Abstract

Title: Evaluation of motor skills level of children with clubfoot by the parental questionnaire DCDQ

Objectives: The aim of the diploma thesis was to evaluate the current level of motor skills of children aged 5 to 15 years with idiopathic clubfoot (IC) using parental questionnaire - The Developmental Coordination Disorder Questionnaire (DCDQ). The work also aimed to detect the prevalence of possible dyspraxia in children with pes equinovarus congenitus in the selected age period. The partial goal of the theoretical part of this thesis was to process the issue of idiopathic clubfoot and developmental coordination disorder.

Methods: The brief parent questionnaire DCDQ was used for the needs of the research, 8 non-standardized questions were added to this questionnaire. A total number of 49 responders participated in the study. The data were evaluated using Microsoft Excel and mathematical software R.

Results: According to the DCDQ, 26.5% (n = 13) of the responders were identified as to be at risk of motor difficulties. Compared to the prevalence of motorial disorders in the general population (5 – 6 %), a statistically significant difference was found. The results did not show any statistically significant differences related to sex and laterality. The children with risk of DCD performed the worst results in questions evaluating the technique and speed of running, the ability to learn new things easily and quickly and sitting posture. The significant difference was found by children with bilateral IC compared to probands with a unilateral type in the question related to child's physical activity participation.

Conclusion: Based on the obtained results, we can confirm that children with a IC have statistically significantly higher risk of motorial difficulties than children in the general population. Motorial difficulties are not related to sex and laterality. It is recommended to carry out further research to increase the objectivity of the results.

Keywords: idiopathic clubfoot, developmental coordination disorder, developmental dyspraxia, neurodevelopmental disorder, DCDQ