Original article

Estimation of serological marker for the diagnosis of rheumatoid arthritis

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Rheumatoid arthritis (RA) is a chronic auto-immune disease that affects multiple joints. The most promising candidates are the autoantibodies to antigens containing one or more than one citrulline residues (cyclic citrulline peptides, CCP) - the anti-CCP antibodies apart from C-reactive protein. They play an important role in the diagnosis, prognosis and therapeutic approach to patients with RA. Their high specificity, the ability to diagnose RA early in its development and distinguish it from other nonerosive type of arthritis, make the anti-cyclic citrullinated peptide antibody (ACCP) a key serologic marker. The aim of this study was to investigate the role of Anti-CCP in addition to C-reactive protein (CRP) for the diagnosis and therapeutic management of RA. Anti-cyclic citrullinated peptide antibodies were determined quantitatively by Enzyme-Linked Immunosorbent assay (ELISA) and serum C-reactive protein detected using Avitex CRP kit, which is a rapid latex agglutination test. The results showed a statistically significant anti-CCP levels in serum of patients with rheumatoid arthritis (p<0.001). CRP test was found to be positive in 37/40 cases of RA and none of the controls. Conclusion, anti-CCP assay can be a reliable, sensitive and specific test, and CRP is an important inflammatory marker for rapid diagnosis of rheumatoid arthritis.