

## **BACHELOR THESIS ABSTRACT**

**Title:** Physiotherapy in patients with amyotrophic lateral sclerosis

**Abstract:**

This bachelor thesis is consisting of a theoretical part and a practical part. The theoretical part is consisting of the basics of neuroanatomy needed to understand the disease, pathophysiology of amyotrophic lateral sclerosis (ALS) and clarify the term motor neuron disease. Then is the ALS described in more details, talks about its history, epidemiology, aetiology, diagnosis, clinical manifestation, classification, treatment and palliative care in patients with ALS. In terms of physiotherapy is first described the course of physiotherapy in the 6 stages of ALS. Subsequently, specific physiotherapeutic techniques are described, which are used in therapy with a justification of what we can influence with their help. The described techniques are respiratory physiotherapy, active exercise, dynamic neuromuscular stabilization, passive exercise and the possibility of influencing pain through physiotherapy.

The practical part is consisting of an information brochure for patients with ALS in the 1st and 2nd stage of the disease and a case report of a patient in the late phase of ALS. The brochure is containing basic information about the disease and the possibilities of movement and exercise with the demonstration of specific exercises and their detailed description. The brochure is also including instruction on breathing exercises and information on the possibilities of breathing aids. The case report of a patient in the late phase of ALS covers an initial examination, a description of ten therapies performed and a final examination.

**Key Words:**

Amyotrophic lateral sclerosis, ALS, physiotherapy, exercises, motor neuron disease, breathing techniques