

ABSTRACT OF BACHELOR THESIS

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Title: The benefits of aerobic training in patients with chronic stroke

Abstract

This bachelor thesis deals with the topic of the benefits of aerobic training in patients with chronic stroke. The work is processed in the form of a literature review and consists of a theoretical and a special part. The theoretical part first describes stroke, mainly from the perspective of epidemiology, pathogenesis, and treatment, with an emphasis on therapy options in the chronic stage. The second section of the theoretical part focuses on the characteristics of aerobic exercise, which is discussed from the point of view of physiology, the metabolism of aerobic and anaerobic activity, organism adaptation, and its benefits in medicine.

The special part is based on the results of the literature review, which was focused on searching for current studies dealing with the use and benefits of aerobic exercise in patients with chronic stroke. The primary goal is to answer the question of what benefits aerobic exercise has for these patients. Secondly, it presents which types and parameters of aerobic exercise are suitable for use.

From the results obtained, it can be stated that aerobic exercise has a positive effect on patients with chronic stroke, mainly on walking, muscle strength, cardiorespiratory fitness, and balance. The use of individual types and parameters of aerobic exercise depends on the desired effect of the therapy. Among the most commonly used types of aerobic exercise are walking training, aerobic-resistance training, cycling on a bicycle ergometer, or functional skills training performed at a moderate, rather high intensity.

Key words: chronic stroke, aerobic training, aerobic exercise, aerobic-resistance training