Evaluation of Glyc A and its relationship with cardiovascular complications in patients with rheumatoid arthritis referred to Imam Khomeini Hospital in Ardabil during 2021

Abstract

Background: Rheumatoid arthritis is the most common autoimmune disease in the world. The GlycA biomarker can help identify people at risk for future cardiovascular disease (CV), help assess disease activitycan be used.

Aim: The aim of this study was to evaluate Glyc A in patients with rheumatoid arthritis and its relationship with cardiovascular complications in patients referred to Imam Khomeini Hospital in Ardabil during 2021 .

Materials and Methods: In this cross-sectional study, patients with rheumatoid arthritis who referred to the rheumatology clinic of Imam Khomeini Hospital in Ardabil during 2021, were included in the study and after obtaining written consent, a checklist for each patient including demographic information of patients, age Gender, duration of disease onset, duration of diagnosis, clinical and laboratory findings, history of heart disease, risk factors for heart disease, smoking, comorbidities were recorded. Then 2 cc of venous blood sample was taken from each patient to measure GlycA. Patients then underwent cardiac examination, ECG and echocardiography. 20 healthy individuals were also included in the study as a control group. The findings of these studies were included in checklists. After studying the data, the data were entered into the software and analyzed.

Results: The results showed that the mean GlycA in the case group was significantly higher than the control group. In the case group, there was a direct relationship between GlycA level with ESR and CRP. In addition, there was a statistically significant difference in the mean GlycA in patients with rheumatoid arthritis with myocardial infarction based on ECG and echocardiography and without complication.

Conclusion: According to the results of this study, it seems that GlycA biomarker in addition to diagnostic applications also has prognostic value.

Keywords: Rheumatoid arthritis, GlycA, Cardiovascular disease