

Gastric Bypass Revisional Surgery: Percentage Excess Weight Loss Differences Among Three Different Techniques.

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Disclosures

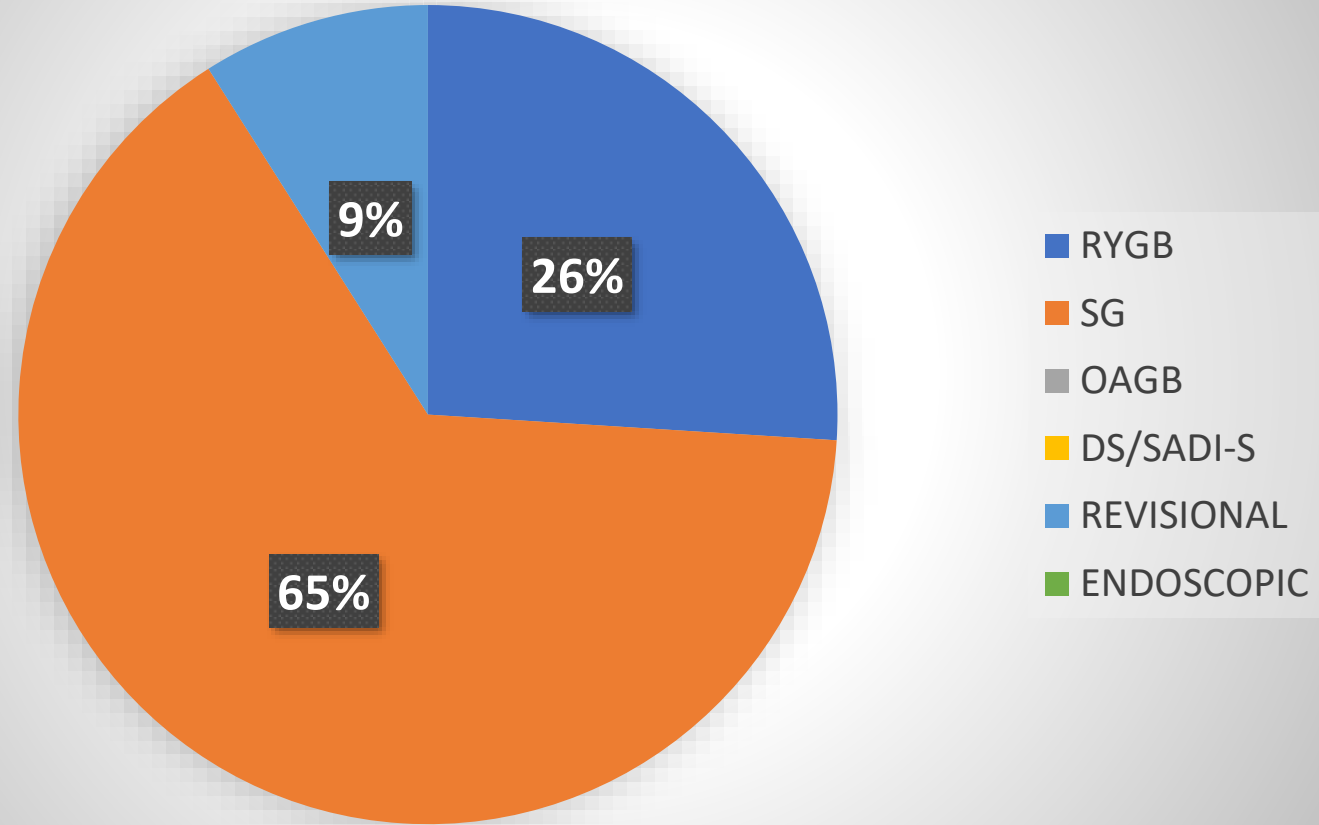
- No disclosures



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CASE MIX DISCLOSURE



Background

- RYGB is one of the most effective procedures against morbid obesity
- Approximately, 15-35% of the patients who undergo RYGB fail to achieve adequate weight loss or develop weight regain
- Multiple revisional procedures have been investigated



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Background

- Jejunum-jejunal distalization (JJD): Distalization of J-J anastomosis.
 - Type I
 - Type II
- Gastric pouch resize (GPR): An enlarged gastric pouch and wider G-J anastomosis are re-fashioned into smaller ones.

Study Question

Is there any difference in weight loss among three different RYGB revisional techniques at one-year follow-up?



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Study Objectives

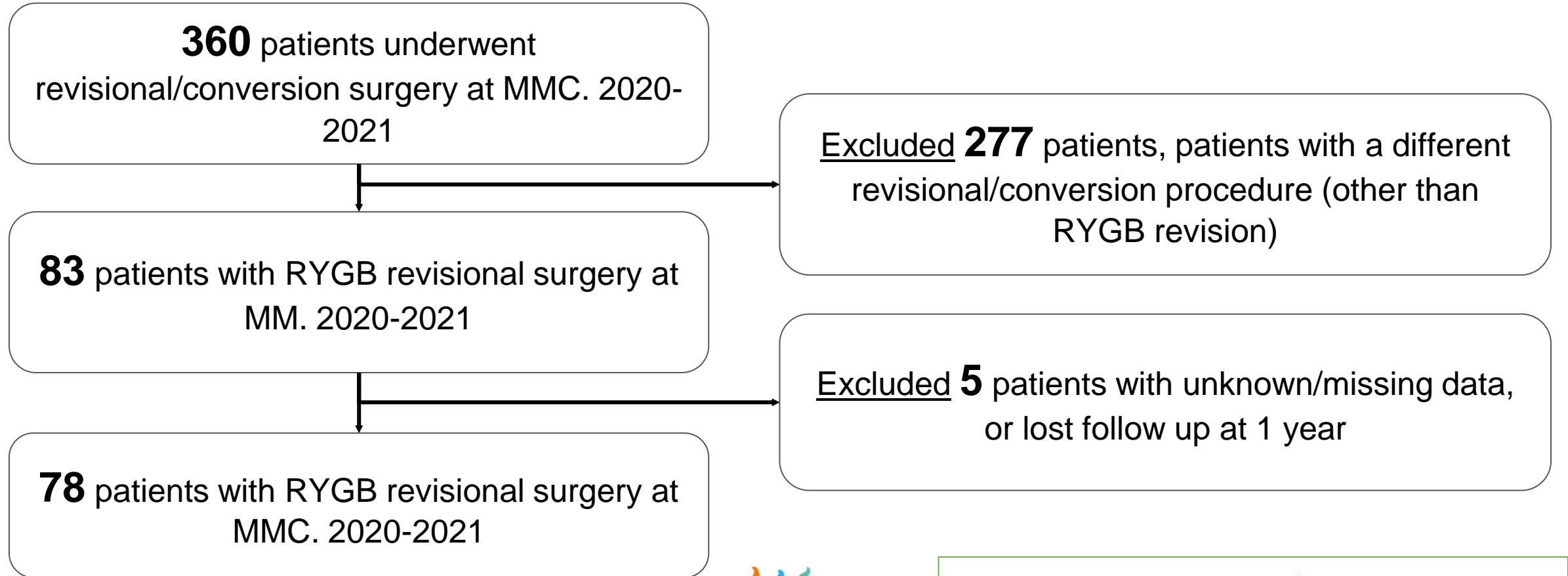
- **Primary objective:** compare the difference in %EWL among the three performed techniques at one-year follow-up.
- **Secondary objectives:** differences in postoperative outcomes and nutritional parameters one year after surgery.



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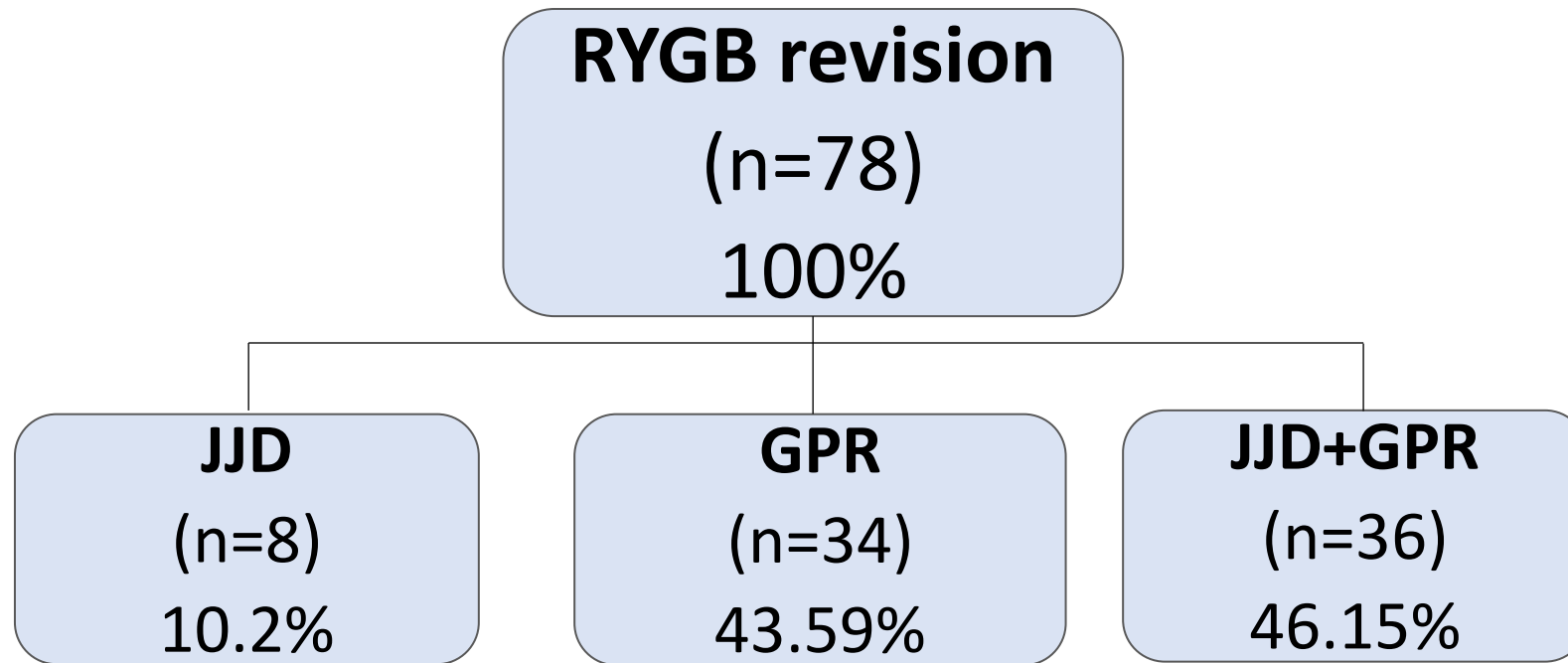


Methods



Results

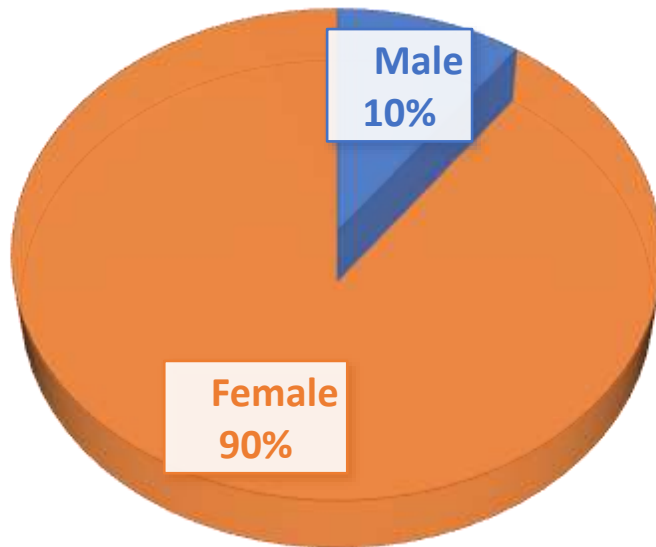
- A total of 78 patients were identified



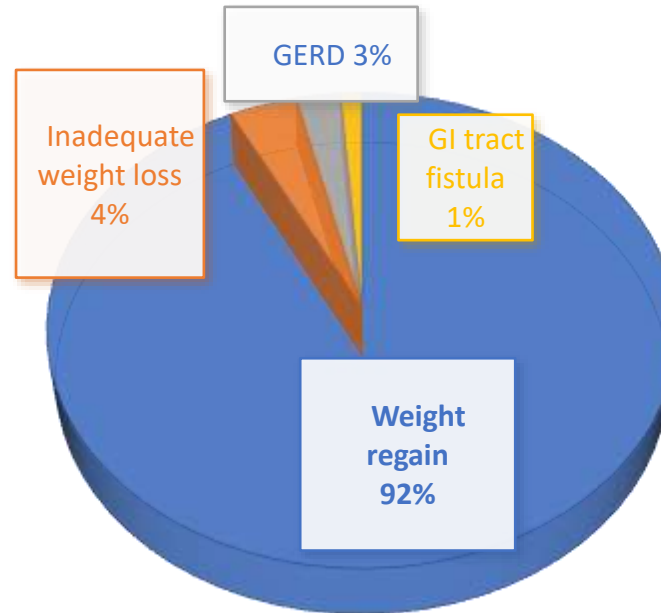
Demographics

- Median age: 45 years (IQR: 37-53)

SEX



INDICATION



Demographics

Procedure	JJD (n=8)	GPR (n=34)	JJD+GPR (n=36)	p Value
Age, y, median (IQR)	48 (38-54)	41 (37-51)	47 (37-55)	0.46
Gender, n (%) Female	7 (87.5%)	32 (94.1%)	31 (86.1%)	0.46
Indication, n Weight regain	8	28	36	0.17

Preop Comorbidity, n (%)	Total (n=78)
Preop DM	7 (8.9%)
Preop OSA	15 (19.2%)
Preop GERD	21 (26.9%)
Preop HTN	26 (33.3%)
Preop HLD	16 (20.5%)



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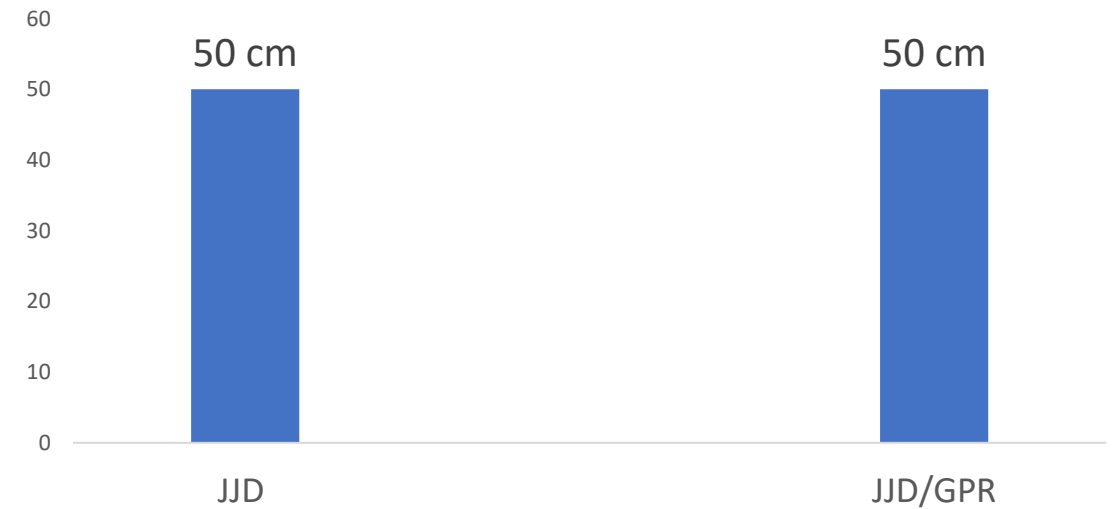
Intraoperative findings

- Median operative time: 99 minutes (IQR: 79-120)

Initial Roux limb, cm, median



Initial BP limb, cm, median



Procedure	JJD	GPR	JJD+GPR	Total	p Value
OR time, min	87 (82-117)	95 (81-110)	102 (76-124)	99 (79-120)	0.75
Initial Roux, cm	150 (112- 175)	N/A	150 (100-150)	150 (100-150)	0.37
Initial BPL, cm	50 (20-75)	N/A	50 (40-75)	50 (40-75)	0.46

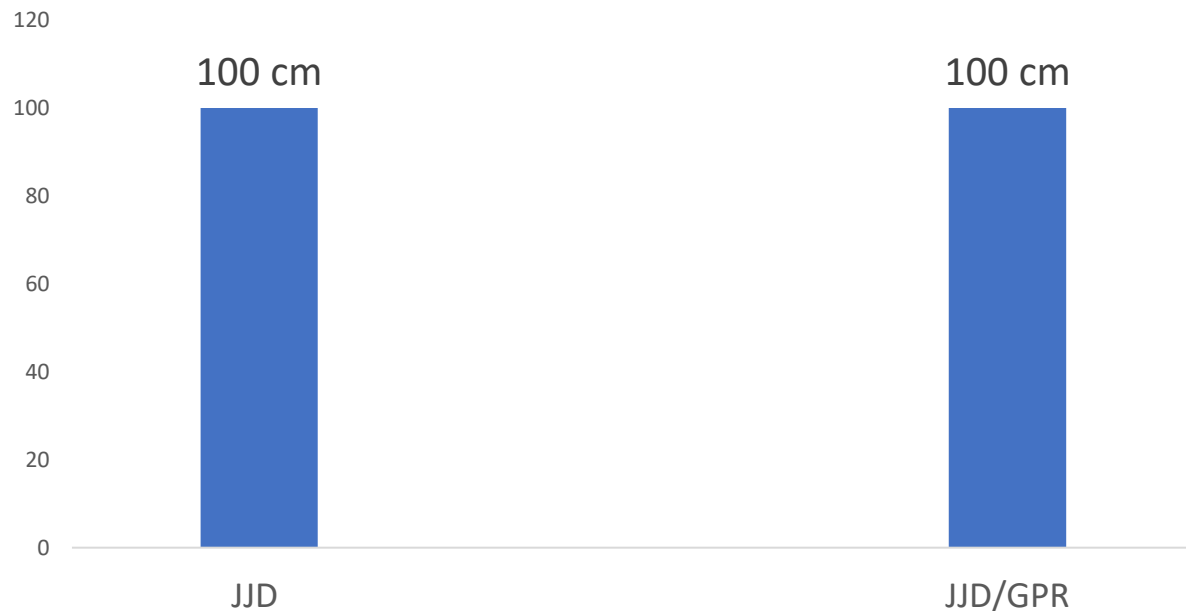
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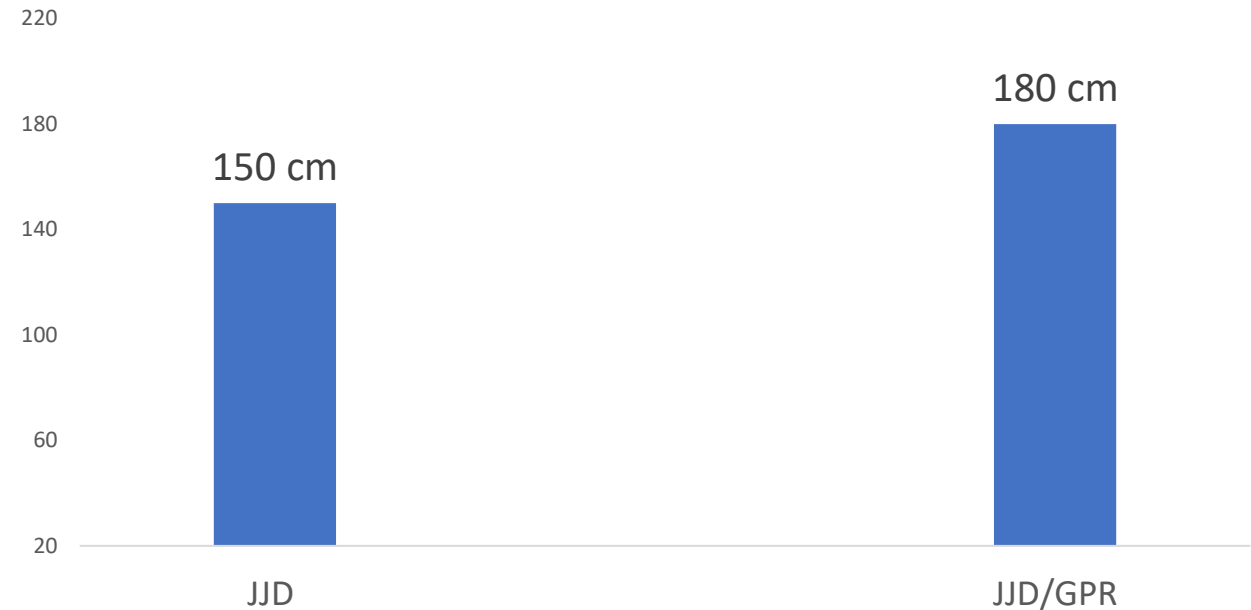
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Postoperative characteristics

BPL elongation, cm, median



BPL length after revision, cm, median



Procedure	JJD	GPR	JJD+GPR	Total	p Value
BPL elongation, cm	100 (100- 175)	N/A	100 (100-125)	100 (100-125)	0.98
BPL length after revision, cm	150 (120-212)	N/A	180 (150-200)	175 (150-200)	0.23

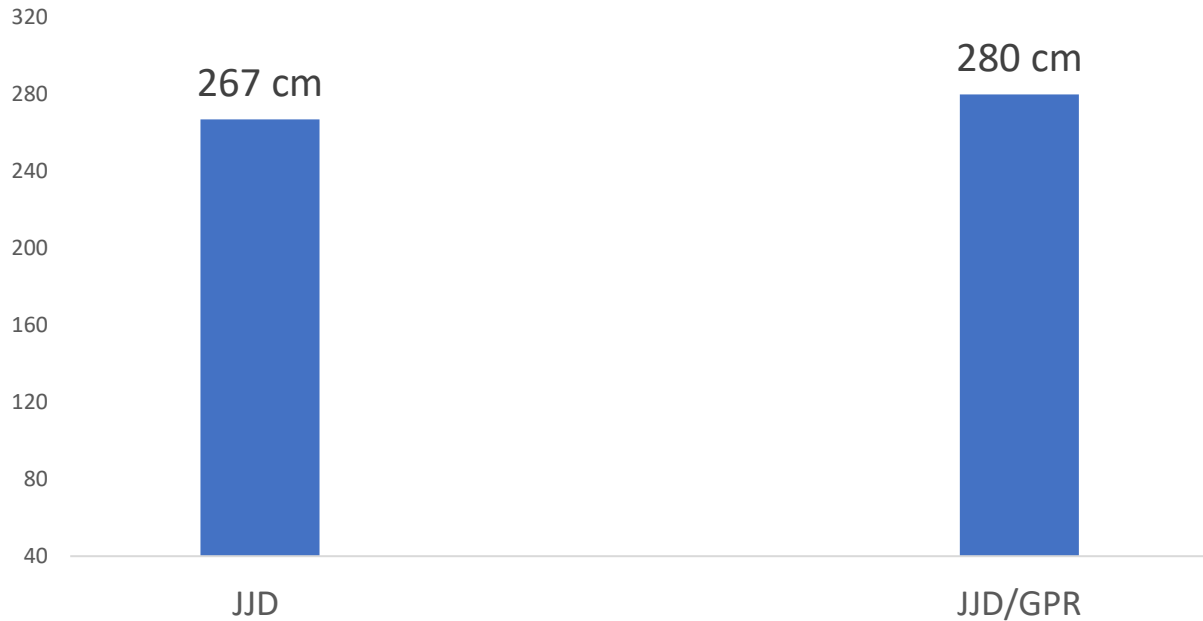
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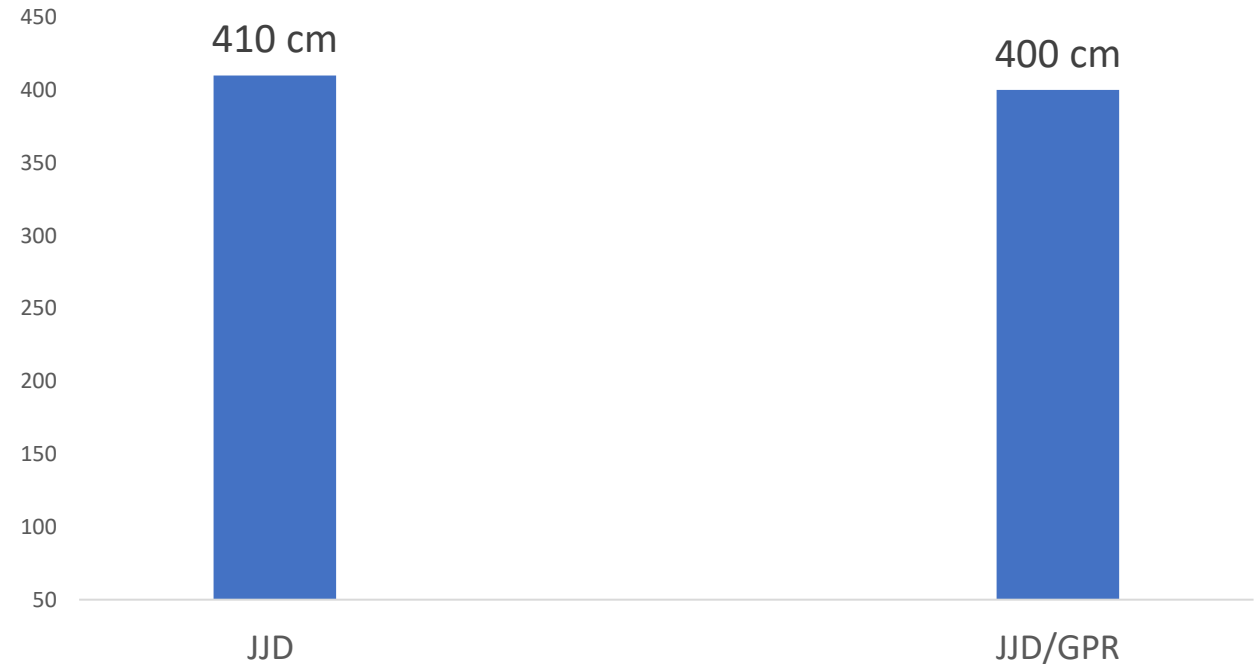
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Postoperative characteristics

New common channel, cm, median



Total Alimentary Limb Length (TALL), cm, median

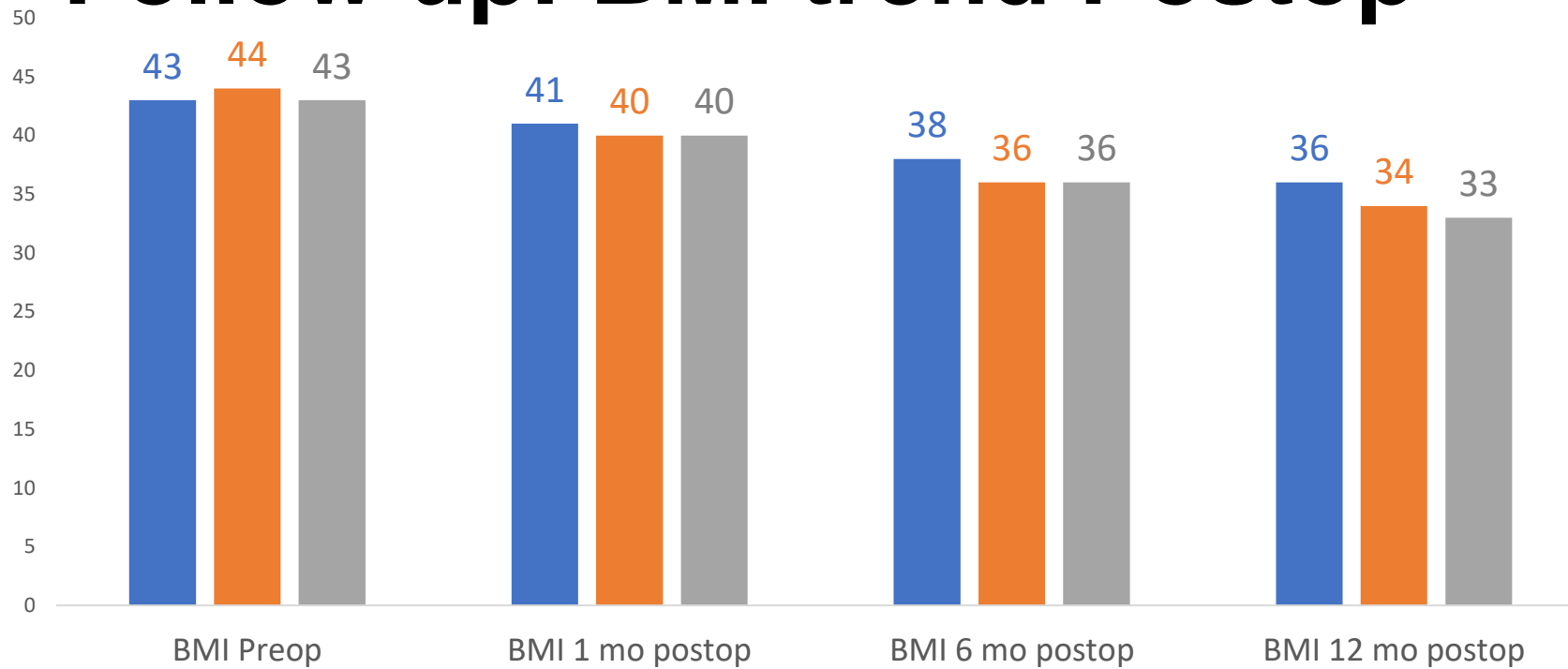


Procedure	JJD	GPR	JJD+GPR	Total	p Value
New common channel, cm	267 (260-267)	N/A	280 (250-338)	277 (250-313)	0.74
TALL, cm	410 (387-458)	N/A	400 (357-476)	400 (375-475)	0.60

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Follow up: BMI trend Postop



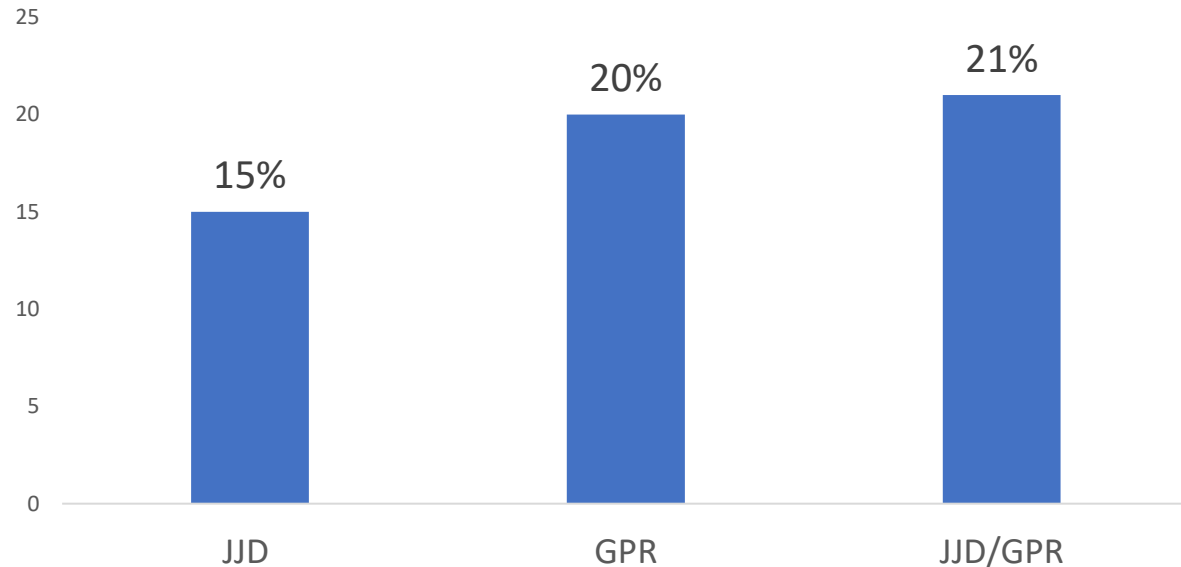
Procedure	JJD	GPR	JJD+GPR	Total	p Value
BMI Preop	43 (41-46)	44 (41-46)	43 (40-48)	43 (41-47)	0.97
BMI 1 mo	41 (39-42)	40 (38-43)	40 (37-45)	40 (38-43)	0.69
BMI 6 mo	38 (37-39)	36 (32-39)	36 (33-40)	37 (33-40)	0.48
BMI 12 mo	36 (33-38)	34 (30-39)	33 (30-37)	34 (30-37)	0.65

■ JJD ■ GPR ■ JJD/GPR

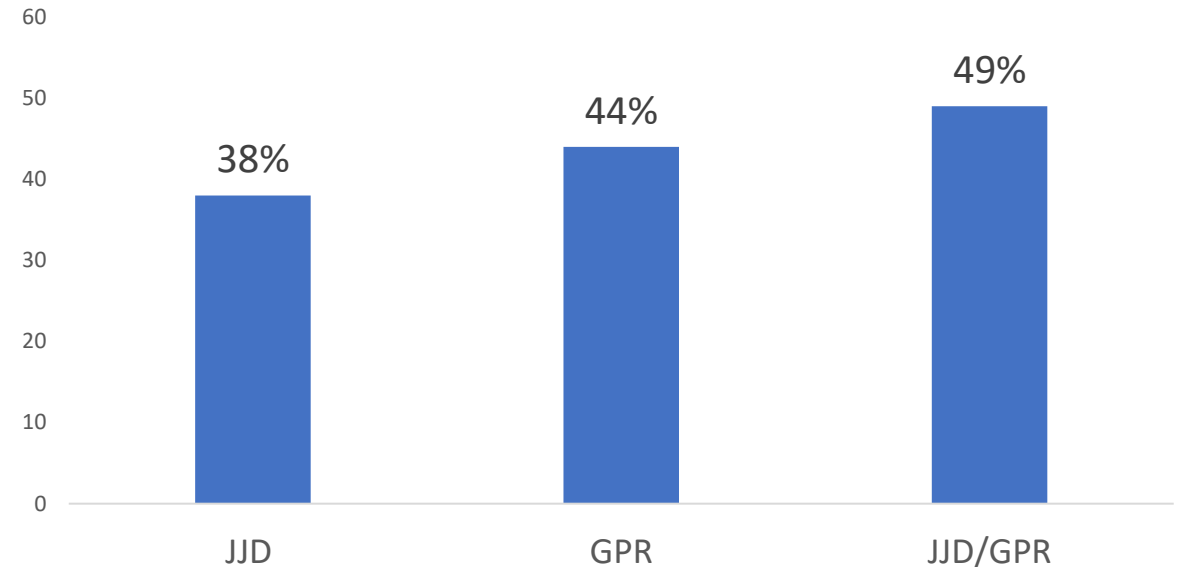


Follow up: %TWL and %EWL at 1 year

% Total body weight loss (%TBWL), median



% Excess weight loss (%EWL), median



Procedure	JJD	GPR	JJD+GPR	Total	p Value
% TBWL	15 (15-19)	20 (13-26)	21 (15-28)	20 (15-26)	0.40
% EWL	38 (35-44)	44 (28-70)	49 (37-66)	47 (36-64)	0.33



Protein and vitamin deficiencies

Procedure	JJD	GPR	JJD+GPR	Total	p Value
Hypoalbuminemia, n	0	4 (7.4%)	0	4 (7.4%)	0.04
Anemia, n	3 (5.0%)	14 (23.6%)	17 (28.7%)	34 (57.6%)	0.86
Iron deficiency, n	2 (4.3%)	9 (19.5%)	14 (30.3%)	25 (54.3%)	0.74
Ferritin deficiency, n	1 (2.1%)	4 (8.6%)	5 (10.8%)	10 (21.7%)	0.87
Calcium deficiency, n	0	5 (8.4%)	0	5 (8.4%)	0.03
B12 deficiency, n	1 (2.1%)	0	2 (4.2%)	3 (6.3%)	0.18
Vit A deficiency, n	2 (5%)	8 (20%)	10 (25%)	20 (50%)	1.00
Vit D deficiency, n	1 (2.1%)	15 (32.5%)	15 (32.5%)	31 (67.4%)	0.20
Vit K deficiency, n	1 (2.5%)	8 (20%)	11 (27.5%)	20 (50%)	1.00
Selenium deficiency	0	0	0	0 (0%)	N/A
Zinc deficiency, n	2 (5%)	3 (7.5%)	6 (15%)	11 (27.5)	0.17

Limitations

- Retrospective study
- Small cohort
- Limited follow-up



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Conclusions

- Comparable outcomes in %EWL at one-year follow-up among the 3 revisional techniques
- No difference in postoperative bariatric outcomes and nutritional deficiencies among groups



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Take home message

- Improvement in RYGB revisional surgery requires:
 - Implementation of universal guidelines to address the lack of consensus in several surgical techniques currently performed.
 - Gather organized data for future recommendations.



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