Evaluation of Serum Soluble Interleukin-2 Receptor level in Diagnosis of Rheumatoid Arthritis.

Abstract

Background: This study aimed to assess the potential clinical utility of serum level of serum soluble interleukin-2 receptor (sIL-2R) as a diagnostic tool in rheumatoid arthritis disease (RA). This study investigate the association between serum sIL-2R levels with other parameters used for estimation of RA such as rheumatoid factor (RF), erythrocytes sedimentation rate (ESR), C-reactive protein (CRP), and uric acid.

Methods: Serum sIL-2R levels, measured by ELISA, were evaluated in 25 RA patients who have positive RF. SIL-2R values were compared with those of 25 normal controls and the correlation with the other parameters was analyzed.

Results: Compared with the healthy control group, RA patients tended to have significantly higher serum sIL-2R and ESR concentrations (P<0.001). While no significant difference between both groups in serum uric acid. Positive serum CRP (CRP level >6 mg/dl) were found in 58% of patients. The sIL-2R level was positively correlated with RF and ESR, while a slight positive correlation with uric acid. Serum sIL-2R showed a highly sensitivity and specificity for the patients with positive RF.

Conclusions: sIL-2R levels may be useful, sensitive, and specific marker for diagnostic of RA.

Key words: C-reactive protein, Erythrocyte sedimentation rate, Rheumatoid arthritis, Soluble interleukine-2 receptors.