

## **BACHELOR THESIS ABSTRACT**

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**Title of the bachelor thesis:** Prevention of damage of the posterior thigh muscles in active football players

### **Abstract:**

This bachelor thesis deals with prevention of damage of the posterior thigh muscles in active football players, also known as hamstrings. The aim of this thesis is to create a training unit to stretch and strengthen posterior thigh muscles. Furthermore, to create information brochure about before and after training preparations.

This thesis is both theoretical and practical. Theoretical part deals with football, skeletal muscle anatomy and detailed anatomy of posterior thigh muscles, risk factors leading to injuries, injuries of posterior thigh muscles, it's treatment and therapy. A considerable portion of this thesis is focused on return to training process, prevention of the injury, regeneration and compensation exercises.

Eight probands of AC Sparta Praha took part in the practical part. They were randomly divided into experimental group, which did the chosen exercises and control group, which only received information brochure but did not participate in the exercises. As a part of the entrance and exit testing, evaluation of shortened muscles, range of motion, modified muscle test and tests of motoric functions were carried out. Entrance and exit form together with training form were also filled out by probands after every exercise.

The evaluation of the training unit was done based on differences between entrance and exit testing values. Results are shown in graphs and tables. The results show that the chosen training unit is effective and helpful for the football players.

**Key words:** hamstrings, demage, football, soccer