

# Evaluation of Weight Loss after RYGB Through a Classification Based on Weight History



# Background

## Weight Loss Assessment

- Effectiveness of bariatric surgery
  - Weight Loss
- No consensus regarding the metric used
  - %EWL or %TWL
- Best Metric
  - Allow more accurate comparisons
    - broadest patient weight ranges
    - population characteristics

Ocón et al., Nutr Hosp, 2010  
Brethauer et al., Surg Obes Relat Dis, 2015  
Grover et al., Obes Surg, 2019



# Background

## Proposal of an obesity classification by SBEM and ABESO

- Based on the maximum weight achieved in life
- With the concept that individuals with different weight history can have different outcomes
- Stratification based on different obesity grades
- Using the percentage of total weight loss achieved



# Objective

Evaluate weight loss in patients 2 years after RYGB  
through the application of a new proposal for weight loss assessment  
based on the history of maximum weight



# Methods

- Retrospective study
- 513 severe obesity patients who underwent RYGB
- 2012 to 2020

# Methods

## Proposed Classification

**Table 1 Obesity Classification Based on Weight History**

	<b>Obesity Grade II</b>  BMI >35 - ≤40	<b>Obesity Grade III</b>  BMI >40 - ≤50	<b>Superobesity</b>  BMI >50
<b>Unchanged</b>	%TWL < 20%	%TWL < 25%	%TWL < 30%
<b>Reduced</b>	%TWL 20 - ≤25%	%TWL 25 - ≤30%	%TWL 30 - ≤40%
<b>Controlled</b>	%TWL >25%	%TWL >30%	%TWL >40%

# Results

## Pre-op Status

- Female prevalence of 73,5%
  - M:F = 11:33
- Mean age of 37,1 years
  - Range from 16 to 72 years
- Mean BMI of 41.4 kg/m<sup>2</sup>
  - Range from 35,1 to 79,7 kg/m<sup>2</sup>



# Results

## Post-op Status

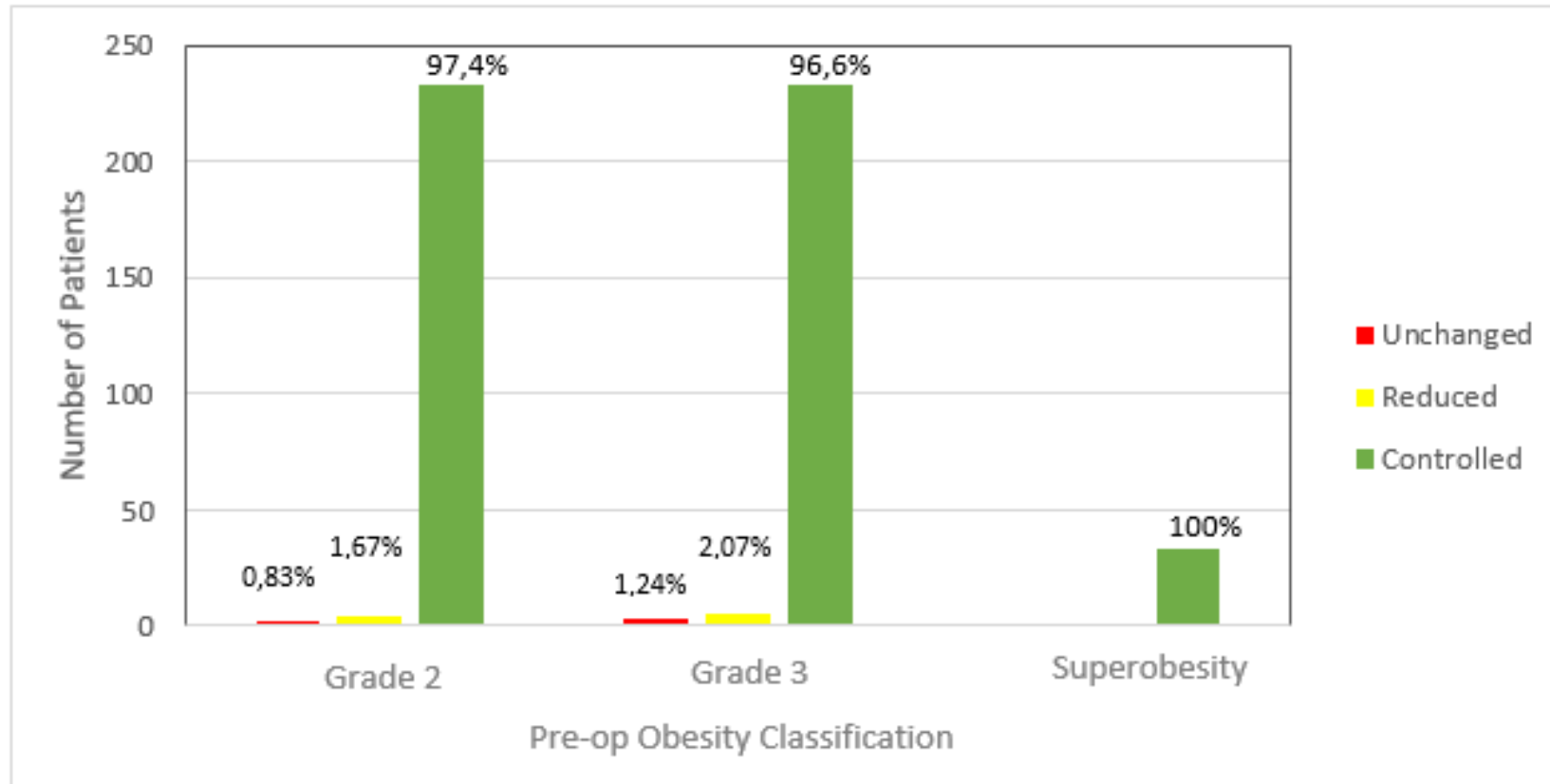
- Mean %TWL of 37,3%
  - Range from 10,4 to 64,6%
- Mean %EWL of 97,8%
  - Range from 40 to 158%
- Proposed classification showed significant associations with already validated metrics ( $p < 0.001$ )





# Results

## Weight Loss Analysis



**Fig. 1 Patients Analysis according to the proposed classification.**

# Results

## Weight Loss Analysis

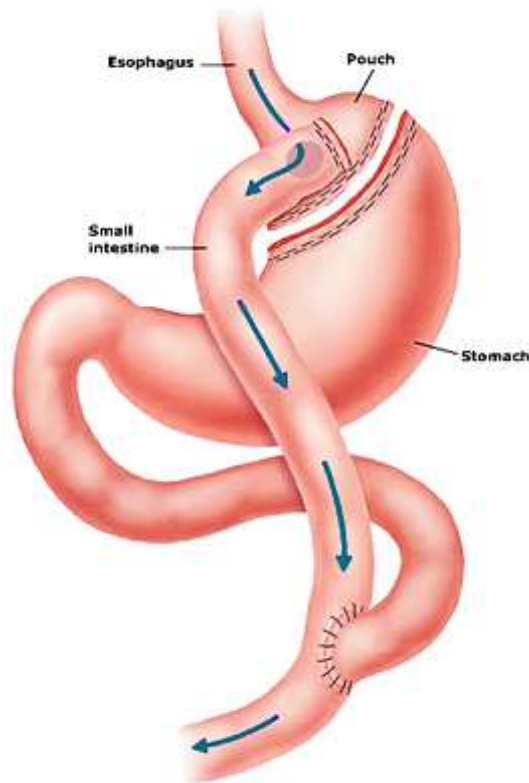
**Table 2 Mean %TWL by subgroup**

	Classification	N	Mean	SD	SE
%TWL	Obesity Grade 2	239	33.1	7.09	0.458
2 years after RYGB	Obesity Grade 3	241	40.8	8.12	0.523
	Superobesity	33	47.9	8.29	1.444
					P<0,001
One-Way ANOVA Test (Fisher's)					

# Conclusion

- Adequate weight loss is an essential predictor in the postoperative period of RYGB
- The classification of obesity based on the maximum weight achieved in the patient's life can help in this assessment.
- It is recommended to carry out randomized clinical trials to demonstrate the maintenance of long-term weight loss , reinforcing the validation of the classification.





Thank You!

Grazie!

Obrigada!

