

## **Abstract**

**Title:** The Occurrence of Lower Crossed Syndrome in Sprinters and the Possibilities of Influencing it in Physiotherapy

**Objectives:** To determine the prevalence of lower crossed syndrome in specific group of sprinters and compare it with control group. To compare occurrence especially in men and women in sprint.

**Methods:** To obtain informations from the research were used clinical tests- muscle test by Janda for testing muscle strength of m. rectus abdominis (trunk flexion test), m. gluteus maximus (test of extension in hip with contemporary flexion in knee), m. gluteus medius et minimus (test of abduction in the hip joint) and examination of frequently shortened muscle groups by Janda for examination shortening of the hip flexor muscles (m. iliopsoas, m. rectus femoris and m. tensor fascia latae) m. quadratus lumborum- lateral variant and paravertebral back muscles. To select probands into research and control groups was created nonstandard questionnaire with open and closed questions. In the research there were 40 probands.

**Results:** The results show that the lower crossed syndrome by Janda is more common in sports recreationally individuals than sprinters. Furthermore the lower crossed syndrome by Janda is more common in sprinters- men than in sprinters- women, but here the results are not so clear.

**Keywords:** lower crossed syndrome, muscle imbalance, athletics, sprint, compensation exercise