

Study of memory dysfunction and interleukin-6 in euthymic Egyptian patients with bipolar disorder

Background: There is evidence supporting a pathophysiological role for inflammatory markers in bipolar disorder (BD). Interleukin-6 (IL-6) was assumed to play a role in pathophysiology as well as in memory deficits in BD during euthymia.

Aim of the study: The aim of this study was to assess the level of serum IL-6 in patients with BD during euthymia and its relation to memory dysfunction.

Patients and methods:

Forty patients with BD during euthymia and 40 healthy controls matched in age, sex, and educational level to the patients' group were assessed and compared as regards the level of serum IL-6 and memory functions.

Results:

The mean level of serum IL-6 of patients with BD was significantly higher than that of healthy control group. Patients showed poorer performance in verbal memory. There was a statistically significant negative correlation between the level of serum IL-6 and some memory functions such as information, orientation, mental control, figural memory, visual paired association, visual memory span, digit span, and verbal memory. Also, there was a statistically significant positive correlation between the level of serum IL-6 and the age, number of episodes, and duration of illness in the patient's group.

Conclusion:

The level of serum IL-6 in patients with BD during euthymia is higher than that of healthy controls and correlated positively with memory dysfunctions, age, number of episodes, and duration of illness in BD during euthymia.