

## **Abstract**

### **Title:**

Anterior cruciate ligament rupture in women floorball extraleague players in Czech and Slovak republic – analysis of influences

### **Objectives:**

The aim of the diploma thesis is to analyze the main influences on the anterior cruciate ligament rupture in top-level women floorball players in the Czech and Slovak top leagues, with the main focus on the length of player's active career and average week load, including a comparison of incidences of the injury in both countries.

### **Methods:**

Data collection was done using an anonymous non-standardized questionnaire in electronic form. The research group included 209 top women floorball players aged 15-35 years. 135 players played in the Czech extraleague and 74 in the Slovak extraleague. All 20 teams registered in the highest women's floorball competitions of both countries during season 2021/2022 took part in the research.

### **Results:**

The results showed a predominance of non-contact injuries (75 %), repeated anterior cruciate ligament rupture occurred in 42.5 % of cases. The effect of the player's active career length (long-term repetitive tissue microtrauma) on the injury was confirmed. The relationship between the volume of the average week training and match load (short-term loading) and the injury was not confirmed. There was a significant difference in the incidences of injuries, the incidence in Czech league players (240 injured players / 1000 floorball players) was higher than in Slovak league players (108 injured players / 1000 floorball players).

### **Keywords:**

anterior cruciate ligament, ACL, rupture, floorball, repetitive loading