Evaluation of the cost-effectiveness of three methods of plasmapheresis, hemoperfusion and remdesiver in patients with COVID 19 in Imam Khomeini Hospital in Ardabil.

Abstract

Background: Although the lower respiratory tract is a major site of involvement in patients with COVID-19, a wide range of cardiac complications, from myocarditis to arrhythmia and acute heart injury, have also been reported.

Aim: The aim of this study was to investigate the relationship between terponin and pro-BNP levels with mortality in patients with COVID 19 admitted to the intensive care unit.

Materials and Methods: In this descriptive cross-sectional study, 70 patients with Covid 19 admitted to the intensive care unit were included in the study. On the first day of hospitalization, after obtaining the informed consent of the patient or the patient's patient, the demographic variables of the patients including age, sex, height and weight, comorbidity were recorded in the relevant information form. After the initial completion of the form, 5 cc of venous blood sample was taken from each patient to measure serum levels of terponin and pro-BNP and its serum was isolated. Patients were followed up in terms of clinical course, length of hospital stay in the intensive care unit, response to treatment and in-hospital mortality. Patients with known heart failure were excluded from the study. The results of patients' tests were recorded in the relevant checklist. After data collection was performed based on statistical methods and using data analysis.

Results:in 70 patients that were evaluated, 58% were male. 55.7% of patients died. The mean ProBNP of patients in the discharged group was 289.74± 31.79 and the mean ProBNP of patients who died was 402.155± 81.43 pg / ml. Mean

proBNP and troponin were higher in deceased patients than in discharged patients(p=0.001).

Conclusion: It seems that the increase in NT-proBNP is not necessarily disease-specific, but rather reflects the worsening of hemodynamics, myocardial ischemia, a disorder of volumetric loading conditions. Thus, elevated NT-proBNP may reflect broader cardiovascular damage in COVID-19.

Keywords: Covid 19, NT-proBNP, Cardiovascular disease