

4th International Conference on

Sports Medicine and Fitness

November 14-15, 2018 | Edinburgh, Scotland

Effect of physical training on platelet aggregation and fibrinogen concentration in patients with chronic heart failure

Ausra Mongirdiene

Lithuanian University of Health Sciences, Lithuania

Aim: The aim of this study was to find out effects of long-term physical load on the changes in the indices of the fibrinogen concentration and platelet aggregation.

Methods: Platelet aggregation was investigated in 144 patients while fibrinogen concentration in 138 patients with CHF. The patients were divided into the groups of the trained patients and the controls were investigated as follows: on admission to the hospital (stage 1); after treatment in the hospital; after three months; after six months; and after one year. The indices were investigated before and after physical load.

Results: It was determined that fibrinogen concentration significantly increased after physical load in all the treatment stages in both groups of the patients ($P=0.045$). In the course of the treatment, fibrinogen concentration gradually decreased in the group of the trained patients ($P=0.02$). Platelet aggregation investigated with ADP significantly increased after physical load in all the stages in both groups of the patients and decreased during the different investigation stages in the groups of the untrained ($P<0.02$) and trained patients. Platelet aggregation investigated with ADR consistently decreased before physical load during the different investigation stages in the groups of the trained (difference is not significant) and untrained patients ($P<0.02$).

Conclusion: Physical training reduces fibrinogen concentration in patients with CHF; Physical training can have an effect on the decrease in platelet aggregation in patients who have long-term physical training applied.

ausra.mongirdiene@mail.com