

## Abstract

This thesis aims to assess whether the level of the physical condition of patients before lung transplantation affects the length of hospitalization after transplantation. The study includes patients over 18 years of age with both unilateral and bilateral lung transplantation who underwent hospitalization between 2016 and 2018 and underwent a six-minute walk test in the preoperative examination. Data were collected at the 3rd Department of Surgery, First Faculty of Medicine, Charles University in Prague and Motol University Hospital and at the Department of Pneumology, 2nd Faculty of Medicine, Charles University in Prague and Motol University Hospital.

The results partially confirmed the correlation between hospitalization and physical condition in some patient groups. Thus, the higher the level of fitness in patients before lung transplantation, the shorter the hospitalization period. The length of hospitalization is influenced not only by the condition of the patient before surgery but also by other significant preoperative, perioperative and postoperative factors that are not related to the condition. For this reason, there is generally no clear correlation between the length of hospitalization and physical condition. Preoperative condition improvement is desirable in lung transplant candidates to support lung transplant success.