The relationship between serum hydroxyvitamin D levels and postural stability in young adults

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Dear Editor,

First of all, we would like to thank Mori Y. et al. for their kind interest and valuable contribution to our article.

Several studies have investigated the relationship between vitamin D and fall risk, and the majority of these studies have been performed in elderly populations [1, 2]. In our study, we aimed to evaluate the possible association between serum 25(OH)D deficiency and balance in a young adult population to rule out age and age-related factors in postural stability. The participants were volunteer healthy young adults without any clinical symptoms for 25(OH)D deficiency and without obvious muscle weakness.

In our study, balance was assessed by conventional Berg balance test (BBT) and computerized posturography (the Tetrax Interactive Balance System). Although there was no significant difference in BBT between groups, a significant difference was found in computerized posturography evaluation between the low 25(OH)D group and the normal group. The BBT is a widely used conventional method to evaluate balance clinically. The Tetrax Interactive Balance System has been defined as a different technique from conventional methods. This system is based on the assessment of vertical pressure fluctuations on independent platforms. This technique provides the “general stability” which is an indicator of the subject’s overall steadiness that represents his/her ability to control postural balance [3]. In the light of our results, it may be concluded that vitamin D deficiency, even

when clinically occult in young adults, seems to affect the “general stability” negatively. Balance, as a complex task with several components, and its relation with vitamin D needs to be investigated in future studies.

Again, we thank Mori Y. et al. for their valuable contribution to our article.

Declarations

Conflict of interest Okan Balcanci and Meltem Alkan Melikoglu declare that they have no conflict of interest.

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