

European Respiratory Society Annual Congress 2013

Abstract Number: 2338

Publication Number: P1348

Abstract Group: 9.2. Physiotherapists

Keyword 1: Surgery **Keyword 2:** Physical activity **Keyword 3:** Physiotherapy care

Title: Influence of body composition on exercise capacity in women after bariatric surgery

Dr. Marcela 17333 Barbalho-Moulím marcelacbarbalho@hotmail.com^{1,4}, Dr. Fabiana 17334 Peixoto-Souza f_s_p@ig.com.br², Dr. Flavia 17335 Sales Leite flasl@hotmail.com², Dr. Eli Maria 17336 Pazzianotto Forti empforti@unimep.br³, Dr. Luciana 17338 Sampaio Jorge lucianamalosa@uninove.br² and Dr. Dirceu 17337 Costa dcosta@uninove.br^{1,2}. ¹ Post Graduate Program of Physiotherapy, Universidade Federal De São Carlos, São Carlos, Brazil ; ² Post Graduate Program of Physiotherapy, Universidade Nove De Julho, São Paulo, Brazil ; ³ Post Graduate Program of Physiotherapy, Universidade Metodista De Piracicaba, Piracicaba, Brazil and ⁴ Bariatric Surgery, Meridional Hospital, Cariacica, Brazil .

Body: Introduction: Bariatric surgery is an effective alternative for weight loss, and that seems to solve or mitigate significantly the physical limitations caused by obesity. Objective: To evaluate the influence of body composition on exercise capacity in women after bariatric surgery. Methods: It was evaluated 25 women (age= 43.05 ± 9.62 years) underwent bariatric surgery with minimum 6 months and maximum of 2 years postoperatively to compose the group I (GI). It was also evaluated 10 women (age= 39.10 ± 9.80 years) nonobese (BMI 18 to 24.9 kg/m²) and sedentary to compose the control group (GII). Body composition was assessed by bioelectrical impedance and exercise capacity by the six-minute walk test (6MWT). Statistical analysis was performed using parametric and nonparametric tests, depending on the distribution of variables, considering a significance level of 5%. Results: After bariatric surgery, 17 patients of GI were still obese. So, for better analysis of the results, the GI (n= 25) was divided into 2 others groups: obese (GIA =17) and nonobese (GIB= 8). The GIA had higher body fat percentage (40.79% ± 4.79; 30.93% ± 6.72; 30.10 ± 4.30%), lower muscle mass (56.21 ± 4.55%; 66.04% ± 5.94; 65.89 ± 4.80%) and lower 6MWT distance (6MWD) (434.00 ± 69.02 m; 513.37 ± 72.96 m; 565.50 ± 112.10 m) when compared to GIB and GII, respectively. The results of body composition and 6MWD were similar between GIB and GII. Conclusion: The results indicate that women undergoing bariatric surgery, but still remain obese have a higher percentage of body fat, less muscle mass and shorter distance in the 6MWT, compared to non-obese patients, whether operated or not.