Abstract

Title: The effect of progressive static stretching on treatment of spastic paraparesis in patients with cerebral palsy

Objectives: The goal of this dissertation is to evaluate the effect of progressive static stretching on treatment of spastic paraparesis in patients with paraparetic form of cerebral palsy (CP). Elements chosen for the treatment were those of the therapeutic concept Guided Self-rehabilitation Contract by French professor Jean-Michel Gracies, which is presented in detail in the theoretical part of the dissertation.

Methodology: This dissertation has a theoretical-empirical character. First theoretical part of the dissertation is in a form of a research on the topic of spasticity and diagnosis and treatment of spastic paresis according to the concept of J.-M. Gracies. Second experimental part of the dissertation evaluating the effect of the selected treatment for spastic paresis in people with cerebral palsy, has a form of pilot qualitative research, which was attended by 6 participants. At the beginning of the research each participant has undergone an entrance examination that evaluated spasticity using at first an unique assessing protocol Five step clinical assessment and consequently a surface electromyography. Based on this examination, each participant was instructed to follow self-therapy at home, lasting a total of 34 days. After this time, the output examination was performed identical way as the input examination. The effect of the selected treatment on spastic paresis in participants was evaluated from the collected data.

Results: The research confirmed a positive effect of progressive static stretching on treatment of spastic paraparesis in patients with paraparetic form of cerebral palsy (CP) and pointed to the possibility of objectification of therapy results using the surface electromyography.

Keywords: spasticity, spastic paresis, muscle overactivity, muscle shortening, cerebral palsy, Guided Self-rehabilitation Contract, Jean-Michel Gracies