PREHABILITATION WITH ANTI-OBESITY MEDICATION IN PATIENTS WITH A BMI>50 KG/M2 PRIOR TO BARIATRIC SURGERY: A CASE CONTROL STUDY

James McClintic MD, Jesse Richards DO, Zhamak Khorgami MD, Geoffrey Chow MD, Roshni Patel MD, Greg Martin, Carah Horn RN, Robert Lim MD

UNIVERSITY OF OKLAHOMA SCHOOL OF MEDICINE AT TULSA

INTRODUCTION

- Bariatric patients with a BMI >50 have more challenging surgeries and more post operative complications. As such, there is a reluctance to consider them for Bariatric Surgery (BS)
- Pre-operative weight loss is recommended but not required prior to BS. Lifestyle modifications alone are unpredictable. Anti-obesity medications (AOM) have shown promise with weight loss.

STUDY AIM

To Evaluate the efficacy and safety of using AOMs preoperatively for patients with BMI over 50 kg/m2 undergoing BS

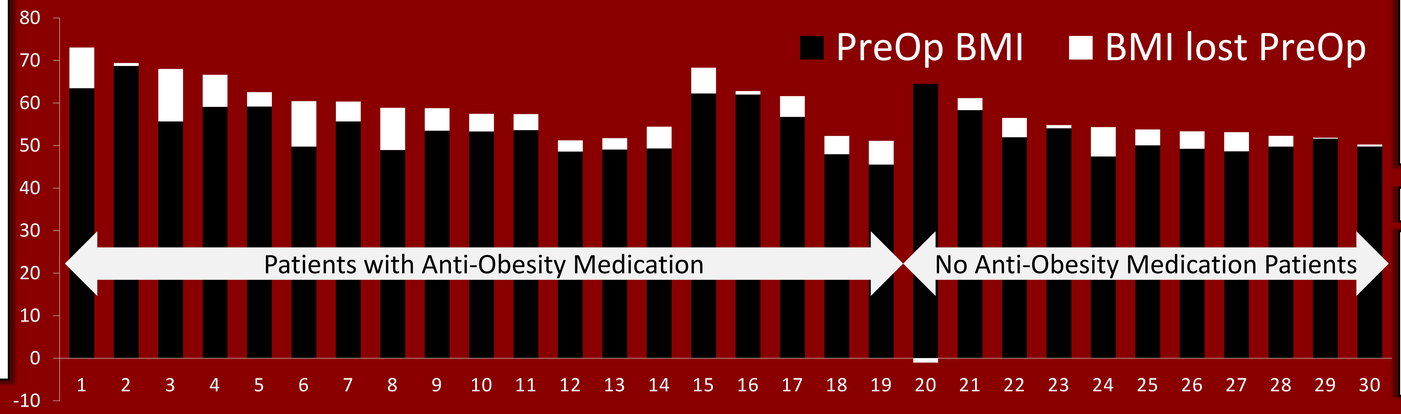
METHODS

- Patient selection
  - BMI >50kg/m2 (30 patients, 32%)
  - Single MBSAQIP center
  - AOM group (19 patients)
    - enrolled after March 2021
    - Covered for AOM
  - Control group (11 patients)
    - Enrolled before March 2021
    - Or no coverage for AOM after March 2021
- Equivalent preoperative weight loss program
- Outcome measures: Pre-operative weight loss/BMI change, operative complications

Results

	AOM	Non AOM	p-value
Demographics			
Mean Initial Weight	173.7 kg	158.8 kg	0.08
Mean Initial BMI	60.3	55.0	0.01
Pre-op Time months	5.11	5.09	0.49
Outcomes			
Change in BMI*	-5.5 kg/m2	-2.7 kg/m2	0.009
Change in Weight*	-16.5 kg	-7.8 kg	0.01
Complications	3	0	0.265

* Change from initial BMI/weight to pre-operative BMI/weight



RESULTS

- Demographics
  - Average BMI was 58.1 kg/m2 (50-73)
  - Average pre-operative period was equivalent
  - 15 gastric bypass, 11 sleeve gastrectomy, 4 SADI-S
- Pre operative weight loss greater with AOM
- Complications
  - AOM: TIA, bleeding treated non operatively, venous thromboembolism
  - Non AOM: none

CONCLUSION

A large percentage of patients had BMIs over 50. The use of AOMs appears safe and results in significant reduction in BMI and weight prior to bariatric surgery. AOMs do not increase the complication rate nor do they prolong time to surgery. More study is needed to determine optimal timing and duration of preoperative AOM therapy. This may improve outcomes in this high-risk population.

LIMITATIONS

- Small sample size
- Single institution
- Not Randomized
- Not blinded
- BMI not equal across groups

The University of Oklahoma is an equal opportunity institution.