Letter to the Editor

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Some errors in the measurement of neutrophil-to-lymphocyte ratio
Nötrofil-Lenfosit oranının ölçümündeki bazı hatalar

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To the Editor,

I have read with great interest the article by Zeren et al. [1] published in your journal. We congratulate the author and his friends for this comprehensive and effortful study. In addition, we would like to note a few points for readers and the authors about the studied parameters.

White blood cell morphology varies in inflammatory diseases [2]. Therefore, it is significant how devices/methods measuring hemogram parameters respond to the morphological changes especially in cancer patients. It is manual microscopy that is the gold standard method for evaluating leukocyte differential. And the methods of the devices in the market to measure leukocyte differential vary according to the devices [3]. Among these methods are electronic impedance, high frequency current conductivity and laser light scatter (Coulter, GEN s), Laser light scatter and peroxidase based cytochemistry (Siemens Advia), fluorescence flow cytometric (Sysmex), Multi angle polarized scatter separation and fluorescent flow cytometry (Abbott Cell-dyn) [4]. Furthermore, flowsitometric measurements are remarkable in determining leukocyte subgroups [3].

Each of the devices mentioned above has its own interference and limitation. For instance, depending on the used specific automate method, the detection of immature cells may often cause false positive and false negative results (electronic impedance, laser light scatter).

Our literature review on Pubmed indicates that the interest in neutrophil-to-lymphocyte ratio has reached peak since 2012. Since then, 1563 studies have been done upon it. The number of the studies done only in 2017 is 474 [5]. Thus, regarding this popular parameter, we consider that the authors should note the trademark and model of the used device and the method they used to WBC subgroups. Moreover, if they inform about the method-device and the interfering factors related to the sample and note all these in the methodology part of the study, it will be more likely that the readers can benefit from the study and evaluate it.

References


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