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Introdução e Objetivo

Several risk factors for Urinary Incontinence have been studied and some of them are already well established, such as age, parity and obesity. Obesity in particular is another major health problem, with its prevalence increasing nearly three-fold between 1975 and 2016 in the world population.

Several studies address the outcomes of the surgical treatment of stress urinary incontinence (SUI) in overweight and obese patients. However, there is no consensus about the effect of obesity on midurethral sling procedure (MUS) outcomes, mostly due to heterogeneity of data, lack of long-term follow-up and low number of prospective studies.

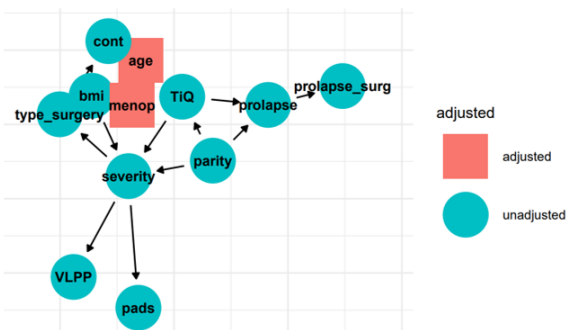
Our hypothesis is that the patient's body mass index (BMI) influences the MUS result in an inversely proportional way: the greater the BMI, the worse the result. Therefore, the aim of this study is to assess whether the outcome of anti-incontinence surgery is influenced by the patient's BMI.

Método

A retrospective analysis of women with SUI submitted to MUS between 2003 and 2018 in a single institution. Two techniques were used, the transobturator (TOT) or the retropubic (RP) approach. Success was evaluated through the continence status, which was assessed subjectively according to the patient's symptoms and classified as improved/cured or unaltered/worsened. BMI, average daily number of pads used, Valsalva leak point pressure (VLPP), vaginal parity and menopause status were recorded (Graph 1).

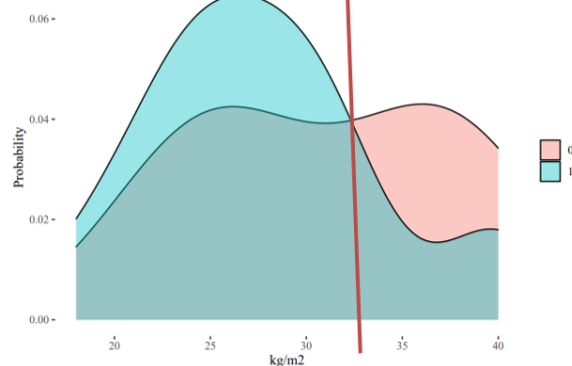
Figuras

Graph 1. Causal Graph - Directed Acyclic Graph (DAG)



Abbreviations: BMI, body mass index; Cont, continence; Menop, menopause; TIQ, Quality of Tissue; VLPP, Valsalva leak point pressure

Graph 2. BMI according to outcome



Abbreviations: BMI, body mass index; 0 = unaltered/worsened; 1 = improved/cured.

Resultados

The present study included 168 women submitted to the MUS technique, mostly through the TOT approach (n = 100, 59%) with an average follow-up of 456 days. The mean age was 51 years and the mean BMI was 28,12 Kg/m². In total, 127 women showed improvement or cure of urinary incontinence (UI). There was no significant difference in clinical characteristics between patients who showed improvement or cured and those who remained unaltered or worsened symptoms. After statistical analysis, a BMI value of 32 Kg/m² was found as a independent factor for worse surgical outcome (Graph 2). In the logistic regression analysis, the increase in BMI and also older age are important factors associated with a lower probability of postoperative continence.

Conclusão

The results of our study suggest that the increase in BMI negatively influences the post-operative outcome of MUS surgeries. This means that the probability of curing urinary incontinence decreases with increasing BMI, especially in values above 32 Kg/m². These data reinforce the importance of obesity control during the treatment of stress urinary incontinence in women.

Referências

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