

Abstract

Title

The effect of the winter preparation period towards the explosive power in amateur football players

Objectives

To find out what effect has preparation period on explosive power of lower limbs at football players of the regional championship level.

Methods

Quantitative research was held as a motorical testing of football team Sokol Kolovraty (n = 20) during winter preparation period. To determine the development of explosive power of the lower limbs was selected 5 motoric tests: High jump from the spot, Four jump from foot to foot, Long jump from the spot, Triple jump on the left (right) leg, Deep forward bend in standing position. This study was so-called „cross over“ study, or as crossover study in which the team was divided by randomization into two groups, group A and a group B. The first half of the study (4 weeks) the group A performed strength intervention and the group B a different running intervention. In the middle of the research, after control measurements, the group exchanged their interventions.

Results

Based on the Mix-design ANOVA I can state the results showed the statistical significance of strength intervention compared to running intervention without strength exercise. In all tests for the explosive power of the lower limbs the positive changes occurred during the strength intervention was performed. The largest increase in measured values can be seen in the test – Triple jump on the left (right) leg where you can see the largest increments of measured values of each lower limb separately. Furthermore in this study we see a positive effect of strength intervention on the flexibility of probands. Probands after strength intervention had better results of measured values in the test – Deep forward bend in a standing position, than before the strength intervention. The tested probands who performed a strength intervention in the first half of the research and the running intervention in the second half (group A) did not have a significantly greater increase in explosive strength of the lower limbs in the output measurement compared to the tested probands who performed the running intervention first and then the strength intervention as a second (group B).

Key words

Condition preparation, strength skills, explosive power, football, analysis, intervention