Response to the letter: Red cell distribution width in subclinical hypothyroidism

Distribuição dos glóbulos vermelhos ampliada no hipotiroidismo subclínico

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We read the paper by Sevket BALTA and cols. and thanks for your interest in our study entitled "Red Cell Distribution Width in Subclinical Hypothyroidism" (1). As we mentioned in the discussion part, the RDW can be affected by some disease conditions such as recent blood transfusion, renal dysfunction, hepatic dysfunction, anemia related nutritional deficiencies (i.e. iron, vitamin B₁₂, and folic acid), bone marrow dysfunction, inflammatory diseases, chronic or acute systemic inflammation (2-5) and some medications (6) is already well known. And this point could be one of the major limitations of our paper. So, we tried to gather other multiple potential confounding factors as much as possible and to adjust confounding factors. And the reason what the participants comprised healthy subjects with no known systemic diseases and who were not taking any medication that may affect thyroid function, and were not pregnant or within the first year of the postpartum period is to rule out the confounding factors. Because of this aspect your paper pointed out, in fact, more investigations and prospective studies are needed to clarify the relations between RDW and subclinical hypothyroidism before application in the clinical field.

And we, authors used the formula developed and validated in the Modification of Diet in Renal Disease (MDRD) to estimate glomerular filtration rate (GFR). As your paper mentioned, according to the current trends, the Chronic Kidney Disease Epidemiology Collaboration (CKD-EPI) equation replace the Modification of Diet in Renal Disease (MDRD) Study equation (7-9). We all agree with your this opinion and can afford to accept your advice. Although we used the MDRD study equation in our paper as usual, in the further study we would plan to use the CKD-EPI equation instead.

When it comes to the additional final question, considering laboratory system of our hospital, we can ensure that analysis of blood sample is not delayed enough to cause abnormal results in RDW measurements.

In addition, because we also have confidence that relationship between inflammatory factors and subclinical hypothyroidism is exist (4,10,11), we guess that the studies deal with inflammatory factors such as RDW, mean platelet volume, neutrophil lymphocyte ratio, CRP, and so on, would have value and should be keep on investigating.

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