ORIGINAL ARTICLE

Iranian Quarterly Journal of Breast Disease 2016; 9(1).

Effect of Aerobic- Strength Training on Sex Hormone Binding Globulin and Some Obesity Indices in Overweight and Obese Postmenopausal Women

Khorshidi D: Department of Physical Education and Sport Sciences, Islamic Azad University, Saveh Branch, Saveh, Iran
Sarmadiyan M: Faculty of Physical Education and Sport Sciences, Islamic Azad University, Karaj Branch, Karaj, Iran
Khoramjah M: Faculty of Physical Education and Sport Sciences, Islamic Azad University, Karaj Branch, Karaj, Iran

Corresponding Author: Masomeh Sarmadiyan, msarmadiyan2013@gmail.com

[Downloaded from ijbd.ir on 2026-11-01]

[DOR: 20.1001.1.17359406.1395.9.1.2.4]

Abstract

Introduction: Research evidences showed that increased levels of sex hormone binding globulin play an important role in reducing breast cancer risk. The purpose of this study was to investigate the effects of aerobic - strength exercise training on sex hormone binding globulin levels and some obesity indices in overweight and obese postmenopausal women.

Methods: Twenty four postmenopausal women (age, 54.6±3.9 years and Body mass index, 54.6±3.9 kg/m2) were randomly assigned into experimental (n=14) and control (n=10) groups. Subjects of experimental group were performed ten weeks of training including aerobic exercise (65-75% of MHR) and resistance exercise (55-65% of 1RM). Body weight, Body mass index, waist circumference, body fat percent and sex hormone binding globulin levels measured at baseline and after exercise training program.

Results: The results showed that after 10 weeks, no significant difference was observed in the sex hormone binding globulin levels between the two groups. Moreover, no significant differences were found in body weight, waist circumference, body mass index and body fat percent between the two groups.

Conclusion: This study showed that ten weeks of aerobic- strength exercise training with moderate intensity has no significant effect on sex hormone binding globulin levels and body composition in overweight and obese postmenopausal women. It seems that sex hormone binding globulin dose not favorable change in response to exercise training that does not led to reduction in body fat mass.

Keywords: Sex Hormone Binding Globulin, ExerciseTraining, Menopouse.