

Elevated Levels of IL- 6 in serum of SLE patients correlated with High- sensitivity CRP and ESR.

Abstract

Systemic Lupus erythematosus (SLE) is an autoimmune disease more prominent in women characterized by wide variety of auto antibodies production, some of which are pathogenic, immune complex deposition and various clinical systemic manifestation that effect various organ. The aim of this study is to investigate the correlation between IL-6, high sensitivity CRP, ESR and organ involvement in SLE patients and to assess if IL-6 could be related to disease activity and to organ involvement. Total of 50 patients with SLE(48female.2Male) and 30 healthy control were studied. SLE patients were divided into two groups 42 patients had active disease and 8 had inactive disease at $p=0.000$. The mean level of IL-6 in SLE patients and healthy control groups was (541.1; 5.31 pg/ml) respectively, the difference was statistically significant at ($p=0.000$). There was positive correlation between serum IL-6 and SLEDAI ($r= 0.422^{**}$, $p= 0.002$). Associations of IL-6 levels in patients with active and inactive disease in different organs were high significant at $p=0.000$, The mean levels of IL-6 in patients with Lupus nephritis was (936.270pg/ml) the difference was higher significantly than other organs ($p=0.000$). The mean levels of hs CRP for SLE patients was (6.08 mg/l) and the difference was statistically significant ($p= 0.000$) than healthy control groups, There was strong positive correlation between IL-6 and hs CRP in serum of SLE patients ($r= 0.969^{**}$, $p= 0.000$). But the difference was not significant between hs CRP and ESR ($r= 0.249$, $p = 0.08$), The mean levels of hs CRP in SLE patients was (8.844 mg/l) significantly higher in patients with lupus nephritis than other organs $p= 0.000$.