

Retrospective Analysis of Muscle Mass Changes after Bariatric Surgery

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Background

Bariatric surgery can be used to treat obesity and obesity-related comorbidities. There are concerns of excess loss of muscle mass after bariatric surgery, especially in elderly patients whose muscle tends to be less compared to younger patients at baseline.

OBJECTIVES

This study investigates changes in total muscle mass and muscle mass percent, in patients who are ≥ 65 years of age, who underwent bariatric surgery.

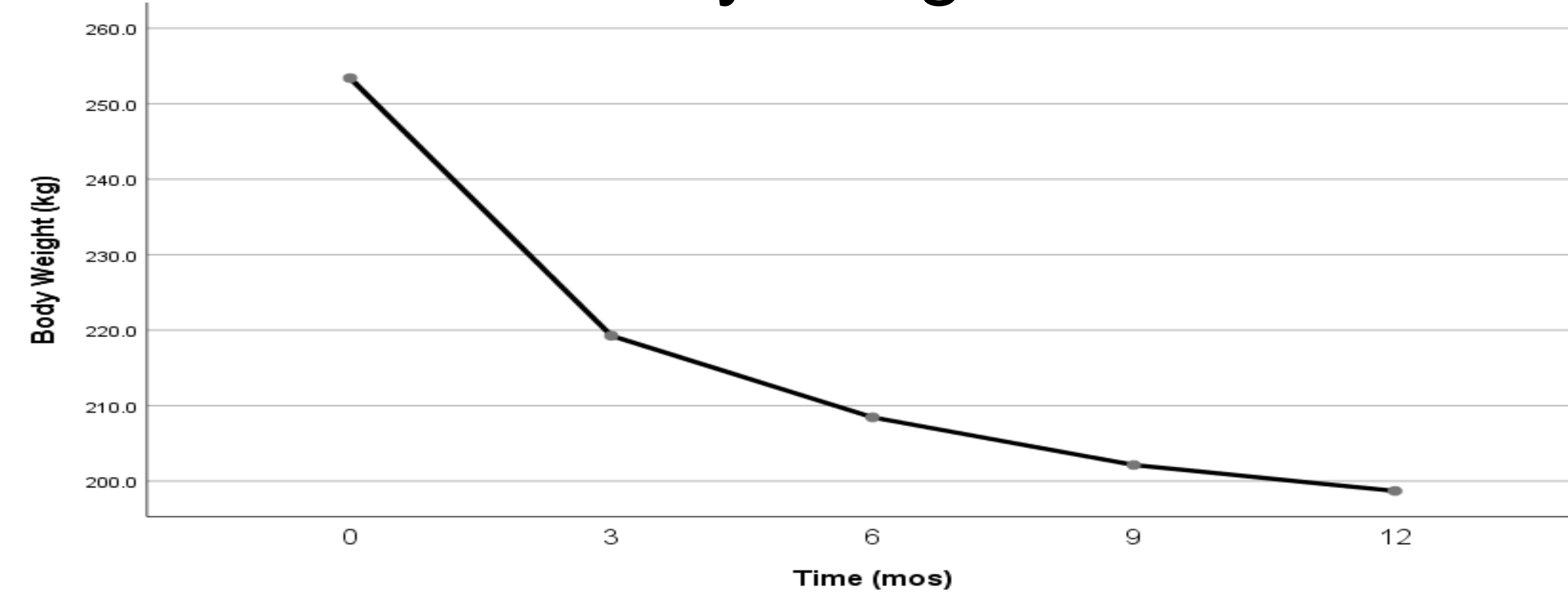
METHODS

Retrospective analysis of prospectively collected data from May 2015 to March 2017 was performed. Total muscle mass and percent muscle mass of patients ≥ 65 years of age, who underwent either laparoscopic sleeve gastrectomy or Roux-en-Y gastric bypass were examined using Tanita scale.

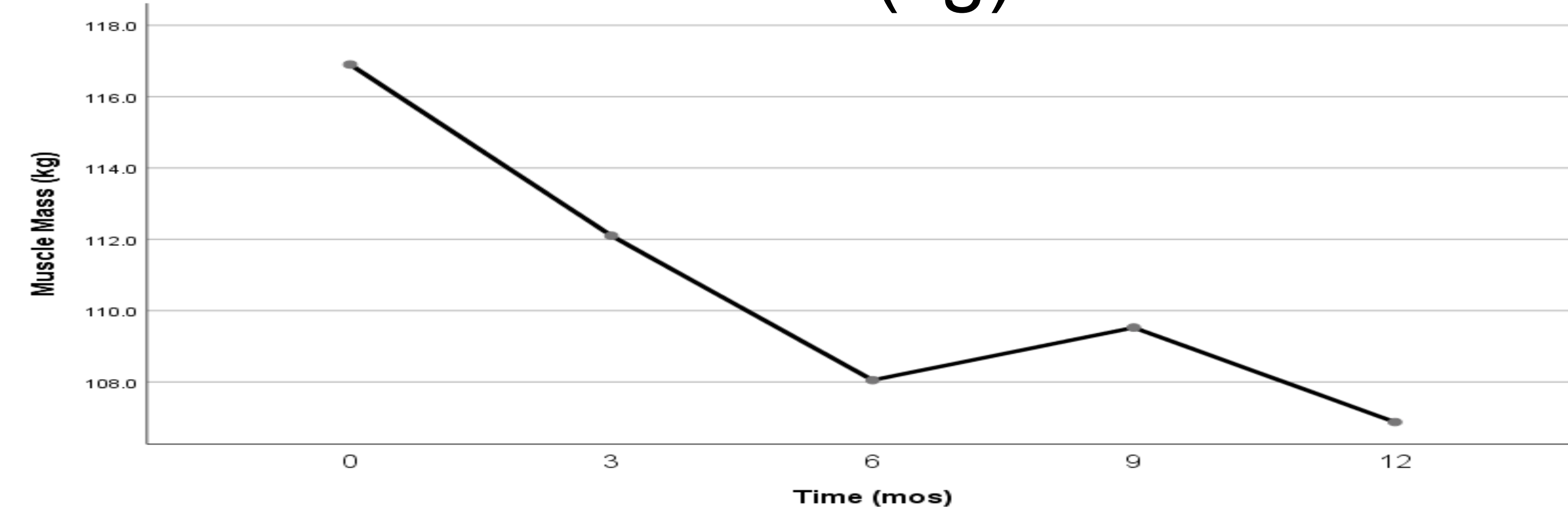
RESULTS

89 patients (74% female) > 65 years of age were included. 87 underwent laparoscopic sleeve gastrectomy and 2 underwent Roux-en-Y gastric bypass. Mean starting TBW was 251.9 ± 41.5 and mean TBW at 12 months was 197 ± 38.9 ($p = < 0.001$). Mean starting muscle mass percent was 49.6 % and mean muscle mass at percent at 12 months 55% ($p = < 0.001$).

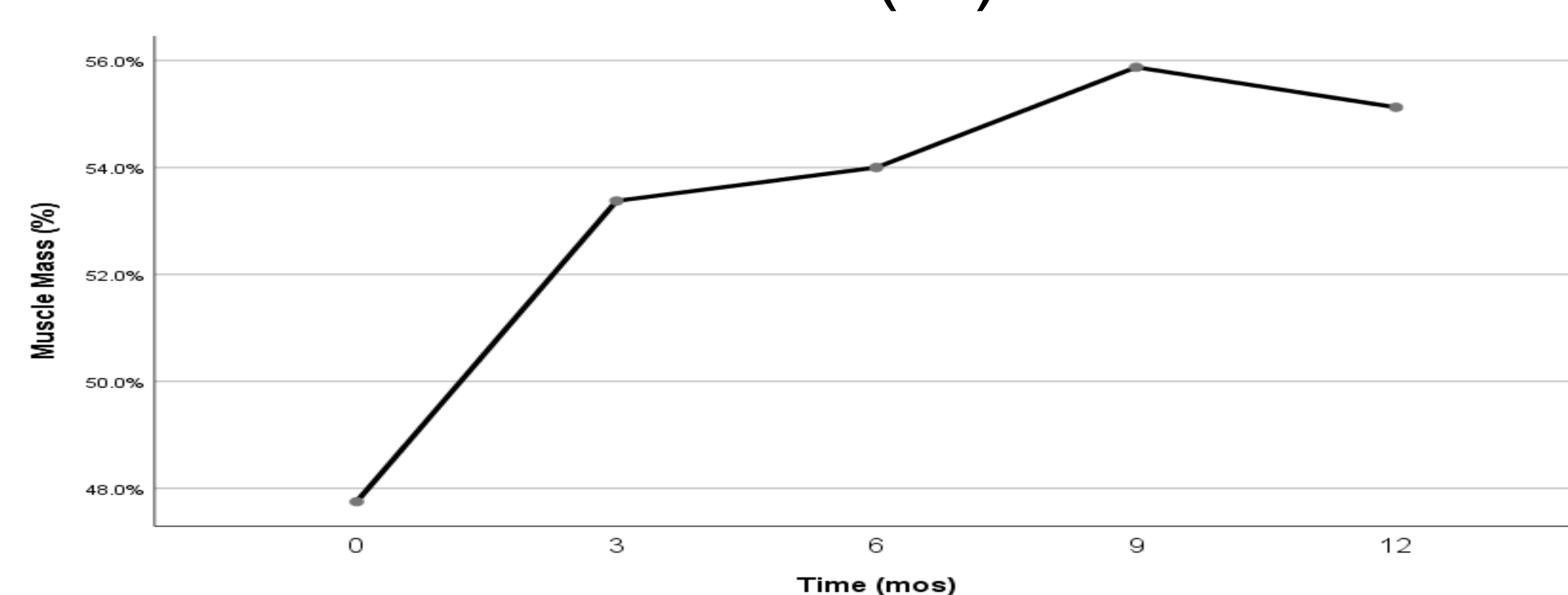
Total Body Weight over time



Muscle Mass (kg) over time



Muscle Mass (%) over time



Type of Surgery

	Frequency	Percent
LSG	88	97.8
RYGB	2	2.2
Total	90	100.0

Gender

	N	Percent
Female	65	74
Male	23	26

CONCLUSIONS

Bariatric surgery results in total body weight loss while increasing total % muscle mass in patients greater than or equal to 65 years of age

REFERENCES

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