



Recurrent Falls in the Elderly Iranian Population: Does the 25-hydroxyvitamin D Level Matter?

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Short Communication

Serum vitamin D concentration has been implemented as a major contributing factor for increasing the risk of fall and fall related injuries in older adults. However, when prescribed and supplemented for these populations, the outcomes are controversial and in several cases no improvement has been reported in reducing the risk of recurrent fall. Therefore, the aim of this study is to examine the association between serum vitamin D concentration and recurrent falls in Iranian older adults. This prospective observational study was conducted in the emergency departments of two university hospitals. During this study, a cohort of 82 elderly participants who aged over 60 and suffered from an unintentional episode of falling; was evaluated after 6 month of their first ED visit. A structured, self-administered checklist was developed to obtain the participants' demographic and clinical

information. Participants were also asked about any recurrent fall experience during follow up. Those who reported recurrent falls were further asked about the frequency of falls. The mean (SD) age of the study population was 75 (8). Over half of the participants were male (57.3%). The mean (median) serum 25(OH)D concentration was 38 (34) ng/ml. Mean serum 25(OH)D levels varied little according to gender groups ($P=0.450$). Besides, an inverse but insignificant association was found between the age of participants and their serum 25(OH)D levels ($r=-0.03$, $p=0.7$). A small but insignificant association was also found between the mean serum 25(OH)D level and the number of recurrent falls in elderly patients irrespective of their age, gender or physical activity groups ($r=-0.1$, $p=0.3$). In contrast to previous studies, no significant association of serum 25(OH)D concentration was found with recurrent falls in Iranian older adults.

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