

BACHELOR THESIS ABSTRACT

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Title: Fatigue in patients with multiple sclerosis: The impact of negative thermotherapy on fatigue in patients with multiple sclerosis

Abstract:

The bachelor thesis deals with the issue of fatigue in patients with multiple sclerosis (MS) and the effect of negative thermotherapy on this fatigue. The main aim of the study is to determine whether it is possible to alleviate fatigue in patients with MS using local negative thermotherapy (specifically using a special cooling cap). The secondary aim is to observe the impact of the outside temperature on fatigue and performance in functional tests in patients with MS. The thesis consists of a theoretical and a practical part. The theoretical part describes the multiple sclerosis, fatigue as common symptom of MS and possible effect of negative thermotherapy. The practical part is focused on the effect of local negative thermotherapy on fatigue and related symptoms in group of people with MS. The following functional tests were chosen to evaluate the effect of negative thermotherapy: Timed 25-Foot Walk (T25FW), Six-Minute Walk Test (6MWT), Nine-Hole Peg Test (9-HPT) and Symbol Digit Modalities Test (SDMT). Fatigue was assessed using two questionnaires: Modified Fatigue Impact Scale (MFIS) and questionnaire of subjectively perceived fatigue. The short questionnaire was created for the subjective evaluation of the effect of negative thermotherapy on fatigue. The results of functional tests and questionnaires were compiled in tables and graphs. After application of local negative thermotherapy, the results of all functional tests were statistically significantly improved. In contrast, the results of most functional tests in control measurements were not improved. Reduction of subjective fatigue was reported by 15 patients. The effect of ambient temperature on fatigue and performance in functional tests was not demonstrated (except T25FW).

Key words: multiple sclerosis, fatigue, negative thermotherapy, regime measures