

Abstract

TITLE OF THESIS:

Analysis of postural functions and posture in triathletes aged 10-15 years.

OBJECTIVES OF THESIS:

The aim of this work is to analyze the condition of the musculoskeletal system and posture in triathletes aged 10-15 years and based on that to create a health compensation program and then verify and be able to objectify the main musculoskeletal problems, recommend and provide remedies.

METHODS USED:

In my diploma thesis I used in testing the level of motor skills tests tested by CTA for the age group of triathletes 8-15 years and then I compared them according to the table determining the level of assumptions using T-points. I used a ray graph to summarize the average results of the group. I tested the analysis of postural functions and posture using physiotherapeutic tests according to the authors Jaroš and Lomíček, and I used Matthias' test as a supplement. During testing according to Jaroš and Lomíček, I used a plumb line, protractor and grid to make the evaluation as accurate as possible. During the physiotherapy measurements, I took photos and videos, thanks to which I was able to better identify postural defects, however they could not be presented in the diploma thesis. I recorded the individual results in tables.

RESULTS:

My research showed that regular application of a health compensation program positively affects posture and improves postural stereotype in a selected group of triathletes, as all probands achieved improvement in individual areas of the body, while according to the evaluation scale Jaroš and Lomíček. They also achieved positive values in the Matthias test, where two probands improved by 2 points, in the others it was 1 point. Research has shown that the elimination of postural defects is not clearly associated with improved motor test results, as most probands achieved progress in motor tests, although physiotherapy test results were less significant, and some did not improve posture at all. motor tests have improved. It can therefore be judged that this age group of triathletes would improve their results in motor tests despite the current postural defects and poor posture. However, we must take into account the fact that

few probands took part in the research and that the global Covid-19 pandemic took place throughout the research.

From the research, I subsequently evaluated that there is no significant difference between the sexes in this age category, but it was confirmed that younger participants had more significant postural defects than older participants, due to the ontogenesis of the individual.

KEY WORDS:

Triathlon, health compensatory exercises, poise, postural defects, Jaroš a Lomíček, Matthias.