Clinical Rheumatology
https://doi.org/10.1007/s10067-024-07005-3

LETTER TO THE EDITOR

Response to letter to the editor: mean platelet volume (MPV) is a reliable indicator for monitoring PsA disease activity and screening for psoriatic enthesopathy with MSUS indices

Arwa S. Amer[1] · Ahmed Y. Al Shambaky[1] · Seham G. Ameen[2] · Amira Kh. Sobih[3]

Received: 3 May 2024 / Revised: 3 May 2024 / Accepted: 9 May 2024

Response to Letter to the Editor:

Thank you Dr. Cengiz Beyan for taking the time to read our work. We appreciate the effort that you dedicated to providing feedback on the manuscript and are grateful for your comments on our paper. I am pleased to address the questions you raised.

In our study, we utilized dipotassium EDTA as the anticoagulant for blood samples, which were analyzed using an automated counter Sysmex XS-800I (Kobe, Japan). The samples were processed within a maximum of 1 h after venipuncture and were stored at room temperature during the interval between venipuncture and processing.

The choice of dipotassium EDTA as the anticoagulant for our study was based on its widespread use and established effectiveness in inhibiting coagulation by chelating calcium ions. EDTA is commonly used in hematological laboratory tests due to its ability to irreversibly bind calcium, thus preventing coagulation. While low and high concentrations of citrate are also used as anticoagulants in some studies, we chose EDTA for its consistent performance and availability.

In the measurement of MPV using low-concentration Na_3-citrate (1:9, citrate to blood) and K-EDTA, the best results are seen between 60 and 90 min, respectively [1]. Others found that measurement of MPV should be made 1 or 2 h after blood collection according to the use of sodium citrate or dipotassium EDTA as anticoagulants. If the blood is loaded into an automatic blood cell autoanalyzer in the first hour, there is no difference between the use of citrate or EDTA as an anticoagulant, and any of them can be preferred [2].

A healthy control group in our study allowed for a comparison of MPV data between patients and normal individuals. This comparison was instrumental in identifying pathological increases in MPV among patients, highlighting the clinical relevance of our findings. By establishing reference ranges and identifying deviations from normal values, our study contributes to the diagnostic and prognostic utility of MPV measurements in clinical practice.

I hope this response addresses your questions satisfactorily. Please feel free to contact me if you require further clarification or additional information.

Declarations

Disclosures None.

References

1. Lancé MD, Sloep M, Henskens YMC, Marcus MAE (2012) Mean platelet volume as a diagnostic marker for cardiovascular disease: drawbacks of preanalytical conditions and measuring techniques. Clin Appl Thromb Hemost 18(6):561–568. https://doi.org/10.1177/1076029612458147
2. Karaaslan T, Boyaci I (2023) Effects of EDTA and sodium citrate on platelet indices: should we use MPV or MPV/PC Ratio? Bezmialem Sci 11:272–279

✉ Arwa S. Amer
arwa.amer@fmed.bu.edu.eg

[1] Rheumatology, Rehabilitation, and Physical Medicine, Faculty of Medicine Benha University, Banha, Egypt

[2] Clinical and Chemical Pathology, Faculty of Medicine Benha University, Banha, Egypt

[3] MB Bch Faculty of Medicine Benha University, Banha, Egypt

Published online: 13 May 2024