

## عنوان مقاله:

The Effect of Eight Weeks of Selected Combined Training (Aerobic-Resistance) on Vascular Adhesion Molecules and Lipid Profile in Inactive Elderly Men

## محل انتشار:

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## خلاصه مقاله:

**Introduction:** Adhesion molecules and lipid profile play an important role in the pathogenesis of atherosclerosis. The aim of this study was to investigate the effect of combined training (aerobic-resistance) on vascular adhesion molecules and lipid profile in inactive elderly men. **Methods:** In this semi-experimental study, 30 elderly men were divided randomly into three equal groups: resistance group ( $n=10$ ), aerobic training ( $n=10$ ) and control groups ( $n=10$ ). The combined training (aerobic-resistance) included running on a treadmill for 20 minutes per session, 3 sessions per week, for 8 weeks, at an intensity of 60 to 70% of HRR. Furthermore, the resistance training comprised 10 circling stationary movements of leg flexion, leg extension, leg press, scott, underarm stretch, chest press, iron cross with dumbbells, biceps flexion, triceps extension, and rowing motion with rope. This training included an intensity of 60 to 70% of one maximum repetition with extra load and 10 repetitions in 2 successive times with 30-second rest between each repetition and 2-minute rest between each movement. To make intra and between groups comparison, paired and independent sample t-test was used. **Results:** The levels of ICAM-1 and VCAM-1 in both aerobic ( $p=0.001$ ) and resistance groups ( $p=0.002$ ) rather than control group reduced significantly. The amount of LDL-C, TG, TC in both aerobic and resistance groups rather than control group reduced significantly; while the levels of HDL-C in both exercise groups increased significantly. However, a significant difference was seen between 3 groups with regard to serum TG, TC and HDL-C levels ( $P<0.05$ ). **Conclusion:** The levels of ICAM-1 and VCAM-1 in both aerobic and resistance groups compared to control group reduced significantly. Therefore, combined training can be used as a good method to improve inflammatory markers in elderly people.

## کلمات کلیدی:

Training, Vascular Adhesion Molecules, Elderly

## لینک ثابت مقاله در پایگاه سیویلیکا:

