

Comparative study of DAS-28 ESR and DAS-28 CRP in determining the severity of disease activity in patients with rheumatoid arthritis in Imam Khomeini Hospital in Ardabil

Abstract

Background:

Rheumatoid arthritis is a systemic and chronic disease. Combined indicators, such as disease activity score or DAS-28, can be used to categorize quantitative disease activity status and recovery. But in this calculation there is no difference between using ESR or CRP. However, there are studies that show that using CRP instead of ESR will cause the severity of the disease to be underestimated.

Aim: Comparison of DAS-28 ESR and DAS-28 CRP in determining the severity of disease activity in patients with rheumatoid arthritis

Methods and materials: This study was a cross-sectional and descriptive-analytical study on patients with rheumatoid arthritis who referred to the rheumatology clinic of Imam Khomeini Hospital. 200 patients from the target community who referred to the rheumatology clinic were randomly selected and studied. Relevant questionnaires including demographic information such as age, sex, cigar consumption were completed from the study.

Results: In this study, 200 patients with RA who met the inclusion criteria were randomly selected and evaluated. The results showed that the mean age of participants in the study was 50.38 ± 12.82 and those in the age range of 18. They were up to 90 years old and 20% of the people were men and the rest were women. The study on alcohol and cigarette use in patients showed that 3 cases (1.5%) of patients had a history of alcohol consumption and 9 cases (4.5%) had a history of smoking. Examination of DAS 28 in individuals showed that the mean of DAS28 in terms of CRP in patients is lower than the mean score of DAS28 in terms of ESR DAS28 showed less disease activity in terms of CRP and this difference was statistically significant. ($P = 0.001$) There was no significant relationship between gender, age and serum albumin level with DAS28 score based on ESR and CRP. There was no statistically significant relationship between VAS in patients and DAS28

Conclusion: According to the results of the present study and previous studies, it seems that if CRP is used to determine the severity of the disease, it is better to use a new scoring criterion for patients.

Keywords: Rheumatoid arthritis, DAS-28 ESR, DAS-28 CRP