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EVALUATION OF BIOCHEMICAL MARKER FOR THE DIAGNOSIS OF RHEUMATOID ARTHRITIS

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ABSTRACT

Objectives: Rheumatoid arthritis (RA) is a chronic auto-immune disorder; there is a prominent immunological dysfunction in the joints and many other tissues by accumulation of chronic inflammatory cells including T and B lymphocytes, monocytes and macrophage, which is due to result of cell mediated immune response in RA patients. Adenosine deaminase (ADA) is one of the marker of cellular immunity and it is a key enzyme of purine metabolism, play an important role in the determination of the seriousness of an inflammatory process. The aim of this study was to investigate the role of adenosine deaminase in addition to C-reactive protein (CRP) for the diagnosis and therapeutic management of RA. **Material and methods:** Catalytic activities of ADA in serum were determined by a spectrophotometric method at 630 nm and serum C-reactive protein detected using Avitex CRP kit, which is a rapid latex agglutination test. **Results:** The results showed a statistically significant ADA levels in serum of patients with rheumatoid arthritis ($p<0.001$). CRP test was found to be positive in 36/40 cases of RA and none of the controls. **Conclusion:** ADA assay can be a reliable, sensitive and specific test, and CRP is an important inflammatory marker for rapid diagnosis of rheumatoid arthritis.