LETTER to the EDITOR

Is MPV a Real Prognostic Indicator for Non-small Cell Lung Cancer?

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Dear Editor

With great interest, we read the recent article by Kemal et al. (2014) regarding the diagnostic impact of the mean platelet volume (MPV), neutrophil lymphocyte ratio (NLR) and platelet lymphocyte ratio (PLR) to differentiate lung cancer (LC) patients from healthy controls.

In the literature, many studies showed that the mean platelet volume (MPV) detected in peripheral blood has clinical significance in various cancers, including colon cancer and gastric cancer (Walsh et al., 2005; Gwak et al., 2007). Although a good number of assertive results have been announced in these studies, sufficient usage area of MPV value measurement has not occurred in the follow-up and treatment of patients clinically as there is no fully standardized method of this parameter.

Some of the factors that affect the standardization of MPV measurement are the environment of blood-taking, type and amount of anticoagulant in the blood collection tube, the duration between blood-taking and examination, the device of examination and the calibration time of the device (Vizioli et al., 2009). It has been reported that there are measurement differences up to 40% even among the devices in the studies, in which different devices were used (Lance et al., 2012; Cengiz et al., 2013).

In the study in question, the authors discussed the MPV, NLR and PLR ratio was associated with differantiation LC patients from healthy controls.They concluded that that the NLR and PLR were more reliable and accurate biomarkers than the MPV. In their results demonstrated that a low NLR and PLR values were significantly higher in LC patients compared to the healthy subjects. Despite the MPV values were similar in both groups; recent studies such as Inagaki et al (Inagaki et al., 2014) reported that MPV levels were significantly higher in patients with non-small cell lung cancer. Similar to their study Karagoz et al. (2009) showed no significantly differences between patient with lung cancer and healthy groups.

We believe it is an assertive statement that this value can be used as instructive marker on lung cancer decision because MPV value can be affected from all aforementioned factors. And also, NLR and PLR are not affected by these factors.

As a consequence, even if MPV has been associated with many illnesses recently, it does not seem possible for now to associate these results with disease etiopathogenesis in the limited studies that state MPV value may be used as a prognostic biomarker. We hope that the above-mentioned items would add to the value of the well-written article of Kemal et al. regarding the diagnostic impact of NLR and PLR to differentiate LC patients from healthy controls.

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