Master-Thesis

Profitieren Kinder/Jugendliche mit einseitig orthetisch versorgter spastischer Hemiparese in der Entwicklung ihrer motorischen Fähigkeiten von einer gleichzeitigen Versorgung der Gegenseite?

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Abstract

<u>Problem:</u> According to the theories of the neurodevelopmental therapy by K. & B. Bobath the question occurred, if a patient with spastic hemiplegia could make a profit from bracing both extremities instead of one as usual. If these theories are right, the patient should improve his motor skills.

Approach: 6 patients with the diagnosis of spastic hemiplegia were formed in two groups. One group, the control group, changed nothing in aspects of daily living, all members had out- patient physiotherapy. The members of the interventional group were braced with a ready- to- wear Orthosis (Kiddiegait®) on the "healthy" extremity and had also physiotherapy.

On all members of both groups the motor skills were measured via GMFM-66, at the start of this study and after 12 weeks. Furthermore, the self- reported quality of life was assessed by using a German questionnaire called ILK – Inventar zur Erfassung der Lebensqualität bei Kindern und Jugendlichen.

Results: The evaluation of the results of the GMFM-66 showed no trend, that gave the right in the assumption that the motor skills of the patients improved while wearing the additional brace. The results of the ILK showed no difference from the general standards of the related population.

<u>Conclusions:</u> There were no findings, that the additional bracing could bring benefit in motor skills to patients with spastic hemiplegia. Additionally, the self- reported quality of life showed no differences from the general standards of the related population. More studies with higher numbers of patients are necessary to support evidence-based decisions regarding the use of orthoses for this population.