ORIGINAL ARTICLE

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Effects 10 Weeks of Aerobic Training on Serum Levels of Estradiol and Percent Body Fat in Sedentary Postmenopausal Overweight Women

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Abstract

Introduction: The purpose of this study was to investigate the effect of 10 weeks of aerobic training on estradiol levels and percent body fat in sedentary postmenopausal women.

Metods: Twenty four postmenopausal women with the mean 54/6±3/9 age randomly divided into training (n=14) and control (n=10) groups. Subjects of training group were performed 10 weeks of exercise training including aerobic training (2 sessions per week with 65-75% MHR). Control group did not participate in any exercise training or physical activity. Serum levels of estradiol were determined with with the use elisa, and body fat percent were determined with the use of a body-composition measured at the beginning and after training. Data were analyzed by SPSS16 and the independent t test, t-dependent

Results: There were no significant changes in estradiol levels and percent body fat after 10 weeks of aerobic training. The results of this study showed no significant effect on serum levels of estradiol exercise and body fat in overweight postmenopausal women were inactive.

Conclusions: Based on the results, it seems that a short - term combined training (10 weeks) with moderate intensity has no effect on serum levels of estradiol, body fat percent in overweight postmenopausal women sedentary. It seems that sex hormone binding globulin level is improved with exercise training that led to reduction in body fat mass.

Keywords: Estradiol, Breast Cancer, Body Fat Percentage, Aerobic Training, Postmenopausal Women.