Response to the letter concerning the article: “Platelet distribution width and plateletcrit: novel biomarkers of ST elevation myocardial infarction in young patients”


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We would like to thank Yildirim et al. [1] for their interest and valuable comments on our recent article [2]. Yildirim et al. [1] raised some interesting points in their letter.

Firstly, as they pointed out, antiaggregatory and anticoagulant therapy may affect the platelet indices [3]. We would like to clarify this issue. We excluded all patients who had been receiving oral antiaggregatory and oral anticoagulant therapy [2]. Also, all blood samples were drawn before initiation of the standard ST elevation myocardial infarction (STEMI) treatment protocol (intravenous unfractionated heparin 100 IU/kg, 600 mg of clopidogrel, and 300 mg of aspirin).

Secondly, Yildirim et al. [1] reported the importance of the anticoagulant used during collection of blood samples and the timing of measurements of platelet indices. As we had mentioned in our ‘Methods’ section, we used EDTA tubes for blood samples. We share the opinions of Yildirim et al. [1] that timing is crucial for determination of platelet volumes, so blood samples were taken for the laboratory analysis without any delay.

In their letter, Yildirim et al. [1] speculated that mean platelet volume (MPV) is the most effective parameter. There are several reports demonstrating the predictive and prognostic value of MPV in the STEMI populations [4]. However in our study, we did not aim to compare the effectiveness of platelet indices. Instead, we assessed the clinical importance of other indices, such as platelet distribution width and plateletcrit, in young STEMI patients.

In their last question, Yildirim et al. [1] wondered whether we compared the young STEMI group with an older STEMI group or a control group in multivariate logistic regression analysis. We had reported in the statistical analysis section that multivariate logistic regression analysis had been performed to evaluate the importance of platelet indices in predicting STEMI in young patients. Based on Yildirim et al.’s [1] comments, we should highlight that comparison of STEMI patients at various age was beyond scope of the current study.

Conflict of interest: none declared

References