

Original Paper

Diagnostic value of simultaneous use of anti-cyclic citrulinated peptide and rheumatoid factor in rheumatoid arthritis

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Abstract

Background and Objective: Rheumatoid arthritis (RA) is a systemic and chronic disease. Anticitrulinated anticyclic antibody (Anti-CCP) and rheumatoid factor (RF) are applied for the diagnosis of rheumatoid arthritis. This study was designed to evaluate the diagnostic value of anticitrulinated cyclic antibody and rheumatoid factor in rheumatoid arthritis patients.

Materials and Methods: This laboratory study was done on 238 affected RF patients and 152 RF symptom free subjects in Gorgan, Iran. Anti-CCP and RF were measured by ELISA and Latex agglutination.

Results: Out of 238 patients with rheumatoid arthritis Anti-CCP test was positive in 196 patients, and the sensitivity was 82%. In control group, Anti-CCP was positive in 5 cases, and the specificity for RA was 96%. RF test was positive in 206 patients and sensitivity for RF in rheumatoid factor was 86%. In control group, RF was positive in 28 cases and specificity was 81%. Positive RF and Anti-CCP (simultaneously) showed sensitivity as 89%.

Conclusion: The specificity of CCP is higher than RF and therefore can be substituted as diagnosis of rheumatoid factor.

Keywords: Anti-CCP, Rheumatoid factor, Rheumatoid arthritis

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Received 21 October 2012

Revised 23 May 2013

Accepted 9 June 2013