Dermatology Practical & Conceptual

Evaluation of the Effects of Systemic Therapy on Inflammatory Markers and Disease Severity in Patients with Pemphigus

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Dear Editor,

We read with great interest the recent article on the role of inflammatory biomarkers in autoimmune skin diseases. In this context, we would like to contribute to the discussion by sharing our findings regarding hematological indices as potential markers for monitoring disease activity and treatment response in patients with pemphigus vulgaris [1].

Since pemphigus is a chronic autoimmune bullous disease, inflammatory indices are expected to reflect progressive improvement with therapy. Güner et al. demonstrated that certain biomarkers, such as the lymphocyte-to-monocyte ratio (LMR), show a negative correlation with disease severity. We added the systemic immune-inflammation index (SII), calculated as platelets × neutrophils/ lymphocytes, as an additional parameter in this setting [2].

We conducted a retrospective study of 27 patients with pemphigus vulgaris, 25% males (N=7) and 75% females (N=20), with a median age of 45 years (IQR 35–55). The median PDAI score was 28 (IQR 12–67). Hematological indices (LMR, NLR, PLR, and SII) were assessed after ≥9 months of follow-up and correlated with clinical severity using Spearman's coefficient. Contrary to the findings of Güner et al., our results (Figure 1) revealed inverse correlations for PLR (rs= –0.464) and SII (rs= –0.307), which may reflect the influence of multiple factors, including the immunomodulatory effects of corticosteroids, azathioprine, or mycophenolate mofetil. These therapies can alter peripheral blood cell distribution, thereby reducing the accuracy of these indices as markers of real inflammation in advanced disease stages.

These findings do not negate the potential utility of these indices at early stages or at treatment initiation. However, we suggest caution when extrapolating their value in long-term follow-up, where their behavior may be more strongly influenced by therapy than by disease activity.

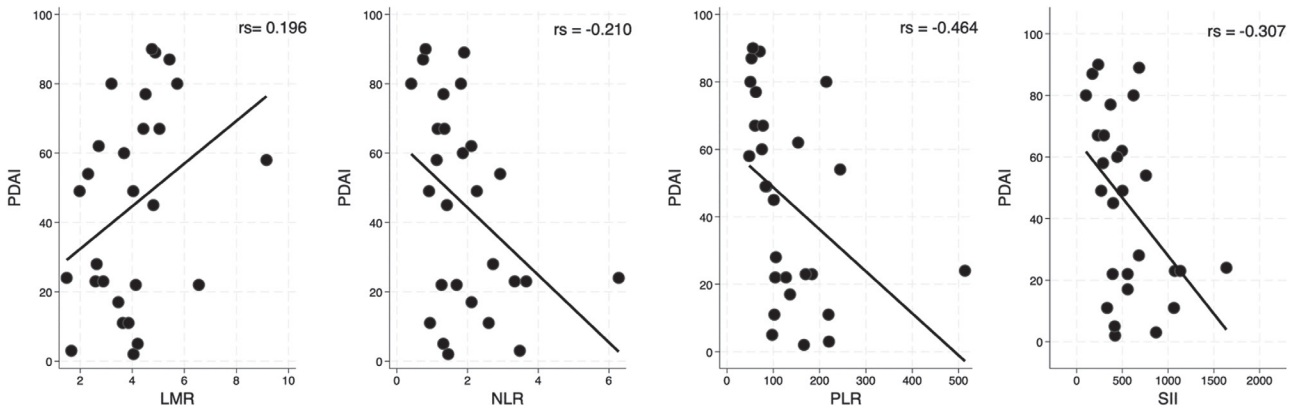

Figure 1. Correlation between clinical activity of pemphigus vulgaris (PDAI) and hematological indices at the ninth month of follow-up. Spearman's correlation (rs) is shown between PDAI scores and four inflammatory indices derived from complete blood count. LMR showed a weak positive correlation (rs = 0.196), whereas NLR (rs = –0.210), PLR (rs = –0.464), and SII (rs = –0.307) showed negative correlations, with PLR being the strongest.

We acknowledge the main limitations of our study: small sample size, absence of a control group, therapeutic heterogeneity, and limited analysis, which restrict the generalizability of our results.

We congratulate Güner et al. on their valuable contribution and propose that future studies investigate the optimal timing for using these biomarkers as well as their dynamic relationship with clinical scales such as PDAI. Comparison with other clinical and functional tools described in blistering diseases, such as the Lund-Browder rule or the BSHS-B, could also be considered.

References

1. Güner ME, Ozturk P, Kuş M. Evaluation of the Effects of Systemic Therapy on Inflammatory Markers and Disease Severity in Patients With Pemphigus. *Dermatol Pract Concept*. 2025;15(1):4969. DOI:10.5826/dpc.1501a4969. PMID: 40117640.
2. Hu B, Yang XR, Xu Y, et al. Systemic Immune-Inflammation Index predicts prognosis of patients after curative resection for hepatocellular carcinoma. *Clin Cancer Res*. 2014;20(23):6212-22. DOI:10.1158/1078-0432.CCR-14-0442. PMID: 25271081.