

**Comparison of echocardiographic findings and inflammatory markers in myocardial infarction patients With and without Covid 19 hospitalized in Ardabil Imam Khomeini Hospital in 1400**

**Abstract:**

**Background:**

In addition to causing respiratory complications, the SARS-COV-2 virus affects various organs in the body and can lead to numerous complications, including cardiovascular issues, and even exacerbate underlying conditions.

**Aim:**

The present study aimed to compare the findings of echocardiography and inflammatory markers in patients with and without COVID-19 who were hospitalized for acute myocardial infarction at Imam Khomeini Hospital in Ardabil in the year 2021.

**Materials and Methods:**

This study included individuals who were hospitalized for acute myocardial infarction with and without COVID-19 in 2021 at Imam Khomeini Hospital in Ardabil. A checklist was completed for all study participants, including demographic information, echocardiographic findings, and inflammatory markers. Relevant patient information such as demographics (including age, gender, medical history, medication history, etc.), echocardiographic data (ejection fraction, wall thickness, diastolic function, segmental motion, wall motion, and pulmonary artery pressure), and inflammatory marker findings (including troponin, D-dimer, and CRP) were extracted from patient records and recorded in a designed questionnaire for each patient.

**Results:**

The results of this study showed that among individuals with a history of myocardial infarction (heart attack), there was no significant difference in echocardiographic findings, including wall thickness, diastolic function, segmental wall motion, wall motion, and pulmonary artery pressure when comparing those with and without COVID-19. Furthermore, the findings of this study indicated that inflammatory markers (troponin, D-dimer, and CRP) did not exhibit significant differences between patients with acute myocardial infarction with and without COVID-19 (P-value > 0.05).

**Conclusion:**

Based on the findings, it appears that COVID-19 infection does not lead to significant alterations in echocardiographic findings or cardiac inflammatory biomarker

**Key words:**

Acute myocardial infarction, Covid-19, Echocardiography: