# Comment on: mean platelet volume in patients with retinal artery occlusion

## *Comentário sobre: volume médio de plaquetas em pacientes com oclusão da artéria da retina*

Dear Editor:

We read the article titled "Mean platelet volume in patients with retinal artery occlusion" by Şahin et al. with great interest[1]. The aim of this study was to investigate the mean platelet volume (MPV) of patients with retinal artery occlusion (RAO). The authors concluded that MPV values were significantly higher in patients with RAO, which suggested that larger platelets may contribute to the pathogenesis of the RAOs. We congratulate the authors on their informative study. We also would like to offer a criticism and comment on this article.

It is known that platelets are involved in the homeostatic process and have an important role in atherosclerosis and arterial thrombosis and that MPV is a marker of platelet function and activation[2]. The relationships between MPV and many systemic diseases, various pathologies, and various drugs have been investigated by researchers, particularly over the last two decades. It has been reported that increased MPV is associated with myocardial infarction, thromboembolism, stroke, obesity, metabolic syndrome, and hypercholesterolemia. In addition, external factors, including smoking and drugs, such as metformin and rosuvastatin, may also alter MPV value[1-5].

The authors stated that patients with systemic diseases other than hypertension (HT) and diabetes mellitus (DM) were excluded from the study and patients with HT or DM were included. However, it has been reported that both DM and HT are associated with increased MPV, and hyperglycemia results in the formation of larger platelets[2-5]. The authors also stated that there were no differences in the presence of HT and DM between the control and RAO groups. The authors meant that the platelet counts of the patients in the groups were similar, but the severity of the disease and drugs used for treatments might have differed between the patient groups. Obesity is also an important factor affecting MPV, and the authors did not provide any information about the body mass indices of the patients. Therefore, we think that the inclusion of patients with HT, DM, or high BMI might have affected the results of the study.

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# Response: comment on: mean platelet volume in patients with retinal artery occlusion

## *Resposta do comentário sobre: volume médio de plaquetas em pacientes com oclusão da artéria da retina*

Dear Editor:

We read with great interest the correspondence generated by our article regarding the "Mean platelet volume in patients with retinal artery occlusion." We thank the authors for their interest in our article[1].

We agree with the authors that systemic disorders, such as diabetes mellitus and hypertension, and medications, such as antihypertensives and antidiabetics, may alter the laboratory parameters. Because of its retrospective nature, our study lacked information on the medications of the patients and the severity of their diseases. This issue was mentioned in the study limitations. In addition, it was not possible to perform statistical analyses because of the small number of patients with hypertension or diabetes mellitus (eight patients).

Second, we agree that obesity might affect MPV values, and the lack of data on body mass index was mentioned in the study limitations.

We again thank the authors for their valuable comments and hope that we have clarified the points related to their comment.

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