Inflammation with Neutrophil-to-lymphocyte Ratio and Platelet-to-lymphocyte Ratio in Restless Legs Syndrome

Huzursuz Bacaklar Sendromunda Enflamasyonun Nötrofil-lenfosit ve Trombosit-lenfosit Oranları ile Değerlendirilmesi

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Dear Editor,

Restless legs syndrome (RLS) is a chronic, progressive sensorimotor neurologic condition (1). In some recent studies, RLS has been associated with inflammatory diseases such as rheumatoid arthritis, systemic lupus, Crohn’s disease, and celiac disease (2,3), and the possible role of inflammation in the etiology has been discussed. Hypoxia-inducible factor-1 alpha (HIF-1α) acts as a regulator in inflammation (4). In a study by Patton et al. (5), high HIF-1α values were shown in the substantia nigra neurons of patients with RLS, indicating the role of inflammation at the cellular level in RLS. The neutrophil-to-lymphocyte ratio (NLR) and platelet-to-lymphocyte ratio (PLR) are low cost and easily applicable methods that have recently been studied as markers of inflammation in various studies. NLR has been evaluated in a number of central and systemic neurologic diseases such as ischemic and hemorrhagic cerebrovascular diseases, myasthenia gravis, and multiple sclerosis, and its association with prognosis has been shown (2,3). In the literature, a single study evaluated inflammation with NLR, which was found to be significantly higher in the RLS group and the effect of inflammation in the etiology was discussed (3). In our study, we aimed to evaluate the inflammation with NLR and PLR in RLS and to discuss whether they may be biomarkers in terms of inflammation in such neurological diseases.

Keywords: Restless legs syndrome, neutrophil-to-lymphocyte ratio, platelet-to-lymphocyte ratio

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