Abstract

Background: The present study was determined the influence of physical activity and dietary habits on lipid profile, blood pressure (BP) and body mass index (BMI) in subjects with metabolic syndrome (MS). Aims: Identify the relationship between physical activity and proper nutrition and the probability of suffering from myocardial infarction (MI). Methods: Hundred chronically ill with MS who were active and followed a healthy diet were classified as compliant, while the remaining subjects were classified as non-compliant. Results: The compliant subjects show lower BMI values (30.8 ± 4.9 vs 32.5 ± 4.6), as well as lower levels of triacylglycerol (130.4 ± 48.2 vs 242.1 ± 90.1), total cholesterol (193.5 ± 39 vs 220.2 ± 52.3) and low-density lipoprotein cholesterol (105.2 ± 38.3 vs 139.2 ± 45). They show higher values in terms of high-density lipoprotein cholesterol levels (62.2 ± 20.1 vs 36.6 ± 15.3), with statistically significant differences. In terms of both systolic and diastolic pressure, no differences were revealed between the groups; however, those who maintain proper dietary habits show lower systolic blood pressure levels than the inactive subjects. The probability of suffering from MI greatly increases among the group of non-compliant subjects. Conclusions: Our results demonstrate how performing aerobic physical activity and following an individualized, Mediterranean diet significantly reduces MS indicators and the chances of suffering from MI.

Keywords
Physical activity, Dietary habits, Health, Metabolic syndrome.