

Comparison of clinical and laboratory findings in patients with Covid 19 with high troponin and without high troponin admitted to Imam Khomeini Hospital in Ardabil

Abstract

Background: Due to the importance of covid-19 disease as the pandemic of the century and considering that no study has been conducted in the country and Ardabil to check the level of troponin, in this study we decided to check the serum level of troponin in hospitalized patients. Patients with covid-19 in Imam Khomeini Hospital in Ardabil during 2019 and the factors related to it.

Aim: To determine clinical and laboratory findings in patients with covid 19 with and without high troponin.

Materials and methods: The present study was a retrospective cross-sectional descriptive study, in which all information was collected from the registered electronic files of the patients. The information of the patients hospitalized in the Corona virus ward during 2019 at Imam Khomeini Hospital in Ardabil was collected by a checklist. The presence of the researcher in the relevant hospitals and the collection of data and completion of the questionnaires were done using the electronic files of the patients. The checklist used included demographic information and a checklist related to clinical and laboratory findings.

Results: In the present study; 866 patients were included in the study. Among these, 644 patients (74.4%) were in the group with normal troponin and 222 patients (25.6%) were in the group with high troponin. in terms of gender of patients; 466 patients (53.8%) were male and 400 patients (46.2%) were female. The average age of the patients was 62.45 years with a standard deviation of 16.07. There was a significant difference between the outcome of the disease and the troponin of the patients, so that the patients with the outcome of death had a significantly higher level than the patients with high troponin ($P<0.05$). Also, there was a significant difference between the severity of the disease and troponin of the patients, so as the severity of the disease worsened, the number of patients with high troponin increased ($P<0.05$).

Conclusion: Corona virus disease and how to prevent and treat it was the most important health challenge of the last decade. In the present study, we reached the conclusion that troponin and its level in patients infected with corona virus have a decisive and significant role in predicting the outcome of the disease, and therefore, it is recommended that respected colleagues pay special attention to this enzyme and its changes in following up the treatment process of patients.

Keywords: troponin, covid 19