Comparison the effect of six weeks aerobic training and diet on Body Composition, Lipid Profile and Metabolic Syndrome Indexes in obese women

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Abstract:

Objective: Metabolic Syndrome (Mets) is a cluster of risk factors such as obesity, hyperglycemia, hypertension, dislipidemia which increases cardiovascular disease and type 2 diabetes mellitus. The purpose of this research was to investigate the effect of six weeks aerobic training and diet on BMI, Lipid Profile and Metabolic Syndrome Indexes in obese women.

Methodology: Sixteen patient female volunteers who were susceptible to hypertension selected (Mean age 44/30±3/74 years). The aerobic training programs were included jogging, stretching and pulling exercises. They were done over 18 sessions with 3 times the week. Each time lasted 60 minutes. Furthermore low calorie diet was concluded 500 kilocalories lower than daily one. During these weeks pre and post tests blood plasma biochemistry indexes, glucose and fast insulin were measured through enzymatic and immunoradiometric methods. HOMA was used for insulin resistance.

Results And Discussion: After six weeks aerobic training and low calorie diet intervention, there was significant reduction in weight, BMI, body Fat percent, total cholesterol, triglyceride, LDL, HOMA, mean arterial and systolic blood pressure and an increase in HDL and VO2max(p<0/05).

Conclusion: Aerobic training with diet provides effective improvements for BMI, lipid profile and Metabolic Syndrome Indexes in obese women.

Key Words: aerobic training, diet, metabolic syndrome, HOMA