Abstract

Title: Current approaches in the therapy of spastic paresis after acquired brain injury in adult patients - review

Objective: The goal of this diploma thesis is evaluate the most effective current physiotherapeutic procedures in the therapy of spastic paresis after acquired brain injury in adult patients with the main focus on physiotherapeutic intervention and further to find out whether the reduction of spasticity on the lower limb improves walking speed.

Methodics: The diploma thesis is written as a theoretical thesis in the form of a literature review using the following electronic databases: PubMed, PEDro, MEDLINE, EBSCO, Scopus, Web of Science. The first half of the thesis summarizes the theoretical basis and knowledge dealing with spasticity assessment scales and spasticity therapy. The second half is written as a descriptive-analytic rewiev and contains an analysis of studies where therapy was used to affect spasticity with a joint assessment of walking speed without concomitant botulinum toxin treatment.

Results: After conducting the search, only 6 studies that addressed the influence of spasticity after acquired brain damage in adult patients with simultaneous assessment of walking speed met the established criteria. Due to the very small number of studies and the way the studies were conducted, it is not possible to interpret which current intervention is the most effective in the therapy of spastic paresis. However, all studies noted improvements in both spasticity reduction and walking speed. In conclusion, it can be said that the reduction of spasticity leads to an acceleration of walking.

Keywords: spasticity – stroke – walking speed – physiotherapy intervetion – 10MWT