

## **ABSTRACT**

**Title:** The Effect of Kinesiotaping on Postural Stabilization in Patients after ACL Reconstruction

**Aim:** The main aim of the thesis was to evaluate, whether postural stabilization of patients after ACL reconstruction followed by kinesiotaping of the knee joint will be improved or decreased. Also the difference in postural stability of operated and un-operated lower extremity was evaluated.

### **Methods:**

The thesis included 10 subjects. Each of them was from 4 to 6 weeks after ACL reconstruction, BTB technique. All subjects regularly attended group exercise in CLPA s.r.o. Every subject completed five measurements of postural somatooscilography, before exercise with kinesiotape and without, after exercise completed with kinesiotape, and after five days before and after exercise without kinesiotape. The values were saved by Microswing 6.0 and analyzed by Posturomed Commander. Then the values were evaluated by Microsoft Office Excel and statistic procedures were done by XLSTAT.

### **Results:**

The measurement confirmed an effect of kinesiotaping on improvement of postural stabilization. Immediately after the application of the tape five out of seven parameters were improved. Participating in the exercise unit revealed an improving trend of postural stabilization, in comparison with the results before exercise. There was significant influence of the tape during exercise. After the exercise unit with the applied tape, there was a statistically significant difference found in six out of seven parametrs. In contrast with the exercise unit without application of the tape, there was a statistically significant difference found in two parametrs. There was not a statistically significant difference found in the measurements between operated and un-operated lower extremity.

**Key words:** kinesiotaping, postural stabilization, Posturomed, ACL reconstruction