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BOOK OF ABSTRACTS

11TH MEETING OF YOUNG RESEARCHERS
UNIVERSITY OF PORTO

- **14011 | Evaluation of segmental body composition in obese patients submitted to bariatric surgery**

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Introduction: Obesity is an important public health issue. Bariatric surgery appeared to aid the treatment of this chronic disease. Body composition assessment plays an important role in the evaluation of the nutritional status of patients submitted to bariatric surgery. However, changes in the segmental body composition of these patients are not fully understood.

Aim: To assess the segmental body composition of obese patients submitted to bariatric surgery and to study their evolution along the time.

Methods: In this retrospective study, we studied patients who attended Nutrition appointments at Centro Hospitalar de São João, E.P.E., throughout 36 months. We performed anthropometric evaluation and body composition analysis by bioelectrical impedance

Results: The sample consisted of 170 patients, 71.8% females and 28.2% males, with a mean age 39 years. Between the initial to the evaluation 36 months after surgery, there was a decrease in BMI from 43.9 kg/m² to 30.5 kg/m² ($p < 0.001$), a decrease of 15.2% in the percentage of body fat ($p = 0.002$) and a decrease in the waist-to-height ratio to 0.572 ($p < 0.001$). Regarding the percentage of segmental fat mass, there was a significant decrease in all segments up to the 12th month after surgery. However, in the last months of follow-up, there was increases all these indicators.

Conclusion: Our results showed a greater decrease in the percentage of body fat in the arms when compared with the other body segments.

Keywords: Body Composition, Bariatric Surgery, Obesity, Body Regions, Bioelectrical Impedance.