EFFECTS OF A MULTIDISCIPLINARY PROGRAM ON MORBID OBESE PATIENTS AND PATIENTS WITH COMORBILITY WHO ARE LIKELY TO BE CANDIDATES FOR BARIATRIC SURGERY


Abstract

Introduction: Morbid obesity is a disease that must be treated comprehensively (i.e. multi/interdisciplinary). Bariatric surgery is an effective and secure procedure for treating this health condition; however, the higher the weight is, the greater the risk of morbimortality might be.

Objective: The aim of this study is to determine the effects of a multidisciplinary treatment program on metabolic and anthropometric parameters and the physical condition of bariatric surgery candidates.

Materials and Methods: 1 man and 9 women of ~42.5 years old, with morbid obesity (n = 3) or obesity and comorbidities (diabetes mellitus type II, hypertension, dyslipidemia and insulin resistance) (n = 7), all of them candidates for bariatric surgery, were submitted to physical exercise, psychological support and nutritional education, 3 times a week during 3 months. 72 hours before and after the last intervention session: body mass; fat mass index; BMI; waist circumference; physical condition; glycemia; HDL, LDL and total cholesterol; and triglycerides, were assessed (with a ≥12-hour fast).

Results: After intervention, body mass (p=0.004), BMI (p=0.002), fat mass index (p=0.047) and physical condition (p=0.000) showed significant changes. Despite their tendency to decrease, remaining variables did not show significant changes.

Conclusions: A comprehensive reasonable-frequent, short intervention (i.e. 3 sessions per week, during 3 months) may lead to significant weight and body fat loss, apart from enhancing considerably the physical condition of candidates for bariatric surgery. Longer time and/or higher frequency in interventions might be necessary in order to modify significantly plasmatic variables.

Keywords Physical exercise, Morbid obesity, Physical condition, Obesity, Weight-loss, Physical-activity, Insulin-resistance, Metabolic syndrome, Risk-factors, Exercise, Prevalence, Nutrition, Health, Adults, Nutrition & Dietetics