

Letter to the Editor

Retrospective platelet values measurement. Is it acceptable to discuss?

Dear Editor,

We read with interest the article by Alcelik et al in the September 2013 issue of The European Review for Medical and Pharmacological Sciences, manuscript entitled "Platelet function in euthyroid patients undergoing thyroidectomy in women".

In our opinion, a critical point of this paper is not completely clear. In particular, the methods section has some missing information¹.

In the patients and methods section, the authors specified that the blood samples were collected in tubes containing EDTA as an anticoagulant additive. As widely stated, platelets undergo swelling when stored in EDTA and, to a lesser extent in citrate-containing solutions². This makes determination of MPV time-dependent. Over time, platelet swelling can increase the measured volume by an additional 20-25%. Suggestions for using time-dependent reference ranges or alternative anticoagulants for MPV determination have been made to resolve this issue³. But authors did not specify the study time of MPV.

There are 4 different ways of platelet counting and MPV measurement⁴:

- Manual counting by phase contrast microscopy.
- Impedance counting.
- Optical light scatter counting.
- Immunological flow cytometry techniques.

The technique that was used to measure platelets is not clear in this article. If they used the same technique for all assays, this can be acceptable.

In conclusion, we think the article by Dr Alcelik et al is very interesting but there is missing information. The authors should have stated the answers of our 2 questions. If material and methods section in articles do not clarify the specific issues such as sample collection tubes and medias, the study time of the samples and the technique of the assays, we could not achieve global standardization.

Conflict of Interest

All the authors disclose no financial relationship with a biotechnology manufacturer, a pharmaceutical company, or other commercial entity that has an interest in the subject matter or materials discussed in the manuscript.

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