Abstract

Introduction: Unfavorable lipid profile is associated with developed cardiovascular diseases. It is necessary to know the beneficial effects of different mode exercises to improve lipid profile. Objective: To investigate, in obese men and women, the effect on lipid profile of hypocaloric diet combined with structured exercise programs or recommendations of physical activity. Methods: Ninety six obese subjects (59 women and 61 men; 18 - 50 years; BMI >30 and < 34.9 kg/m2) were randomised into four supervised treatment groups: strength training (S; n = 24), endurance training (E; n = 26), combined S + E (SE; n = 24), and and received recommendations of physical activity (PA; n = 22). Energy intake, body composition, training variables (VO2peak, strength index, dynamometric strength index) and blood lipid profile were recorded at baseline and after 24 weeks of treatment. Results: Blood lipid profile improved in all groups. No statistically significant differences in baseline and posttraining values were observed between groups. HDLCholesterol showed no changes. A decrease in LDLCholesterol values was observed in all groups after the intervention (S: 11.2%, E: 10.8%, SE: 7.9%, PA: 10.8%; p < 0.01). S, E and PA subjects showed decrease in trigly - cerides (S: 14.9%, E: 15.8%, PA: 15.7%; p < 0.01). Total cholesterol decreased in all groups (S: 8.4%, p < 0.01; E: 8.8%, p < 0.01; SE: 4.9%, p < 0.01; PA: 8.3%, p < 0.05). Conclusion: All protocols proposed in our study improved blood lipid profile in obese people. There were no significant differences about the effect on the lipid profile between the implementation of a structured training protocol with physical activity professional supervision and follow recommendations of physical activity.

Keywords