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EVALUATION OF PERIPHERAL BIOMARKERS IN BIPOLAR AND UNIPOLAR DEPRESSION

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Introduction: In recent years there has been a growing recognition that changes in the immune system, oxidative stress and neurotrophic factors could contribute to the development of mood episodes. The diagnosis of Bipolar disorder is a challenge to be recognized due to the high degree of overlap of symptoms, which are presented by a patient during bipolar depressive episode and correlate with the diagnostic criteria for major depression. In this context, the search for peripheral markers for psychiatric disorders has followed for many years, yet remains undefined. Objective: As a result, this study aims to search for peripheral markers for use in aiding the differential diagnosis of unipolar and bipolar depression. Methods: We measured serum levels of Brain Derived Neurotrophic Factor (BDNF); interleukins (IL-2, IL-4, IL-6, IL-10, TNF, IFN-γ, IL-17), damage to lipids and proteins in 54 depressive Bipolar and Unipolar outpatients matched to 54 healthy volunteers. Results: In this study we found increased interleukin-6 in both groups compared to controls (p = 0.020 and p = 0.001, respectively), as well as increased damage to proteins in unipolar patients (p = 0.003). There were no changes in BDNF levels in both groups of patients (p = 0.295) and the content of lipid peroxidation (p = 0.860). A positive correlation was found between the values of HDRS and protein carbonyl levels (r = 0.291, p = 0.036) in bipolar patients. Conclusion: Our results indicate the involvement of oxidative stress, damage to proteins, and a change in the inflammatory immune system in depressed patients; however the markers evaluated here were not suitable for differentiation of unipolar and bipolar depressive disorders, more research is needed, with a larger sample to validate these findings.