Letter to the Editor:

Retrospective platelet values measurement assesment always acceptable?

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African Health Sciences 2014; 14(2):490-491
DOI: http://dx.doi.org/10.4314/ahs.v14i2.31

Letter

We read with interest the article by Dr Ocak and colleagues in the September 2013 issue of The African Health Sciences, manuscript entitled "The importance of the mean platelet volume in the diagnosis of supraventricular tachycardia. "

In our opinion, a critical point of this paper are not completely clear. In particular, the authors state in methods section "This retrospective study…..Age, gender, leukocyte and thrombocyte counts at the time of hospital admission, MPV values, and ECG were recorded. The MPV was determined on arrival at the ED through the brachial vein, collected into tubes containing ethylenediaminetetraacetic acid (EDTA), and processed within 1 hour after venipuncture. For the measurements of the hematologic counts and MPV, samples were analyzed within 20 min after collection with an automated flow counter (Beckman Coulter LH 750, USA)….." [1].

1. In this paragraph, authors stated this is a retrospective study, but patients information and sample collection as prospective one. How can someone know when patients blood collected and studied, especially data were obtained from the computer record.
2. Authors must specify that blood samples collected in which collecting tube (Na-EDTA or K-EDTA?) (Na-EDTA as an anticoagulant results in less pronounced swelling than K-EDTA etc.) [2, 3].
3. Also there is a contradiction about MPV studied time,
   "The MPV was determined …. processed within 1 hour after venipuncture. For the measurements of the hematologic counts and MPV, samples were analyzed within 20 min after collection" [1].
   At this point, platelets undergo swelling when stored in EDTA and, to a lesser extent, in citrate-containing solutions. 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 issue [3, 4]. But authors not specified time when the MPV studied. In 1 hour or in 20 min, and why?

Conclusion

We think the article by Dr Ma and colleagues is very interesting but contains some limitations. The authors should have stated the answer of our 3 questions. If material and methods section in articles has not specified to specific issues such as the tubes or media which are collected the samples, the study time of the samples and the principle of studies , we could not standardize the findings as worldwide acceptance.

Retrospective data collection would have contradictions.

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Declaration 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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