Abstract

Title: The case study of physiotherapeutic treatment of a patient after acute respiratory failure caused by Legionella pneumonia.

Objectives: This work aimed to summarize general pieces of information about the respiratory system, Legionella pneumonia, and acute respiratory failure and perform a case study of a patient with this condition.

Methods: This thesis is divided into general and practical parts. The general part covers anatomical, physiological, and pathophysiological facts about the respiratory system, issues associated with Legionella pneumonia and acute respiratory failure, as well as physiotherapeutic methods used to treat patients with this condition. The practical part is a case study of a patient who experienced acute respiratory failure cause by Legionella pneumophila. All physiotherapy methods used were regularly recorded. The case study was carried out during a 4-week internship at the Institute for Clinical and Experimental Medicine between January and February 2021.

Results: At the beginning of the treatment, the patient was in a medically induced coma connected to breathing assistance. However, his condition soon began to improve. The most significant results were achieved in terms of mobility and physical ability of the patient. Furthermore, the muscle strength and the breathing stereotype significantly improved.

Keywords: acute respiratory failure, pneumonia, respiratory physiotherapy, physiotherapy