

MOOD AND ANXIETY DISORDERS IN LUPUS ERYTHEMATOSUS: POSSIBLE ASSOCIATION WITH INFLAMMATORY CYTOKINES.

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Abstract

Mood and anxiety disorders are often found in patients with SLE and this finding affect the quality of life of patients; some studies have shown that cytokines may develop a role in this mechanism. In our study we observed that there was a prevalence of mood and anxiety disorders in patients compared to healthy controls and IL-6 was associated with the presence of anxiety and IL10 was associated with the presence of mood disorder in patients with SLE.

Key words: SLE, Mood disorders, cytokines.

Introduction

Systemic lupus erythematosus (SLE) is an autoimmune disease that has a wide spectrum of clinical and laboratory manifestations. Some studies have shown that cytokines may have influence on mood disorders in patients with SLE.

The aim of our study was to evaluate the prevalence of mood disorders in patients with SLE and controls, well as determine whether levels of inflammatory cytokines are associated with mood disorders in SLE

Results and Discussion

We included 130 patients with SLE followed at ambulatory of Rheumatology of UNICAMP and 45 healthy controls. All patients and controls filled in the anxiety questionnaire (BAI) and depression (BDI) Beck. Blood samples were obtained on the day of consultation of patients and used the enzyme-linked immunosorbent assay (ELISA) to quantitate the levels of IL-4, IL-5, IL-6, IL-10, IL-12 and IFN- γ .

SLE patients had a mean age of 42.2 ± 12.03 years and mean time of disease 12.8 ± 7.11 years. We observed that patients with SLE had significantly more anxiety symptoms ($p = 0.0001$) and depression ($p = 0.001$) compared with healthy controls. We observed that IL-6 levels were associated with the presence of anxiety ($p = 0.036$) and IL-10 levels were associated with the presence of mood disorders ($p = 0.025$). We did not observe other associations.

The literature has shown that patients with SLE have a prevalence of mood disorder, this finding may occur in isolation or in conjunction with other neuropsychiatric manifestations in SLE. The mood

disorder may affect negatively the quality of life of patients.

Several studies showed a novel molecular relationship between immunity (cytokine/antibodies) and neural activity; this is of particular relevance to patients suffering from psychiatric or neurological diseases, and also autoimmunity disease. Thus cytokines may have a pathogenic role in mood disorder mechanism in SLE

Conclusions

There was a prevalence of mood and anxiety disorders in SLE patients compared with healthy controls. IL-6 levels were associated with anxiety symptoms and IL-10 levels have been associated with mood disorders in patients with SLE

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