

Abstract

This master thesis deals with the use of balance-strength training to influence dynamic stability in floorball players. The aim of this thesis was to determine whether players undergoing balance-strength training achieve better results than players in the control group.

The theoretical part summarizes the knowledge about floorball and its influence on the musculoskeletal system. Furthermore, the thesis focuses on dynamic stability. At the end of the theoretical part the problems of preventive programs and the use of balance and strength training are described. The practical part involved 25 players of the junior floorball team of the club Black Angels. The players were randomly divided into two groups - experimental (n = 13) and control (n = 12). Both groups have undergone pre-season training for 14 weeks. In addition, players in the experimental group completed 3 units of balance-strength training each week. Functional tests such as Y-balance test, horizontal jump and 5+5 test were chosen to evaluate the results.

The results show that our balance-strength training had a positive effect mainly on increasing the distance of the Y-balance test in the posteromedial direction and the horizontal jump. On the contrary, deterioration occurred in the values of the distance of the Y-balance test in the anterior direction. Due to the small sample size of probands, the non-parametric Mann-Whitney U test was used to evaluate the training effect. There was no statistically significant change in the evaluation of the difference between the values before and after in each group. When evaluating the difference between groups in their differences, there was a statistically significant difference in the horizontal jump ($p = 0.010$) and 5+5 test ($p = 0.007$). There was no statistically significant difference between groups in either direction of the Y-balance test.