Original Article

Changes of Liver Trans-Aminases after a Period of Selected Aerobic Training in Postmenopausal Women

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Abstract

Background and Objective: Fatty liver disease is one of the most common diseases in postmenopausal women. While regular exercise can decrease the complication of this disease, it has not been clearly identified. Thus, we aimed to investigate the effect of 6-weeks of aerobic training on Alanine transaminase, Aspartate Aminotransphrase and Alkaline phosphatase changes in menopausal women.

Material and Methods: In this Semi-empirical study, 20 postmenopausal women were randomly divided into equal experimental and control groups. The experimental group participated in a controlled aerobic training at 40-60 percent of maximal heart rate. The program was the three training sessions per week (45-60 minutes) for six weeks. By being fast for 12 hours, blood samples were taken before and after 6 weeks.

Results: After six weeks, the level of Alanine transaminase, Aspartate Aminotransphrase and Alkaline phosphatase decreased significantly in experimental group ($p<0.05$), in contrast with control group. Also, there were no significant changes in the baseline characteristic of participants, liver enzymes level and lipid profile between experimental and control groups.

Conclusion: The findings showed that six-weeks of aerobic training can diminish liver enzymes but it has not any effect on lipid level.

Key words: Fatty Liver Disease; Menopausal; Aerobic Training, Liver Trans-Aminases

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