عنوان مقاله:

IL-17 is Aberrantly Overexpressed Among Under-treatment Systemic Lupus Erythematosus Patients

محل انتشار:

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خلاصه مقاله:

Background & Objective: Systemic lupus erythematosus (SLE) is an autoimmune disease with chronic inflammatory immune response. Current therapies mostly rely on glucocorticoids which are accompanied by side-effects and mostly fail to achieve a favorable remission. Th17 subpopulation of T cells is increased in exacerbated SLE as IL-17 cytokine is overexpressed. However, IL-17 is reported to be resistant to glucocorticoids in various disorders. Here, we evaluated the plasma level of IL-17 among newly diagnosed and under-treatment SLE patients to understand the effect of glucocorticoids on Th17 response. Methods: A total of 40 female SLE patients and 20 age- and sex-matched normal subjects were enrolled. IL-17 plasma level was evaluated using ELISA cytokine assay and analyzed with previously obtained IL-10, IFN-γ, and GILZ levels. Results: Our findings revealed that IL-17 was overexpressed among under-treatment SLE patients. There was a significant correlation between IL-17 and IFN-γ and significant reverse correlations between IL-17, IL-10, and GILZ levels. IL-17 was not significantly correlated with the disease activity. Conclusion: According to the role of IL-17 in tissue injury and the fact that glucocorticoids are not successful in preventing organ damages in SLE, the overexpressed IL-17 in response to therapies could be introduced as an underlying reason.

کلمات کلیدی:

Systemic Lupus Erythematosus, IL-17, glucocorticoids, pathogenesis, organ damage, Treatment