عنوان مقاله:

The Effect of Resistance Training on Levels of Interlukine-6 and High-Sensitivity C - reactive protein in Older-Aged Women

محل انتشار:

مجله سلامت سالمندان, دوره 3, شماره 1 (سال: 1396)

تعداد صفحات اصل مقاله: 7

نویسندگان:

Zahra Mardanpour Shahrekordi - *Department of Sport Sciences, School of Human Sciences, University of Shahrekord, Shahrekord, Iran*

Ebrahim Banitalebi - *Department of Sport Sciences, School of Human Sciences, University of Shahrekord, Shahrekord, Iran*

Mohammad Faramarzi - *Department of Sport Sciences, School of Human Sciences, University of Shahrekord, Shahrekord, Iran*

خلاصه مقاله:

Introduction: Aging is associated with elevated levels of some proinflammatory factors and exercise is a non-invasive intervention to improve immune function among older adults .The aim of the study was to compare resistance training effects on interlukine-6 (IL-6) and high-sensitivity C-reactive protein (hs-CRP) levels in older-aged women. Methods: The study was quasi-experimental and forty healthy females were selected and randomly assigned to one of four groups: strength after endurance training (endurance + strength (E + S), n = 9), strength prior to endurance training (strength + endurance (S + E), n = 10), interval resistance-endurance training (Int, n = 12), and control (n = 9) groups. The training program was performed for eight weeks, three times per week. Human TNF-α and IL-6 sandwich ELISA Kit were used. Within-group differences were analyzed using a paired samples t-test and between-group differences were analyzed using one-way analysis of variance. Results: The intra-session order had not significantly influence on the adaptive response of waist-to-hip ratio (p = 0.55), IL-6 (p = 0.55) and hs-CRP (p = 0.55) throughout the study. However, significant differences were shown following combined training between the S + E, E + S and Int groups for Vo2 max (p = 0.029), body mass (p = 0.016) and BMI (p = 0.023) when comparing pre and posttests. Conclusion: This study confirmed that adaptations to a combination of endurance and resistance training appear to be independent of whether resistance training occurs prior to or following endurance training.

کلمات کلیدی:

Exercise, Inflammation, IL-6, hs-CRP, Aging