

Abstract

Title: Evaluation of the physiotherapy effectiveness in women handball players with an anterior instability of the glenohumeral joint.

Objectives: The aim of this diploma thesis is to summarize the anterior instability of the glenohumeral joint knowledge in women handball players. Subsequently to perform and evaluate the effect of the three months long physiotherapy intervention based on proprioceptive neuromuscular facilitation by which we wanted to eliminate the anterior instability of the glenohumeral joint. In the last part of the research are compared the results which were reached by the group which did the three months intervention program and the control group without any physiotherapeutical intervention.

Methods: The experiment was performed in handball team HC Slavia Praha by women players range in age from 15 -19 years. It was carried out using 3 tests evaluating the instability of the anterior glenohumeral joint, which were evaluated by 2 different physiotherapists and 3 motor tests evaluating the explosive force of the upper limb. Testing was performed twice, before and after the three months long physiotherapeutical intervention.

Results: After the three months intervention, there was a significant improvement of the results in the group which underwent the physiotherapy intervention. In the tests evaluating the anterior instability of the glenohumeral joint, there was an elimination of the positive result in 15 cases in the output testing. On the other hand in the control group, there were 2 cases of deterioration in the output testing in a comparison of the input testing. The most often positive test evaluating the anterior instability of the glenohumeral joint in both groups of the research was the Apprehension test. In the motor tests testing the explosive force of the upper limb, there was improvement in that group which underwent the physiotherapeutical intervention in every single test by each proband in this group. The average of the whole group showed the best results in the test – „Throw into the distance from a certain point“, where the improvement was 1,72 m. In the control group there was an average deterioration in the all tests. The worst results of this group were in the test „Throw into the distance from a certain point“, the deterioration was by 0,45m.

Key words:

Handball, glenohumeral joint, the anterior instability, proprioceptive neuromuscular facilitation, Thera – Band.