(2020) 60:24

LETTER



NLR and PLR as potential markers of disease activity in patients with ankylosing spondylitis?



Tolga Düzenli^{1*} and Emre Ata²

Dear Editor,

We read the recently published article entitled 'Neutrophil/lymphocyte and platelet/ lymphocyte ratios as potential markers of disease activity in patients with Ankylosing spondylitis: a case-control study' by Al-Osami MH et al. [1] with interest. In the article authors aimed to evaluate the NLR and PLR as potential markers of disease activity in patients with ankylosing spondylitis. At the end of the article, the authors have pointed out that there was a statistically significant difference in the NLR and PLR between the active and inactive ankylosing spondylitis patients. And they concluded that PLR may be used as a useful marker in the assessment and monitoring of disease activity in AS together with acute phase reactants such as the ESR. The availability of this parameters at no additional cost may encourage its utilization in clinical practice. We would like to thank to the authors for their comprehensive contribution.

NLR is a globally available and inexpensive laboratory parameter, which is used to test systemic inflammation. In previous papers, it was shown that chronic hepatitis B and/or C infection, renal failure, diabetes mellitus, valvular heart diseases, acute coronary syndromes, thyroid functional abnormalities, metabolic syndrome, essential hypertension, and many inflammatory diseases may potentially affect the NLR [2, 3]. And also the main limitations of PLR studies are preanalytical faults, inadequate standardization of laboratory measurements, and inappropriate subject selection [4]. Thus, it would be more relevant if Al-Osami MH et al. had mentioned these NLR and PLR-affecting factors while evaluating the relationship between NLR and PLR in patients with

* Correspondence: tolgaduzenli@yahoo.com

ankylosing spondylitis. And also, as an important limitation of study, it would be more objective if a larger number of patients were included in this current research. Moreover, medication may easily alter NLR and PLR, so it would have been useful if the patients were described in greater detail in terms of, anti-inflammatory drugs, antiviral agents, immunosuppressive drugs, and/or other medications. In addition, it would also have been better if the authors indicated the elapsed time between taking the blood samples and measuring NLR and PLR, since waiting period prior to analysis may affect this laboratory parameters [2, 3].

We believe that the findings of Al-Osami MH et al. [1] will lead to further research concerning the relationship between NLR, PLR and ankylosing spondylitis. In addition to that, it should be kept in mind that NLR and PLR may not secure true information about disease activity in patients with ankylosing spondylitis.

Acknowledgements

None.

Authors' contributions

TD and EA wrote and drafted the manuscript. The authors read and approved the final manuscript.

Funding

There has been no financial support for this work.

Availability of data and materials

Not applicable

Ethics approval and consent to participate Not applicable.

Consent for publication

Not applicable.

Competing interests

The authors declare that they have no competing interests.

© The Author(s). 2020 **Open Access** This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit http://creativecommons.org/licenses/by/4.0/.

¹Department of Gastroenterology, Hitit University Erol Olcok Training and Research Hospital, Çepni, İnönü Cd. No:176, 19040 Çorum, Turkey Full list of author information is available at the end of the article

Author details

¹Department of Gastroenterology, Hitit University Erol Olcok Training and Research Hospital, Çepni, İnönü Cd. No:176, 19040 Çorum, Turkey. ²Department of Physical Medicine and Rehabilitation, Sultan Abdulhamid Han Training and Research Hospital, Istanbul, Turkey.

Received: 9 February 2020 Accepted: 16 April 2020 Published online: 01 May 2020

References

- Al-Osami MH, Awadh NI, Khalid KB, Awadh Al. Neutrophil/lymphocyte and platelet/lymphocyte ratios as potential markers of disease activity in patients with ankylosing spondylitis: a case-control study. Adv Rheumatol. 2020;60(1):13.
- Düzenli T, Çakır Güney B, Tanoğlu A, Kaplan M, Akyol T. Does Gilbert syndrome have an effect on the hematologic parameters? GMJ. 2020;31(1): 15–8. https://doi.org/10.12996/gmj.2020.04.
- Karakonstantis S, Kalemaki D, Tzagkarakis E, Lydakis C. Pitfalls in studies of eosinopenia and neutrophil-to-lymphocyte count ratio. Infect Dis (Lond). 2018;50(3):163–74.
- Gasparyan AY, Ayvazyan L, Mukanova U, Yessirkepov M, Kitas GD. The platelet-to-lymphocyte ratio as an inflammatory marker in rheumatic diseases. Ann Lab Med. 2019;39(4):345–57.

Publisher's Note

Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Ready to submit your research? Choose BMC and benefit from:

- fast, convenient online submission
- · thorough peer review by experienced researchers in your field
- rapid publication on acceptance
- support for research data, including large and complex data types
- gold Open Access which fosters wider collaboration and increased citations
- maximum visibility for your research: over 100M website views per year

At BMC, research is always in progress.

Learn more biomedcentral.com/submissions

