

Abstract

Title: Case study of physiotherapy treatment of a patient after acute respiratory failure due to COVID-19.

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Objectives: The aim of this bachelor thesis is to summarize the current theoretical knowledge about human respiratory system, COVID-19, acute respiratory failure and general physiotherapy methods used in patients who have undergone these diseases. The other aim of this bachelor thesis is to describe a case study of a patient after acute respiratory failure due to COVID-19.

Methods: The bachelor thesis was written based on a continuous physiotherapeutic internship at the Institute of clinical and experimental medicine in Prague at the department of KARIP, which took place between 18th January 2021 and 12th February 2021. The bachelor thesis is divided into theoretical and special part. Theoretical part contains information about anatomy of human respiratory system, physiology of breathing, COVID-19, acute respiratory failure and presents general physiotherapy methods used in patients afflicted by these diseases depending on their condition. Special part describes a case study of a patient after acute respiratory failure due to COVID-19, including a description of therapeutic units and evaluation of the effect of physiotherapeutic care. All this information was obtained from academic literature and other peer reviewed sources listed at the end of this thesis. The thesis is written from a physiotherapeutic point of view.

Results: The main improvement was in patient's mobility, spontaneous movement, range of motion of patient's right shoulder and gripping functions. There was also a slight improvement in muscle strength, range of motion of patient's other joints, a slight deepening and symmetrization of the patient's breath.

Keywords: respiratory system, COVID-19, acute respiratory failure, physiotherapy