

Original Paper

Effect of 8-week walking program on serum lipoprotein (a) concentration in non-athlete menopausal women

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Abstract

Background and Objective: Lipoprotein (a) [Lp(a)] is a new cardiovascular risk factor and its concentration increase cardiovascular diseases, while physical activity decrease cardiovascular diseases. This study intend to investigate the effect of eight week walking program on lipoprotein (a) concentration in non-athlete iranian menopausal women.

Materials and Methods: Twenty two healthy menopause women of 47-55 year of age any specific disorder were enrolled in this study. The subjects randomly divided into experimental and control groups. Anthropometric characteristics including height ,weight, body mass index (BMI), body fat percent and Waist-to-Hip ratio (WHR) and serum lipoprotein on fasting were measured pre and post-walking program. The data were compared using independent t-test, U mann witny and pearson correlation caefficeint was used for assesement of relation between lipoprotein (a) with anthropometric indexes.

Results: According to these results, there was a significant reduction of serum lipoprotein (a) (pre test $12.5 \pm 4/1$; post test 10.5 ± 3 md), WHR, BMI and body fat percent prior and after the training in experimental group ($P < 0.05$) while non significant changes was observed in control group. Also, there was non significant relationship between lipoprotein (a) with Anthropometric indexes.

Conclusion: This study revealed that 8-week walking program had useful effects on menopausal women' serum lipoprotein (a) concentration, WHR, BMI and body fat percent.

Keywords: Serum lipoprotein (a), Walking, Menopausal women

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