

# 363 - ASSESSMENT OF URINARY INCONTINENCE (UI) SEVERITY IN OBESE WOMEN UNDERGOING BARIATRIC SURGERY

Oliveira B1, Dorés M1, Marques v1, Rosa G1, Barros P1, Cabrita M1, Coutinho A1

1. Centro Hospitalar Universitário do Algarve - Urology Department

## AIMS OF STUDY

Obesity is a known risk factor for urinary incontinence, described as being associated with twice the risk for stress UI and three times the risk for urge UI.

Obese women have greater abdominal mass and consequently increased intra-abdominal and intravesical pressure, as well as pelvic floor changes that lead to dysregulation of the mechanism responsible for urinary continence.

UI treatment depends on incontinence type. However, all women benefit from behavioural modification including fluid restriction, weight loss and pelvic floor exercises. Obesity is a known modifiable risk factor for UI

The aim of the study is to determine the impact of bariatric surgery on the severity of urinary incontinence in obese women and to assess the impact of other known risk factors, comparing women in the preoperative period (stage 0) with women at 6 to 12 months (stage 1) and 12 to 18 months (stage 2) postoperatively

## STUDY DESIGN, MATERIALS AND METHODS

Women followed up in a multidisciplinary consultation for bariatric surgery answered anonymously the ICIQ-SF (International Consultation on Incontinence Questionnaire–Short Form), translated and validated for the Portuguese population.

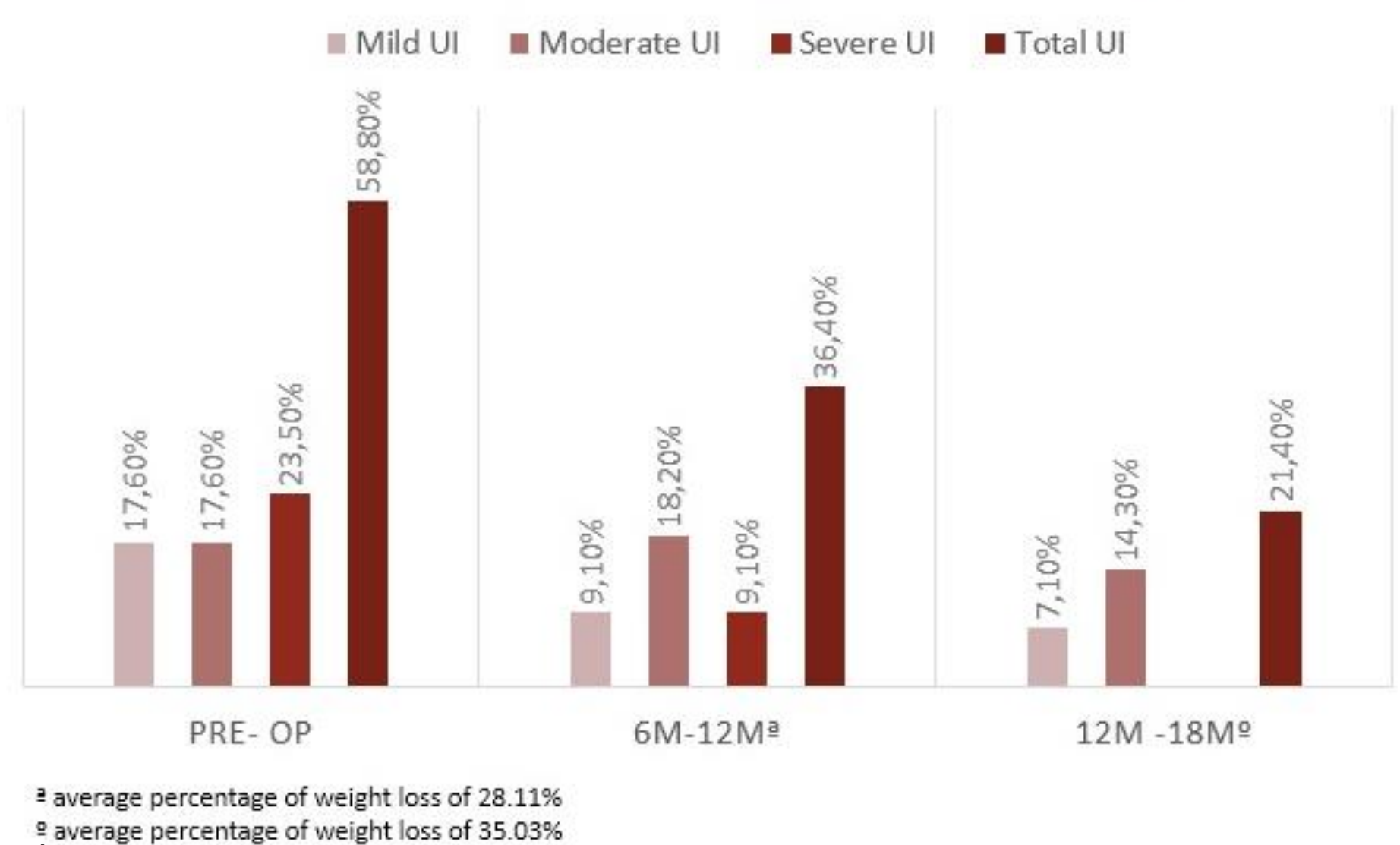
The patient was previously weighed and the body mass index (BMI) and percentage of weight loss were calculated. To characterize the sample, data were collected from the clinical process of the patients about pelvic surgical history, obstetric index and type of delivery, menopause, presence of diabetes, corroborated with glycated hemoglobin (HbA1c).

Statistical analysis was performed using SPSS version 20.0. All p values were considered statistically significant for  $p \leq 0.05$ . The Kruskal-Wallis and McNemar's chi-square tests were used for continuous and categorical variables, respectively.

## RESULTS

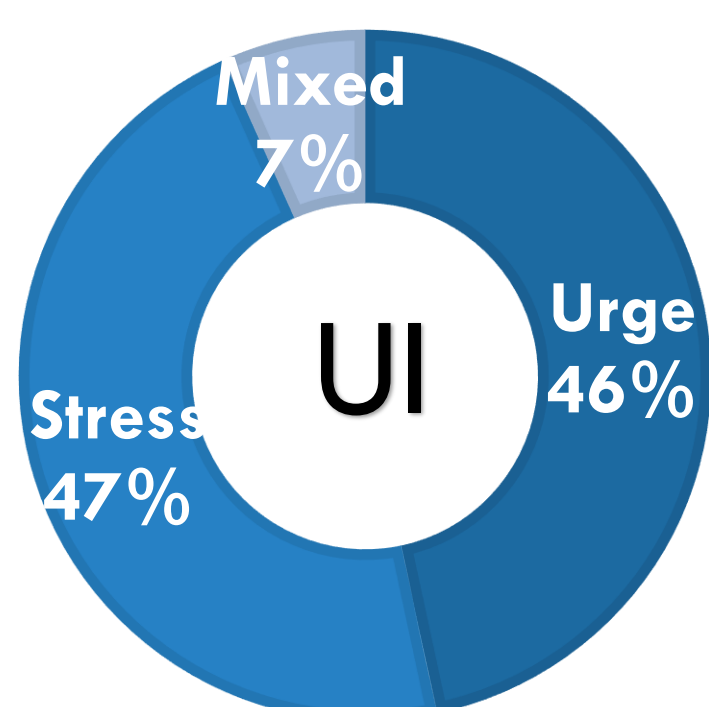
|                                 | Obese women (n=42) |
|---------------------------------|--------------------|
| Age (years)                     | 45,6±8,68          |
| Weight (kg)*                    | 109,25± 15,56      |
| BMI (kg/m <sup>2</sup> )*       | 41,29± 3,33        |
| Number of pregnancies           | 2 (0-6)            |
| - Exclusive cesarean delivery   | 14 (33,3%)         |
| - Exclusive vaginal delivery    | 14 (33,3%)         |
| - Cesarean and vaginal delivery | 8 (19,0%)          |
| Nulliparous                     | 6 (14,3%)          |
| Menopause                       | 9 (21,4%)          |
| Diabetes Mellitus II            | 8 (19%)            |
| - HbA1c (%)                     | 5,96± 0,32         |
| Pelvic surgical history         | 16 (38,1%)         |

### CHARACTERIZATION OF UI BY STAGES (SCORE ICIQ-SF)



Of the 50 women who completed the ICIQ-SF, 8 were excluded due to surgical complications or underwent reinterventions.

The average weight losses in stages 1 and 2 were 28.11% and 35.03%, respectively.



## INTERPRETATION OF RESULTS

- After statistical analysis of the results obtained in the group of patients in the preoperative stage, it was found that weight ( $p=0.015$ ) and BMI ( $p=0.007$ ) were associated with more severe forms of UI (moderate and severe).
- It was also found that the ICIQ classification in the preoperative group was significantly higher ( $p=0.034$ ) than the classification of the postoperative group.

## CONCLUSIONS

- ✓ Bariatric surgery can be an effective solution in obese patients with UI, regardless of the type of UI. Bariatric surgery results in a clinically significant improvement in most common types of UI, regardless of patient reproductive history, existence of comorbid conditions, and pelvic surgery.
- ✓ A limitation of this study is the small sample as well as the absence of any assessment of physical activity. Another limitation is not having evaluated how much weight loss or improvement in symptoms severity has individually affected patients' quality of life outcomes.

## References

1. Purwar B, Cartwright R, Cavalcanti G, Digesu GA, Fernando R, Khullar V. The impact of bariatric surgery on urinary incontinence: a systematic review and meta-analysis. Int Urogynecol J. 2019 Aug;30(8):1225-1237
2. Anglim B, O'Boyle CJ, O'Sullivan OE, O'Reilly BA. The long-term effects of bariatric surgery on female urinary incontinence. Eur J Obstet Gynecol Reprod Biol. 2018 Dec;231:15-18