## Comparison of the prevalence of thrombocytopenia in patients recovered from COVID-19 with a history of hospitalization in ICU with patients who died in Imam Khomeini Hospital Ardabil

## Abstract

**Background:** Thrombocytopenia is one of the clinical manifestations of COVID-19, and its major complication bleeding, worsens the course of the disease. Considering the clinical importance of thrombocytopenia in COVID-19 and its impact on the process and Disease prognosis, In this study, we evaluated the frequency of thrombocytopenia in patients admitted to ICU.

**Aim:** The aim of this study was to investigate the frequency of thrombocytopenia in severe COVID-19 patients admitted to the ICU of Imam Khomeini Hospital in recovered patients versus deceased patients.

**Materials and methods:** This study was conducted on patients with Covid-19 hospitalized in the itensive care unit of Imam Khomeini Hospital in Ardabil in the first half of 2021. Patients were examined in two groups: recovered and expired. Demographic, clinical and laboratory information, the severity of thrombocytopenia and the result of hospitalization were obtained from the patients' files. Then the information was entered into the checklist and analyzed.

**Results:** There were 14 cases (56%) of thrombocytopenia in recovered patients and 104 cases (58.4%) in expired patients. The most type of treatment for Covid-19 patients in ICU was remdesivir; 21 cases (84%) of recovered patients treated with remdesivir had thrombocytopenia, while in patients who died treated with remdesivir, the frequency of thrombocytopenia was 116 cases (65.2%).

**Conclusion:** Male gender, increasing age and heart failure as an influencing factor caused an increase in thrombocytopenia in patients who died compared to patients who recovered with Covid-19 in special departments, however, in the logistic regression analysis, only increasing age as a factor The effective factor increased thrombocytopenia in these patients. Thrombocytopenia is more common in critically ill Covid-19 patients than in recovered patients.

Key words: Thrombocytopenia, Covid-19, Intensive Care Unit, Prognosis, Severe covid-19