

Evaluation of Pulmonary Functions After Discharge in Pediatric Patients with Covid-19

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Abstract

Objective: In some adult patients diagnosed with Covid-19, abnormal lung imaging and then pulmonary fibrosis were detected in these patients after discharge. Studies on pulmonary function tests have been carried out in these patients, but not yet in pediatric patients. In our study, we performed pulmonary function tests 1 month after discharge in pediatric patients diagnosed with Covid-19. Thus, we thought that when we encountered pulmonary dysfunction in our patients, we could reduce morbidity and mortality by enabled them get involved in pulmonary rehabilitation programs. **Material and Methods:** In this prospective study, pediatric patients aged 5-18 years who were hospitalized and discharged with the diagnosis of Covid-19 were included. Pulmonary function tests were performed with spirometry in our patients. **Results:** 76 patients were screened. 34 patients were able to perform pft. When the percentage values of the patients in pulmonary function tests were compared with the test value of 100, no significant decrease was found. When the actual values measured by spirometry were compared with the predictive values that should be at the same age, weight and height, no significant decrease was found. However, in the correlation analysis, a moderately negative correlation was found between the length of hospital stay and Fef 25-75. **Conclusion:** The fact that the decreasing of Fef 25-75 as the hospitalization period increases due to Covid-19 may be meaningful in terms of showing us that having covid 19 worsens lung functions even in pediatric patients. More comprehensive studies are needed to understand the prognosis of these patients.

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