Preoperative GLP-1 Therapy in Indigenous Patients Undergoing Multidisciplinary Bariatric Care

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Background

- Prehabiliation and pre-surgery optimization are important for the care of bariatric surgery patients
- Pre-operative weight loss may reduce risk of peri-operative complications, decrease OR time, & decrease post operative mortality
- Medical therapy has an increasing role in the care of bariatric surgery patients both before and after bariatric surgery
- GLP-1 therapies have demonstrated benefit for weight loss and treatment of type II Diabetes mellitus

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Objective

- Evaluate pre-operative weight loss in patients who were placed on GLP-1 therapy as part of multidisciplinary program before bariatric surgery
- Compare weight loss and pre-operative course in Indigenous patients placed on GLP-1 therapy versus patients who received standard multidisciplinary care in a comprehensive bariatric program.

Methods

- Retrospective chart review of prospectively collected data of Indigenous patients who underwent bariatric surgery from June 2021-August 2022
- Patients who were placed on GLP-1 therapy were compared with patients who did not receive GLP-1 therapy.
- Patient demographics, BMI, preoperative weight loss recorded
- Comorbidities and operative intervention reviewed
- GLP-1 associated complications recorded.
- IRB approval obtained

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Multidisciplinary program

- 3 Bariatric Surgeons
- Two Obesity medicine specialists (ABOM)
- Two Dieticians
- Physical therapy
- Psychiatry

Results

- 38 patients included in the study
- 19 patients treated with GLP-1 therapy
- 19 patients did not receive GLP-1 therapy

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Pre-operative weight, weight loss

	GLP-1 Therapy	No GLP-1 Therapy
Program intake weight	156.6 kg (106.7-257.7)	132.7 kg (91-207)
BMI (kg/m^2)	51.5 (10.5)	44.5 (7.38)
Pre-operative weight loss	13.2 kg	7.69 kg (*p=0.05)
TBW loss before surgery	8%	5.4% (p=0.05)
TBW loss, 1 month post surgery	16%	10%
Program intake until surgery	**188 days (range: 97-368)**	**131 days (range 44-243)**

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Patient comorbidities

Comorbidity	GLP-1 Therapy	No GLP-1 Therapy
Diabetes Mellitus	12 (63%)	9 (47%)
Hypertension	13 (68%)	12 (63%)
Obstructive Sleep Apnea	10 (53%)	7 (37%)
Dyslipidemia	4 (21%)	9 (47%)

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Operative intervention

	GLP-1 Therapy	No GLP-1 Therapy
Sleeve gastrectomy	7 (36.8%)	5 (26%)
RYGB	9 (47.4%)	13 (68%)
SADI	2 (10.5%)	1 (5.3%)
Revision	1 (5.3%)	0

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Conclusion

- Patients who receive pre-operative GLP-1 therapy have more pre-operative weight loss than patients who do not receive GLP-1 therapy
- Patients who receive GLP-1 therapy have more weight loss in early post-surgery follow up
- Pre-operative GLP-1 therapy is well tolerated before bariatric surgery with low rates of severe adverse events
- Additional data needed on optimal duration of GLP-1 therapy before bariatric surgery

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Thank you!

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