Evaluation of Serum CRP and Vitamin D in Rheumatoid Arteritis Patients and Healthy People

Abdollahi, E. (MSc)
MSc of Immunology, Faculty of Medicine, Shahid Sadoughi University of Medical Sciences, Yazd, Iran

Tavasolian, F. (MSc)
MSc of Immunology, Faculty of Medicine, Shahid Sadoughi University of Medical Sciences, Yazd, Iran

Vakili, M. (PhD)
Assistant Professor of Community Medicine, Faculty of Medicine, Shahid Sadoughi University of Medical Sciences, Yazd, Iran

Samadi, M. (PhD)
Assistant Professor of Immunology, Faculty of Medicine, Shahid Sadoughi University of Medical Sciences, Yazd, Iran

Corresponding Author:
Samadi, M.

Email: amadi@ssu.ac.ir

Received: 20 Jul 2013
Revised: 28 Nov 2013
Accepted: 25 Dec 2013

Abstract

Background and Objective: C- reactive protein (CRP), as an acute phase reactant and a reliable marker of inflammation, increases due to inflammatory diseases such as Rheumatoid Arteritis and infectious conditions. New evidence shows that Vitamin D may have important effects on adjusting and reducing the Immune Responses. The aim of this study was to evaluate the association between serum vitamin D as an immunomodulator factor and CRP as an inflammatory factor in Arteritis Patients. .

Material and Methods: The CRP and Vitamin D were evaluated in Rheumatoid Arteritis patients confirmed by Medical records (40 men and 40 women) and in 80 healthy adult people with normal CRP and Vitamin D and no history of arteritis (40 men and 40 women). Torbidometry was used to measure CRP and Eliza for Vitamin D.

Results: In patient group, the mean of CRP and Vitamin D were 95.9±9.1 Mlg/lit and 9.17±2.9 Mlg/lit, resoectively. There was a significant inverse correlation between C-reactive protein and vitamin D in Rheumatoid Arteritis patients (Pvalue= 0.03 ; Pearson correlation: -0.62) and that was the case for healthy people (p value: 0.04; Pearson correlation: -0.73).

Conclusion: Based on the findings, inverse correlation is observed between serum vitamin D and CRP level.

Keywords: Vitamin D, CRP, Rheumatoid Arteritis

This paper should be cited as: Abdollahi E, Tavasolian F, Vakili M, Samadi M. [Evaluation of Serum CRP and Vitamin D in Rheumatoid Arteritis Patients and Healthy People]. mljgoums. 2015; 9(1): 90-96[Article in Persian]