Mean platelet volume in retinopathy of prematurity

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Dear Editor,

We read with interest the article by Tao et al. [1]. In their study, they reported that mean platelet volume (MPV) was elevated in patients with type 1 retinopathy of prematurity (ROP). They also stated that only one study [2] investigated the possible relationship between MPV values and occurrence of ROP in preterm infants. However, we have some comments with regard to this publication.

First, we very recently reported our results with similar methodology [3]. Contrary to Tao and colleagues' study, we found no significant difference between type 1 ROP and control subjects. In our study, we excluded patients who had undergone blood transfusion and/or blood exchange. Tao and colleagues' study did not provide any information about the exclusion criteria. The blood transfusion and blood exchange may alter the hematologic parameters, particularly platelet count and MPV [4]. Blood transfusion may also aggravate the progression of ROP. This issue should be clearly defined before commencement of the study.

Secondly, although the methodology of their study is different, Cekmez et al. found no relationship between ROP and MPV values. They obtained the blood samples just after birth. Therefore, their results might not provide information about the development of ROP, which usually develops at a gestational age of 33 to 35 weeks in infants.

Moreover, MPV can be affected by many parameters, such as inflammation and sepsis. Catal et al. reported that MPV can be used both at diagnosis and follow-up of sepsis, and at the response of treatment [5]. The authors should also consider these issues in the comparison of MPV measurements.

Conflict of interest All authors certify that they have no affiliations with or involvement in any organization or entity with any financial interest or non-financial interest in the subject matter or materials discussed in this manuscript.

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