Comparison of serum levels of CRP, RF and CIC before and after treatment in hospitalized patients with infective endocarditis in Ahvaz- Iran

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Abstract

Background and Objective: Previous reports on the effect of treatment on the serum immunologic parameters in patients with infective endocarditis are controversial. This study was conducted to asses the serum levels of CRP (C-reactive protein), RF (rheumatoid factor) and CIC (circulatory immune complex) before and after treatment in patients with infective endocarditis.

Materials and Methods: In this descriptive study 30 hospitalized patients with infective endocarditis in Razi Hospital in Ahvaz during 2006. Blood samples obtained before and after treatment. 2.5 cc of each sample were used for CRP and RF and remaining 2.5 cc preserved at -20ºC until CIC examination. CRP and RF were measured by using nephelometry and CIC was detected by immundiffusion method. The data were analyzed using SPSS-16 and t-student test.

Results: Out of 30 patients, 26 (86.7%) were male. Mean age was 29.53±10.28 years. The mean values of CIC, CRP and RF before and after treatment were 0.847, 72.38, 60.45 and 0.80, 44.1, 41.2, respectively. The means of CRP and RF before and after treatment were statistically significant (p<0.05).

Conclusion: This study showed that the serum level of CRP and RF reduce after effective treatments because most of the our patients were intravenous drug user, CRP and RF indeces may be useful measurment for treatment evaluation responses to infective endocarditis in these population.

Keywords: Infective endocarditis, CRP, Rheumatoid Factor, Immune complex

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