COMPARISON OF THE EFFECTS OF ACTIVE AND PASSIVE RECOVERY AFTER INCREMENTAL EXERCISE TO EXHAUSTION ON SERUM TESTOSTERONE AND PROGESTERONE LEVELS OF ATHLETES

Abstract
Introduction: The aim of the present study was to compare the effects of active and passive recovery after a very heavy exercise session (incremental exercise to exhaustion) on serum testosterone and progesterone levels of athletes. Materials and Methods: A total of 26 healthy, active sprinters participated voluntarily in the study. Exclusion factors included endocrinal, cardiac diseases and diabetes. Blood samples were drawn at three stages; baseline, immediately after an excessively heavy workout and 10 minutes after recovery on an empty stomach. Variance analysis was the statistical test used. A P_value < 0.05 was considered significant and SPSS 18 software program was used for entering the data in the computer. Findings: The results showed that passive recovery results in more reduction of testosterone and progesterone levels as compared to active recovery, but this difference is not significant (P > 0.05). Conclusion: It can be concluded that type of recovery and post recovery period has no effect on testosterone and progesterone serum levels of athletes.

Key words: recovery, active, passive, exercise, exhaustion, testosterone, progesterone