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INTRODUCTION

The intragastric balloon use associated with a multidisciplinary approach aiming changes in lifestyle have shown efficacy in the treatment of overweight/ obesity and its correlated diseases [1,2]. However, some patients may regain weight, and seek the use of intragastric balloon for the second time a valid treatment option [2-4].

Thus, to evaluate the efficacy and complications of a second implant of intragastric balloon, with a minimum interval of six months between the removal of the first and second implant.

METHODS

Was used intragastric balloons Orbera®[®], with volume between 600-700 mL. The first balloon remained for a period of six months. The implant of the second balloon occurred after a minimum of six months in patients who had weight regained. Data were analysed using descriptive statistical methods and student t-test. The level of significance was set at $p < 0.05$.

RESULTS

71 patients had the balloon implanted for the second time at least six months (mean of 25.74 ± 12.94 months) after the removal of the first balloon. Of these, 25 had an early removal (balloon explant less than a month after implantation) of the balloon due to intolerance (35.21%). Of the remaining 46 patients, 35 were women. The percent weight regain in relationship to first treatment weight lost was 99.71 ± 44.9 (range: 5.00-255.56).

The patients showed a significant lower final BMI (mean: 29.61 ± 4.20 kg/m²; range: 20.08-42.98) than the initial BMI (mean: 35.27 ± 5.49 kg/m²; range: 27.05-52.96) ($p < 0.0001$) (**Figure 1**).

The average weight loss in kilograms was 15.27 ± 8.78 (range 3.0-35.0). The percent total body weight loss (%TBWL) was 15.54 ± 7.95 (range: 3.26-40.23), and the percent excess weight loss (%EWL) of 60.57 ± 35.37 (range: 10.87-194.61). The success rate of treatment ($>25\%$ EWL) was 91.30%. However, BMI reduction, weight loss in kg, %TBWL and %EWL were significantly lower than in the first treatment ($p < 0.0001$, $p < 0.0001$, $p = 0.0004$, respectively) (**Figures 2 to 5**).

Figure 1. Significant lower final BMI (mean: 29.61 ± 4.20 kg/m²) than the initial BMI ((mean: 35.27 ± 5.49 kg/m²).

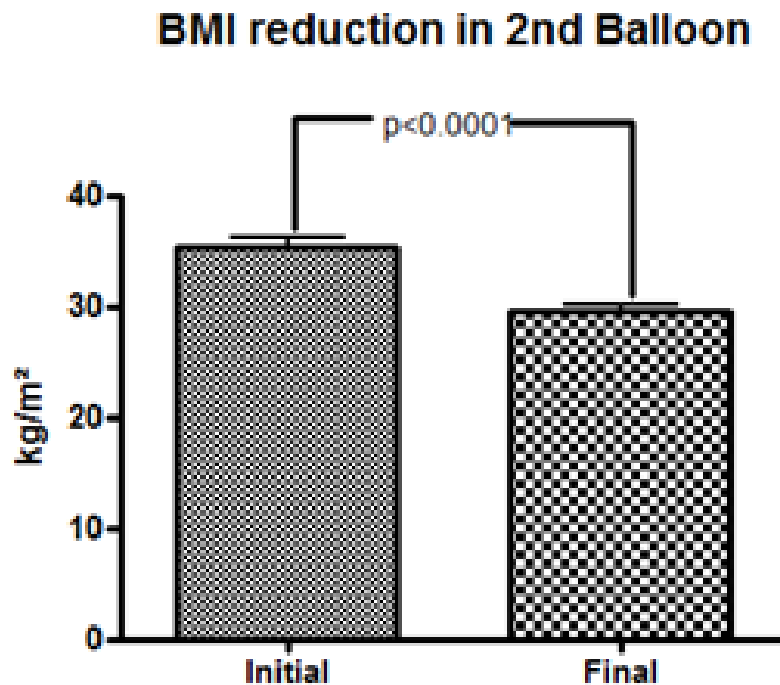


Figure 2. BMI reduction in 1st vs 2st Balloon.

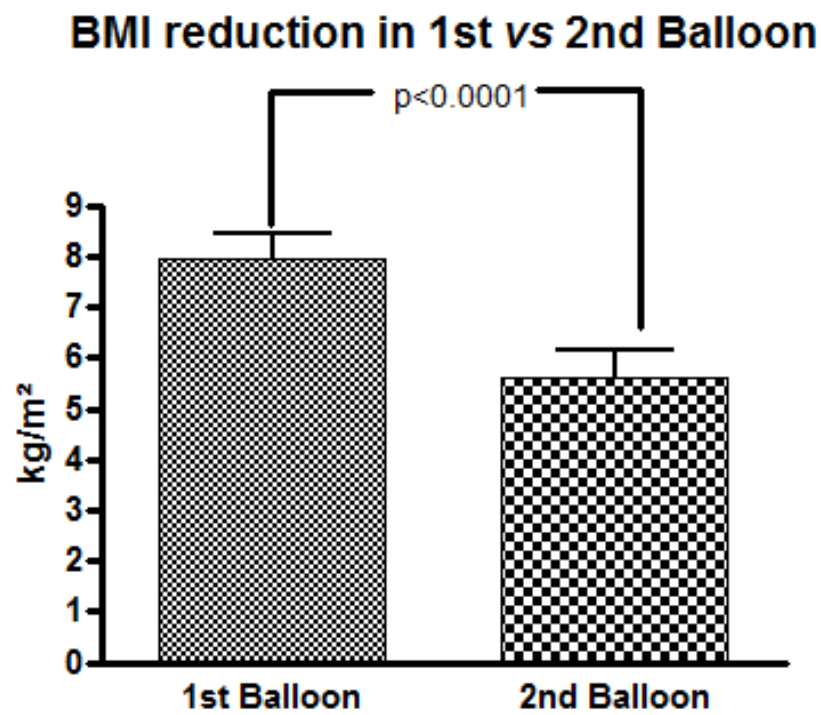


Figure 3. Weight loss (kg) in 1st vs 2st Balloon.

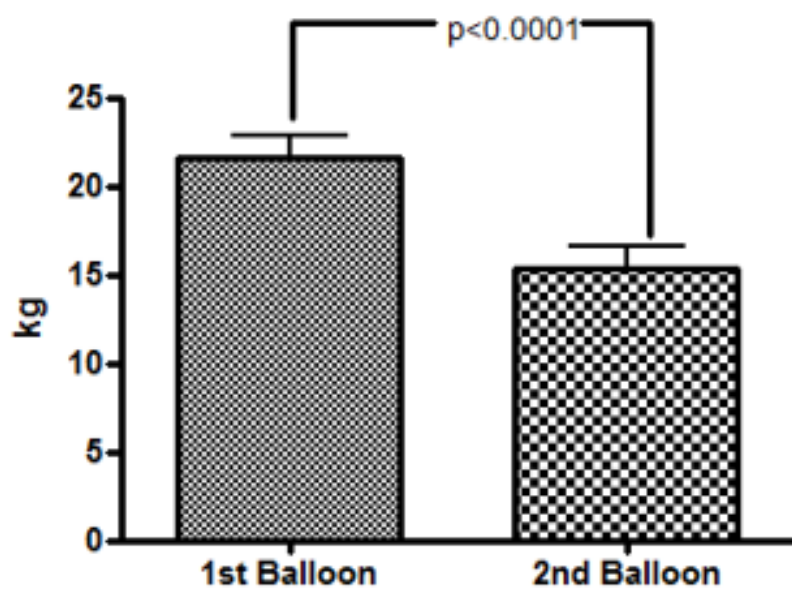


Figure 4. Total body weight loss (%) in 1st vs 2st Balloon.

Total body weight loss (%) in 1st vs 2nd Balloon

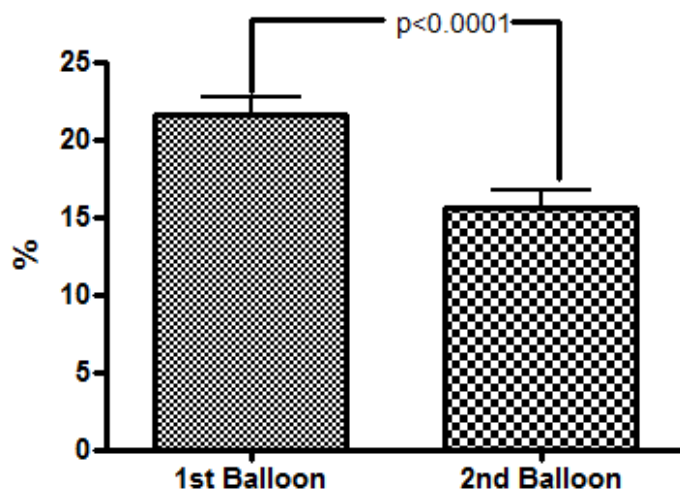
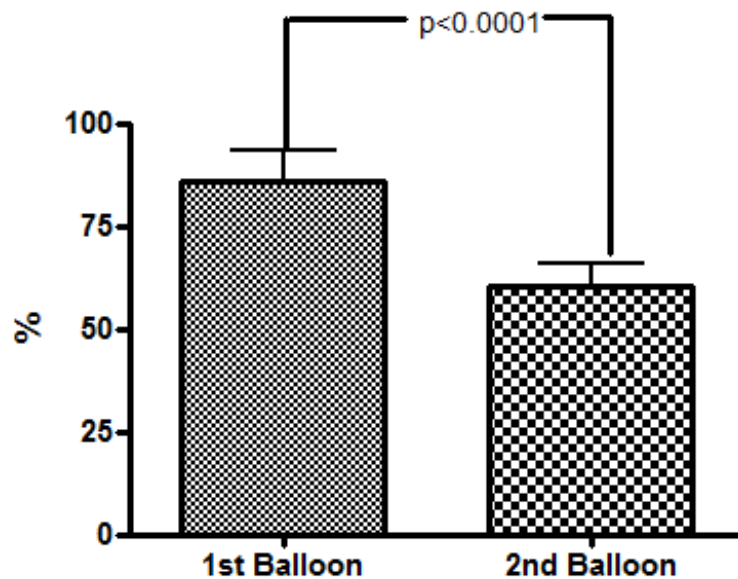


Figure 5. Excess weight loss (%) in 1st vs 2st Balloon.

Excess weight loss (%) in 1st vs 2nd Balloon



CONCLUSION

Use an intragastric balloon for the second time to treat obesity still proves to be effective, though to a lesser extent than in the first treatment, and with a high rate of complications (early balloon removal), a fact that should be thoroughly discussed and considered with the patient before making the choice of using this treatment again.

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