Lefter to the Editor

Mean platelet volume in patients with ischemic stroke

Dear Editor,

We read with interest article the entitled "The relationship of the mean platelet volume(MPV) and C-reactive protein(CRP) levels with mortality in ischemic stroke patients" by Arikanoglu et al¹. In that very well-designed and presented study Arikanoglu et al tried to determine the interrelationship of the CRP and MPV parameters together with their influence on mortality in patients with acute ischemic stroke. They concluded that the MPV levels were found higher in the patients who died, compared to the patients who survived points out that these predictors may light the way in the follow-up and prognosis of stroke patients. The ready availability of MPV measurements at no additional cost may encourage its wider use in clinical practice.

A complete blood count is a relatively routine, inexpensive, practical and easy examination that supplies additional information. MPV is a widely used laboratory marker associated with platelet function based on inflammatory conditions². The MPV also indicates platelet function, which is central to processes that are involved in coronary heart disease pathophysiology and endothelial dysfunction³. Recently, increased levels of MPV were demonstrated in many conditions such as atrial fibrillation⁴, peripheral artery disease, deep vein thrombosis, malignancy, Behçet'disease⁵, ulcerative colitis and celiac disease, all of that are related to endothelial dysfunction on the basis of inflammation. The higher MPV values are considered to be a useful indicator of higher thromboycte activity and have been found to be associated with inflammation in patients with thyroid and rheumatic diseases. Furthermore, MPV value was higher in chronic obstructive pulmonary disease patients compared with a control group⁶. Therefore, it may be intersting if the authors provided information about these conditions.

Finally, not only MPV but also red cell distribution width, neutrophil lymphocyte ratio⁷, plateletcrit (PCT), platelet lymphocyte ratio, CRP, ferritin⁸ and uric acid are easy methods to evaluate the extent of CAD in patients with stable angina². These markers might be useful in clinical practice⁹. Finally, because the authors evaluated patients with acute ischemic stroke retrospectively in present study, the authors might not accurately define how much time elapsed before measuring MPV levels; delaying blood sampling may lead to abnormal results in MPV measurements¹⁰.

In conclusion, we believe that the findings of the current study will lead to further studies examining the relationship between MPV and extent of CAD. However, MPV itself alone without other inflammatory indicators may not provide enough information about the extent of CAD in patients with stable angina. We suggest that MPV ought to be evaluated together with other serum inflammatory markers.

Conflict of Interest

The Authors declare that they have no conflict of interests.

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