Investigating inflammatory markers (LDH, Ferretin, WBC, ESR, etc.) and disease outcome in covid 19 patients receiving remdesivir hospitalized in Imam Khomeini Hospital, Ardabil, in the outbreak of Omicron variant (December 2022 May 2023)

Abstract

Background: The Covid-19 pandemic caused by the novel coronavirus-2019, which is the third known animal coronavirus disease after SARS and Middle East Respiratory Syndrome (MERS). The initial symptoms of covid-19 include pulmonary symptoms (cough and shortness of breath) and extrapulmonary symptoms (muscle pain, fatigue, headache, fever, etc.).

Purpose: The purpose of this study is to determine laboratory parameters (inflammatory markers, etc.) and disease outcome in covid-19 patients receiving remdesivir hospitalized in Imam Khomeini Hospital, Ardabil, in the outbreak of Omicron variant (December 2022 to May 2023).

Materials and Methods: The present study is a cross-sectional descriptive analytical study that was conducted in 2023 at the Faculty of Medicine of the University of Medical Sciences and Imam Khomeini (RA) Hospital in Ardabil on the patients of Covid-19 in Ardabil city. In this study, a researcher-made checklist based on the objectives of the study was used to collect data. The checklist included several demographic and clinical sections and information related to receiving remdesivir. Finally, the study data were analyzed using t-test and SPSS23 software.

Results: In this research, the gender of most of the studied subjects is male, and one of the most common underlying diseases in the studied subjects is blood pressure, followed by diabetes. In terms of the outcome of the disease, only 9 of

the 143 patients died. 55% of people were over 60 years old. In terms of clinical symptoms in the subjects of the study, the symptoms related to the respiratory group had the highest incidence rate. The average value related to the tests of AST, ALT, LDH, Troponin, etc. enzymes was above the normal range.

Conclusion: According to the results of the present study, although this drug has been useful in improving the treatment process of covid-19 patients, the benefits of this drug in reducing patient mortality require more and larger studies with a larger sample size. Also, inflammatory markers have increased in these patients.

Keywords: Covid-19, Remdesivir, Omicron, laboratory parameters