

News in Brief

Seasonal variation in vitamin D status among frail older hospitalized patients

Seasonal variation in 25-hydroxyvitamin D [25(OH)D] levels is the result of sunlight dependent skin synthesis of vitamin D. However, its presence is not studied in frail older hospitalized patients. Pourhassan M et al (J Frailty Aging 2018;7(2):95-99) sought to investigate whether seasonal variation in 25(OH)D levels is evident among these patients. This study investigated older participants who were consecutively admitted between February 2015 and December 2016 to the geriatric acute care ward. Results of routine measurements of 25(OH)D at hospital admission were retrospectively analyzed and stratified according to months and seasons. Previous intake of vitamin D supplementation was derived from the patients' medical records. The study group comprised 679 participants (mean age 82.1±8.2; 457 females),

of which 78% had vitamin D deficiency. Older individuals not taking vitamin D supplements had a lower mean serum 25(OH)D than those receiving supplements. Of those patients with no vitamin D supplementation, 87.0% were vitamin D deficient and only 5% showing sufficient vitamin 25(OH)D. Further, there were neither monthly nor seasonal variations in vitamin 25(OH)D levels among these patients and their vitamin D levels stayed far below the recommended threshold of 20 ng/ml across the seasons. In conclusion Vitamin D deficiency was very prevalent in the subgroup of older hospitalized patients without vitamin D supplementation, irrespective of season. Since no seasonal variations in mean 25(OH)D levels was observed, sunlight dependent skin synthesis is unlikely to contribute to vitamin D status in these patients. Supplementation seems to be necessary to maintain desirable vitamin D levels among this population throughout the year. M. Pourhassan ; R. Wirth: Seasonal variation in vitamin D status among frail older hospitalized patients. J Frailty Aging 2018;7(2):95-99. <http://dx.doi.org/10.14283/jfa.2018.10>