim 2022	4	7	5	11	5.3%	1.26 [0.51, 3.13]			V 	X 1			
Level 2020	2	4	4	6	4.4%	0.75 [0.24, 2.33]		-		+			
Mohaned 2018	3	6	3	4	4.9%	0.67 [0.25, 1.78]			•				
Ruiz-Tovar 2018	72	86	61	83	85.3%	1.14 [0.97, 1.34]							
Total (95% CI)		103		104	100.0%	1.10 [0.94, 1.29]				•			
Total events	81		73										
Heterogeneity: Chi2 =	1.69, df=	3 (P=	0.64); 12:	= 0%				-,-		+		<u> </u>	
Test for overall effect:	Z = 1.24	(P = 0.2)	<u>?</u> 1)				0.1	0.2 Fav	0.5 ours [OAG	B] Favo	urs [RY	GB]	10

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Fig. 16 Postoperative hyperlipidemia remission

	OAG	В	RYG	В		Risk Ratio			Ris	k Ratio		
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Fixed, 95% CI			M-H, Fiz	xed, 95% CI		
Level 2020	1	1	2	2	3.8%	1.00 [0.39, 2.58]				 		
Ruiz-Tovar 2018	74	74	49	69	96.2%	1.40 [1.21, 1.64]						
Total (95% CI)		75		71	100.0%	1.39 [1.20, 1.61]				•		
Total events	75		51									
Heterogeneity: Chi ² =	0.48, df=	1 (P=	0.49); 12=	= 0%			0.1	42	0,5	1 1	<u></u>	10
Test for overall effect	Z = 4.30	(P < 0.0)	1001)				0.1	Favo	0.5 ours [OAGE	B] Favours [F	RYGB]	10

Sight benefit to OAGB

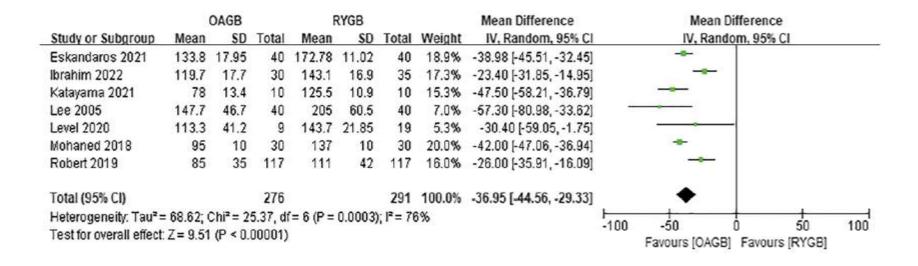
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Fig. 17 Postoperative GERD remission

	OAG	В	RYG	В		Risk Ratio			Risk Ratio		
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Fixed, 95% CI		M-	H, Fixed, 95%	CI	
Level 2020	0	1	1	1	22.2%	0.33 [0.03, 4.19]	-			-	
Mohaned 2018	2	10	5	9	77.8%	0.36 [0.09, 1.42]		-			
Total (95% CI)		11		10	100.0%	0.35 [0.11, 1.18]					
Total events	2		6								
Heterogeneity: Chi² =	0.00, df=	1 (P=	0.96); 12=	= 0%			0.02	0.1	- -	10	50
Test for overall effect	Z=1.69	(P = 0.0)	9)				0.02	Favours [C	AGB] Favour	rs [RYGB]	30

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Fig. 18 Operation time



Sight benefit to OAGB – 40 mins

Meta-Analysis: Summary OAGB vs. RYGB

Efficacy

Short-term – SI. Benefit for OAGB

Long-term- equal Wt. Loss- equal

Diabetes-equal

Hypertension-equal

Hyperlipidemia- Slight Benefit for OAGB

GERD – equal

Operative time – Slight Benefit for OAGB

Meta-Analysis: Summary OAGB vs. RYGB

Safety

Short-term - equal

Long-term- equal – for complications tracked

Unknowns: Bile gastritis, Bile reflux, Esophageal cancer, Marginal ulcer,

Nutritional deficiencies

Efficacy and safety of one anastomosis gastric bypass versus Rouxen-Y gastric bypass for obesity (YOMEGA): a multicentre, randomised, open-label, non-inferiority trial

OAGB vs. RYGB N=253

RYGB = 150 cm Roux-limb, 50 cm BP –limb OAGB = 200 cm BP-limb

Mean age 43, BMI=44, 75% Female, 27% with T2C

At 2 yr follow up OAGB vs. RYGB

%EWL 88 % VS. 86%

Serious Adverse Events 42 vs. 24 p=0.04

Nutritional complications 21% vs. 0 p=0.0034

Interpretation: OAGB is not inferior to RYGB regarding weight loss and metabolic improvement at 2 years. Higher incidences of diarrhoea, steatorrhoea, and nutritional adverse events were observed with a 200 cm biliopancreatic limb OAGB, suggesting a malabsorptive effect.



YOMEGA		OAGB (114)	RYGB (118)	P Value
	Clinical GERD at 2 years	5.6%	1.4%	0.15
Trial 5 Yrs	Clinical GERD at 5 years	40.9%	18.4%	0.03
	Use of PPI>20mg/day at 5 years		24.7%	0.026
	D: Regurgitation, eru	uctations, heart b	urn, most of times	or always
Clinical GER	J. Negara	/SLIS		11 0 (4) 10 m



Conclusion

RYGB is Superior to OAGB due to <u>INFERIOR</u> Long-term safety profile.



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Bariatric-Metabolic Surgery vs. Best Medical Care for NASH – BRAVES RCT, Lancet April 2023



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Professor, Catholic University, Rome, Italy and
Kings College, London, UK



Panelist:
Sayeed Ikramuddin, MD, MHA

Jay Phillips Professor and Chair, Department of Surgery
University of Minnesota School of Medicine



Panelist:
Bilal Hameed, MBBS
Professor of Medicine and Ambulatory Director of Hepatology
University of California San Francisco





