Assessment of the effect of hemoperfusion on the difficult separation of the patient from the ventilator in patients with Covid 19 admission to the intensive care unit

Background: Due to the high prevalence and mortality of Covid 19 disease, patients usually have difficulty in separating the ventilator. The mortality and the rate of separation from the ventilator in these patients is unknown and the existing articles are changing day by day. In Covid 19 patients, separation of patients from the ventilator is a major problem that plays a very important role in the mortality of these patients. Apart from the fact that in non-Covid patients, the patient's heart and brain must be stabilized to be separated from the ventilator in order to be able to be separated from the ventilator, but in Covid patients, despite the patient's cardiopulmonary stability, we are not able to separate the ventilator from these patients. Cardiopulmonary and hormonal issues and mineral deficiency is checked in these patients while they are stable. Contrary to expectations, we are not able to separate the device. With the experience we have gained in the intensive care unit, with the hemoperfusion of these patients, we will be able to separate the patients from ventilator. In this study, this issue is examined.

Aim: To separate the ventilator from the patients in the intensive care unit without causing complications and mortality

Materials & Methods: About 30 patients with Covid 19 with positive CT scan test who had difficulty weaning under ventilator were included in the study.

Results: The mean age of the total participants in the study was 48.38 years with a standard deviation of 15.04. The mean age and standard deviation in patients who were removed from the ventilator and patients who died were calculated (44.11 ± 15.63) and (50.56 ± 10.24), respectively, which had a statistically significant difference. This study was performed on 30 patients aged 20 to 75 years who referred to Imam Khomeini Hospital in Ardabil due to Covid 19 disease. 19 patients (63.3%) were weaned from ventilator and 11 patients (36.7%) suffered the consequences of death.

Conclusion: Considering the COVID-19 pandemic and the fact that new dimensions of its pathogenicity are revealed every day, it seems that more clinical studies are needed on the pathogenesis of the virus as well as its treatments, especially cleansing tools such as hemoperfusion. Suitable for patients and management of its side effects. It can be concluded that hemoperfusion was effective in difficult weaning.

Keywords: Hemoperfusion, Difficult separation of patient from ventilator, Covid 19 patient, Intensive care unit