

## **Abstract**

**Title:** An effect of generalized joint hypermobility to the frequency of ankle joint injuries at girls' basketball players of the age category U11-U17

**Objective:** The main objective of this thesis is to assess the frequency of generalized joint hypermobility and its relation to the frequency of injury of the ankle at girls' basketball players of the age from 7 to 16 years. The secondary goal of this work is to evaluate effectiveness of the balance exercises integrated into the experimental group of girls' basketball players.

**Methods:** The theoretical part is elaborated as a recherche of foreign literature in particular. In the practical part, the injury frequency of the ankle is analyzed by the quantitative methods using a survey and the frequency of the generalized joint hypermobility assessed by clinical tests of motion by Carter and Wilkinson, Beighton and Bulbena. Furthermore, a controlled experiment is included in which practice balance exercises had been included to the training of the experimental group of girls' basketball players BK Brandys nad Labem and its effect to the dependent variable, the frequency of the ankle injury, was monitored and compared with the control groups BK Prosek and SK Aritma.

**Results:** In this study the link between the frequency of the ankle injury and the presence of generalized hypermobility has been confirmed. The frequency of the ankle joint injuries per year, i.e. a rate of injuries to the period between the first and the last accident is twice as high among girls with generalized hypermobility. At the same time, after experiment there was observed more than three times higher number of the ankle injuries at control group teams than at the BK Brandys nad Labem team, which applied the balance exercises.

**Keywords:** ankle joint, generalized hypermobility, basketball, children, balance exercises