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Letter to the Editor

Comment on "Mitochondrial oxidative stress, endothelial function and metabolic control in patients with type II diabetes and periodontitis: A randomized controlled clinical trial"

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Dear Editor,

I read the current article of Masi et al. [1] concerning the effect of intensive periodontitis treatment administered by using the alterations in mitochondrial reactive oxygen species (ROS) on the metabolic control and endothelial function of patients who have diabetes mellitus and periodontitis with strong interest. I would be glad to add some aspects and address here to highlight which of the oxidative stress parameters would be more useful in indicating the precise results.

Ulas et al. have earlier indicated that not only ROS was capable of indicating the total oxidative stress but also the parameters of total oxidative stress and total antioxidant could display better results which would be more accurate and decisive. If only certain parameters are measured, the levels of these parameters may be reduced or stable, even if the existing oxidant status is raised, or contrarily [2,3]. Despite the fact that the use of ROS led to getting significant results in the study, it may not demonstrate the total oxidative stress. Before the treatment, the parameters of total oxidative stress and the levels of total antioxidant may be high. The ROS level from these total antioxidants may be lower than expected due to the antioxidants opposite to ROS. Therefore, it is difficult to conclude whether the ROS level directly correlated to metabolic status and/or endothelial injury. If total antioxidant levels and total oxidative stress have been inspected in parallel with the measurement of ROS level, it would be possible to state an opinion on this argument.

We believe that the aspects specified above may contribute to the value of the well-written article of Masi et al. [1].

Conflict of interest

There is no conflict of interest or financial support.

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