-Effect of IL6 and IL23 on double negative T cells and anti ds DNA in Systemic lupus Erythematosus Patients

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Abstract:

Several evidences suggest that DN T cells, IL23 and IL6 play a role in the pathogenesis of SLE. This study aimed to evaluate the frequency of DN T cells in SLE patients and the relation to their activity also to assess the possible role of IL6 and IL23 on DN T cells. Thirty patients with SLE and sixteen healthy blood donor females were enrolled. There was a significant increase in DN T cells in patients than controls (P=0.001). These cells had a significant positive correlation with SLEDAI (r= 0.486, P= 0.006). DN T cells from SLE patient samples were expanded when stimulated in vitro with RhIL6 or RhIL23 in patients than controls. Furthermore, anti ds-DNA level was found to be increased in supernatant of PBMCs when stimulated by these cytokines in different concentrations. Our findings suggest that IL6 and IL23 may play role in SLE pathogenesis through their effect on DN T cells and anti ds-DNA.

Keywords:

DN T cells; SLE; IL23

Published In:

Human Immunology , Vol. 77- No. 10 , pp. 937-43