The Effect of Early Prone Position on Prognosis in Acute Respiratory Failure Due to COVID-19 Pneumonia

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Our study was planned retrospectively in 5 Covid Cohort intensive care units in our hospital to include the dates 15.03.2020 / 15.05.2020. The study started after getting approval from the local ethics committee of our hospital, ethics committee of the Ministry of Health and registering to Clinical Trials. Written and verbal consent was obtained from the patients themselves and / or their legal heirs.

The data of patients over 18 years old who were followed up and treated in the intensive care unit due to acute respiratory failure due to Covid 19 pneumonia were retrospectively reviewed.

Patients who developed acute respiratory failure due to Covid-19 pneumonia and received conventional oxygen therapy with reservoir mask oxygen at the stage of admission to the intensive care unit were included in the study.

patients with respiratory acidosis (Ph<7,30 and PaCO2>50 mmhg), P / F ratio below 150, Glaskow Coma Score (GKS) below 12 points, hemodynamic instability, primary pulmonary pathologies other than pneumonia (lung cancer, cardiopulmonary edema, carcinogen syndrome, etc.) were exculeded. patients who underwent NIMV or intubated from admission to intensive care, and those who underwent self PP under 12 hours were not included in the study.

The diagnosis of Covid-19 was made by PCR (Polymerase Chain Reaction) test. The diagnosis of pneumonia was made with clinical findings and the presence of multifocal ground-glass opacities that formed consolidation on computed tomography.

Acute respiratory failure; Despite the conventional oxygen treatment applied at 6 lt / min with a reservoir mask, it was defined as the P / F ratio being less than 300.

The first group (EPP) created for our study was composed of patients who received PP at least 12 hours early (with the first 48 hours) with the oxygen support of the reservoir mask, and the

second group (non-EPP) patients who received oxygen with the reservoir mask but could not be applied early PP due to the patient's incompatibility or rejection.

The demographic data of all patients, gender, body mass index (BMI) and additional diseases (Diabetus Mellitus, hypertension, coronary artery disease, Chronic Obsessive Pulmonary Disease, Congestive heart failure, Chronic kidney failure, etc.) were recorded.

Conventional oxygen therapy applied to all patients was given with a reservoir mask, aiming at SpO2 93% and above, at a flow rate of 6-15 L / min.
Despite all the treatments, the patients who have a follow-up with a respiratory acidosis (Ph<7,30 and PaCO2>50 mmhg), SpO2 value below 93%, applied NIMV, in case of insufficient patient intubated and have invasive mechanical ventilation. In patients who had regression of GKS during follow-up, orotracheal intubation was performed and invasive mechanical ventilation was performed.
The number of patients in need of intubation and the number of days they were separated from the ventilator were recorded.

The duration of hospitalization and short-term mortalities of all patients were recorded. Short-term mortality; ICU hospitalization and post-ICU service hospitalization or death up to 28 days in patients discharged home.