

Abstract (in English)

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Title: Case study of Physiotherapy Treatment of a Patient with Transfemoral Amputation

Objectives:

The thesis is structured in three main parts. The first part provides background information on lower limb amputations, covering the etiology, prevalence, clinical picture, etiology, prevalence, types of lower limb amputations, prosthetics, prognosis, complications, and patho-kinesiology. The second part covers the physiotherapy and rehabilitation that goes into lower limb amputations and currently available treatments. The final part presents a case study conducted at the Nemocnice na Homolce, including detailed examinations, therapy interventions, results evaluation, and therapy effectiveness.

Methods:

All examinations and treatments are based on the knowledge I have acquired in the Faculty of Physical Education and Sports of Charles University. These include goniometry, anthropometric measurements, posture and gait examinations and training, breathing pattern, muscle strength tests, and movement pattern. The methods used for the patient therapy were primarily strengthening exercises, stretching, soft tissue therapy, and PIR. No invasive methods were used.

The main goals of the therapy were to reduce the pain and edema, improve mobility, balance, and coordination, strengthen the residual limb and surrounding muscles, prevent secondary contractures (e.g., PLP, contractures), and improve posture and gait. To increase overall independence and ability to do ADLs and promote overall physical health so that the patient can continue rehabilitation with prosthetic fitting and training.

Results:

The patient underwent 16 therapy sessions that objectively and subjectively addressed various issues, including pain, muscle strength, posture, gait, movement patterns, anthropometrics, transfers/mobility, and breathing patterns. Objective measures indicated that the therapy sessions positively impacted the patient's physical health. In contrast, subjective measures significantly improved the patient's mental and emotional well-being.

Conclusion:

The therapy sessions successfully improved the patient's condition after a Lower Limb Amputation and the limitations found during the initial kinesiological examination. In addition, the structured, achievable goals and therapy plan contributed to significant progress, leading to reduced pain, improved confidence, and increased independence.

Keywords: Physiotherapy, Lower Limb Amputation, Rehabilitation, Early Phase