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The Impact of Preoperative Obesity Medication Use on Bariatric Surgery Outcomes

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Background

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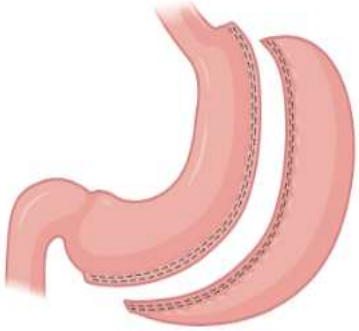
- Bariatric surgery is the most effective treatment for severe obesity
- Average total weight loss at 24 months 20-30% for SG & GB
- ↑ No. of patients using obesity medications preoperatively
  - COVID
  - Waiting Lists
  - Comorbidity optimisation
- The impact of preoperative obesity medication use on postoperative weight loss is unknown



Aim

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- Does pre-op Rx negate or compound benefits of surgery?

- To conduct an observational study to investigate the impact of pre-operative pharmacologic interventions for obesity on weight loss after bariatric surgery.

Methods

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- Retrospective review of prospectively collected data
- Patients who underwent Bariatric Surgery in SVPH over a 20-month period (Jan 2021 - Aug 2022)
- Identified patients who were taking Obesity medications pre surgery ('Medication group')
- Demographic & clinical data compared between Medication group and No Medication group
  - Compared weight loss tragectory from DOS to 12-months postop in both groups

Inclusion/Exclusion Criteria

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- Inclusion Criteria
  - All patients who had primary LSG, RYGB or OAGB over a 20-month period
- Excluded Criteria
  - Patients who underwent revisional surgery

Results 1.

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N=197

- 31% (n=61) were taking obesity medications prior to Bariatric surgery

- Mean age 47±11 years
- % Female 77% (n=152)
- % with T2DM 22% (n=44)

- Medication use (n=61):
  - Semaglutide 82% (n=50)
  - Liraglutide 13% (n=8)
  - Mysimba 5% (n=3)

Results 2.

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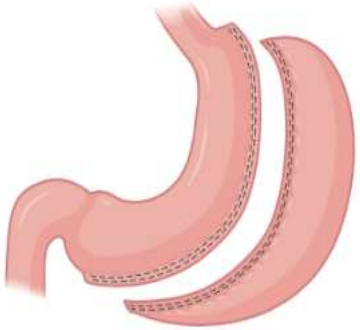
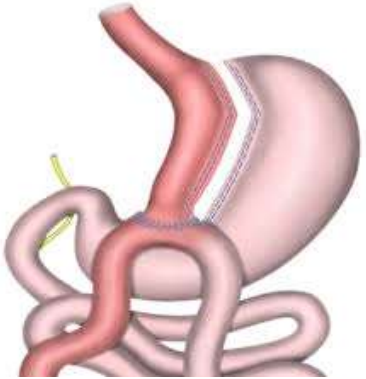
Bariatric procedures performed



Sleeve 31% (n=61)

RYGB 44% (n= 87)



OAGB 25% (n=49)

Results 3.

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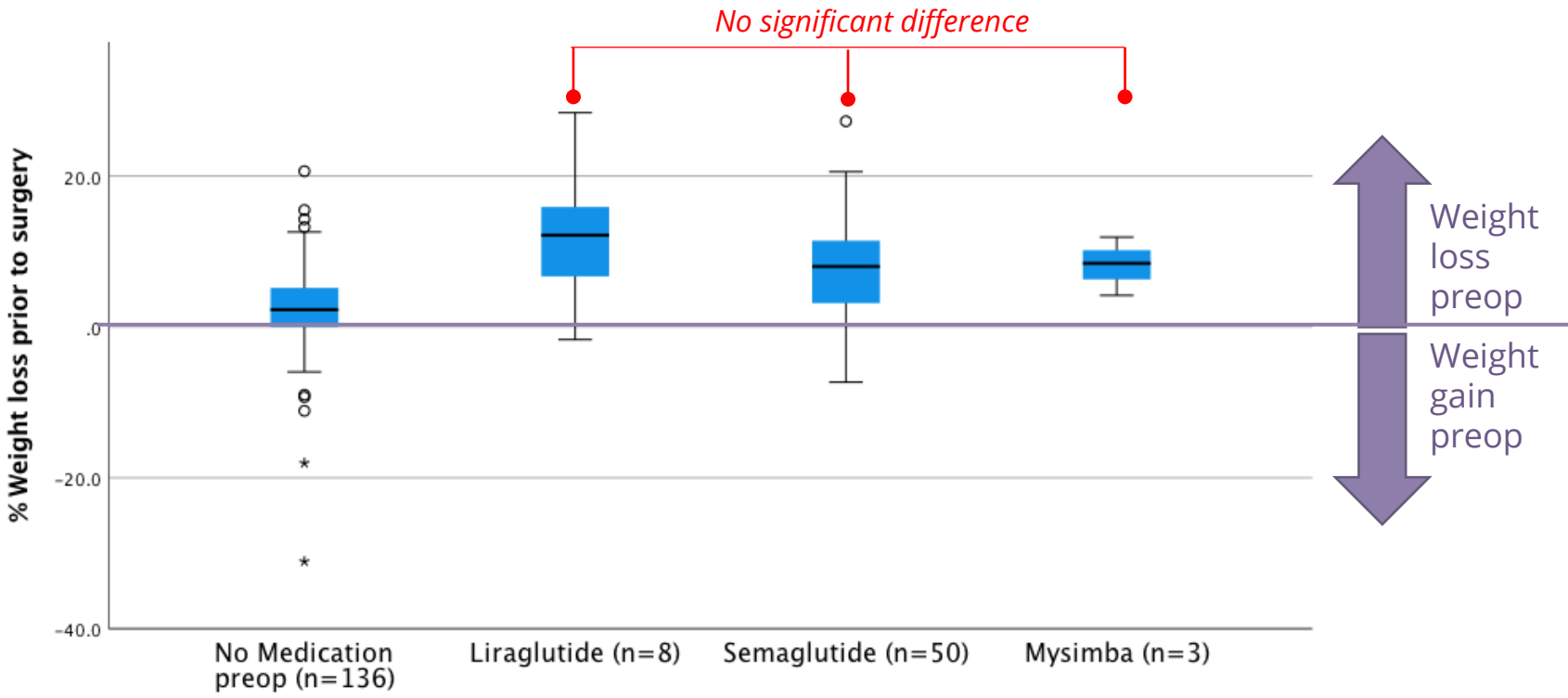
Demographic Data (on the day of surgery)			
	Medication Group (n=61)	No Medication Group (n=136)	p-value
Age, (years)	47.5 ± 10.6	45.8 ± 13.6	0.45
BMI (kg/m2)	46.7 ± 7.1	48.1 ± 6.3	0.87
Weight (Kg)	128.2 ± 22	128.1 ± 22	0.71
Preop % weight loss	10.0 ± 13.9 %	2.3 ± 5.8 %	<0.0001

Results 4.


No significant difference
% Weight loss prior to surgery
20.0
.0
-20.0
-40.0
No Medication preop (n=136)
Liraglutide (n=8)
Semaglutide (n=50)
Mysimba (n=3)
Weight loss preop
Weight gain preop

Results 5.

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Total weight loss 12 months after Bariatric Surgery (from first assessment)			
	Medication Group (n=61)	No Medication Group (n=136)	p-value
% weight loss 12 months	32.3 (7.8)	31.9 (7.9)	0.798

Results 6. Weight loss at 12 months post op compared to pre op medication response

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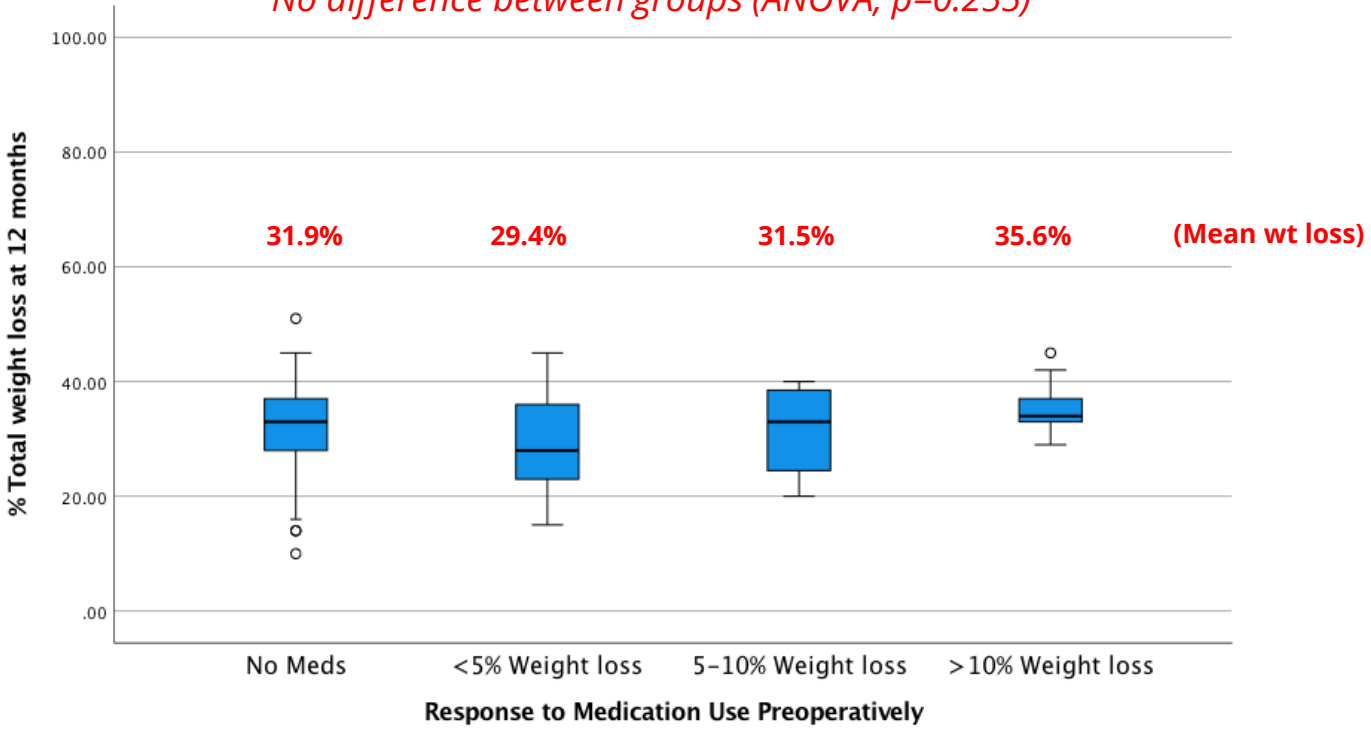
No difference between groups (ANOVA; p=0.255)



Results 7.

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Postoperative total weight loss (from Day of Surgery)			
	Medication Group (n=61)	No Medication Group (n=136)	p-value
% weight loss 6 weeks	10.5 (3.1)	11.4 (8.8)	0.508
% weight loss 3 months	15.1 (3.9)	16.3 (4.0)	0.06
% weight loss 6 months	21.8 (5.5)	24.4 (6.1)	0.02
% weight loss 12 months	**26.4 (7.4)**	**30.6 (8.3)**	0.02

Limitations

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- Short-term follow-up
  - Data collection for this study ended at 12 months
  - Further follow-up ongoing

Conclusion

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- Rx improves improves pre-op patient optimisation.
  - Co-morbidity control.
  - Preferred surgical procedure.
  - ↑ QOL.
- Non-Rx does not detrimentally effect weight loss.
- Managing Expectations.

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[X] I have no potential conflict of interest to report.

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