

EVALUATION OF INFLAMMATORY MARKERS IN PATIENTS WITH CHRONIC PSYCHOTIC DISORDER AND FIRST-EPISODE PSYCHOSIS COMPARED TO A HEALTHY CONTROL GROUP

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BACKGROUND AND AIM: Recently, the importance of inflammatory processes in the etiology of psychotic disorders has been increasingly emphasized. In this context, this study aimed to compare the values of accepted inflammatory markers, including neutrophil-lymphocyte ratio (NLR), monocyte-lymphocyte ratio (MLR), and platelet-lymphocyte ratio (PLR), among patients with initial diagnosis of psychosis, patients with chronic psychotic disorders, and a healthy control group.

METHODS: : (Karabük University Faculty of Medicine Ethics Committee Application Number: 2026/2711). The retrospective study included 215 patients in total: 52 patients admitted to the psychiatry ward of Karabük Training and Research Hospital between January 1, 2021, and December 31, 2025, who had no prior antipsychotic use and were diagnosed with psychosis for the first time; 163 patients with chronic psychotic disorders who had been followed up for at least one year; and 215 healthy control subjects who applied to the family medicine outpatient clinic for health screening. Participants with a history of alcohol or substance use, chronic or inflammatory disease, and cancer were excluded. NLR, MLR, and PLR levels obtained from

complete blood count samples taken on the date of admission were compared with a healthy control group of 215 individuals matched for age and gender

RESULTS: Of the participants, 243 (56.5%) were male, with an average age of 40.1 ± 11.9 years. In three-group comparison, patients with initial diagnosis of psychosis had lower lymphocyte counts and higher NLR, MLR, and PLR values compared to the control group ($p < 0.05$). Patients with chronic psychotic disorder had lower platelet counts and higher MLR values compared to the control group ($p < 0.05$). PLR levels were higher in patients with initial diagnosis of psychosis compared to those with chronic psychotic disorder ($p = 0.019$).

CONCLUSIONS: The significantly higher values of peripheral markers of inflammation, such as NLR and MLR, in psychotic patients compared to a healthy control group suggest that inflammation may play an important role in the etiopathogenesis of the disease.

Keywords: Psychosis, inflammation, monocyte-lymphocyte ratio, neutrophil-lymphocyte ratio, platelet-lymphocyte ratio