The Effect of Continual and Alternative Aerobic Training intensity on Visfatin and RBP4 Serum Levels in Obese Women with Type II Diabetes

Rahman Soori [*1], Nikoo .Khosravi[2], Haniyeh Yazdandoust Baygi[3], Hossein Khademi[4]

1- Associate professor of Exercise physiology, Faculty of physical education and sport sciences, University of Tehran, Tehran, Iran
2- Associate professor of Exercise physiology, Faculty of physical education and sport sciences, University of Alzahra, Tehran, Iran
3- MSc. of Exercise physiology, Faculty of physical education and sport sciences, University of Alzahra, Tehran, Iran
4-Assistant professor of anesthesiology, Torbat Heydariyeh University of Medical Sciences, Torbat heydariyeh, Iran

*** Corresponding Address: Faculty of physical education and sport sciences, University of Tehran, Tehran, Iran. Tel: +989122077862**
Email Address: soori@ut.ac.ir

Abstract

Background & Aim: Aerobic activities have an undeniable role in improving insulin resistance in obese people with type II diabetes. Although the status of aerobic exercises especially its intensity is an important factor in reducing the risks in diabetic patients, there is little information about this topic. Therefore, this study was conducted to compare two different types of aerobic exercises with different intensities on Visfatin and RBP4 Serum Levels in obese women with type II diabetes.

Methods: This is a quasi-experimental study conducted on 24 diabetic patients with irregular physical exercises (inactive) during a week. Samples were collected through convenience method and divided randomly into 3 groups (2 experimental and 1 control groups) of 8 people. The first experimental group did high-intensity alternative workout and the second experimental group did the low-intensity continual exercises three times a week for 16 weeks. The control group did not receive any interventions during this time.

Results*:* The present study revealed that a 16 week of high-intensity alternative training has no significant effect on Visfatin and RBP4 Serum Levels in type II diabetic patients($P>0.05$), while it had significant effect on the insulin resistance and insulin level ($P<0.05$). Furthermore, the data showed that there was no significant relationship between 16 week of low-intensity continual training and the level of Visfatin and RBP4 and Insulin ($p>0.05$).

Conclusion: To sum it up, the current research indicates that physical activity can improve the blood factors in type II diabetic patients. Also, it controls the blood glucose and improves insulin resistance. Moreover, it is necessary to notice that there was no significant difference between different intensities of aerobic exercises.

Keywords: Visfatin, RBP4, High-intensity alternative Training; Low-intensity continual

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