Comment on: The current practice of using angiotensin-converting enzyme inhibitors and angiotensin II receptor blockers in diabetic hypertensive and non-hypertensive patients. *Is there a room for vitamin D?*

To the Editor

Sukkarieh et al,[1] answer to the question they raise in their recent article that there is a room for recommending vitamin D supplements in using angiotensin-converting enzyme inhibitors (ACEi) and angiotensin II receptor blockers (ARBs) in diabetic hypertensive and non-hypertensive patients.

The literature is full of data indicating a higher risk of many diseases such as immune mediated conditions, infections, diabetes mellitus, cardiovascular diseases, and cancer, if 25-hydroxyvitamin D (25[OH] D) levels are <20 ng/mL (50 nmol/L) and the risk decreases with higher level.[2-5] There is little evidence for a linear causal association between vitamin D levels and risk of these diseases. There are no randomized controlled trials that show that adding vitamin D will lead to decreasing this risk or alter the outcome of these conditions. More research is needed to clarify the role of vitamin D in the prevention and management of extra skeletal diseases.

In conclusion, it is inappropriate to recommend vitamin D supplements in diabetic patients with or without hypertension using ACEi and ARBs medication. The Scientific Advisory Committee on Nutrition (SACN) has recommended a reference nutrient intake, the amount that is sufficient to meet the needs of 97.5% of the population, for vitamin D of 10µg (400 IU) a day to protect musculoskeletal health in people aged 4 years or older.[6] Lastly, vitamin D intoxication may cause hypercalcemia with confusion, polyuria, and polydipsia, muscle weakness and pain, nephrocalcinosis and bone demineralization.

Ali S. Jawad
Department of Rheumatology
Royal London Hospital
London, United Kingdom

Reply from the Author

No reply received from the Author.

References

1. Sukkarieh HH, Bustami RT, Abdu MN, Khokhar AA, Salih AA, Abdalla HK. The current practice of using angiotensin-converting enzyme inhibitors and angiotensin II receptor blockers in diabetic hypertensive and non-hypertensive patients. Is there a room for vitamin D? ***Saudi Med J*** 2020; 41: 1083-1089.
2. World Health Organization. International Agency for Research on Cancer. Vitamin D and Cancer. IARC Working Group Reports Vol. 5. [Updated 2008 November. 2020 October 12]. Available from URL: http://www.iarc.fr/en/publications/pdfs-online/wrk/wrk5/Report_VitD.pdf
3. Rosen CJ, Adams JS, Bikle DD, Black DM, Demay MB, Manson JE, et al. The nonskeletal effects of vitamin D: an Endocrine Society scientific statement. ***Endocr Rev*** 2012; 33: 456-492.
4. Kupferschmidt K. Uncertain verdict as vitamin D goes on trial. ***Science*** 2012; 337: 1476-1478.
5. Bouillon R, Marcocci C, Carmeliet G, Bikle D, White JH, Dawson-Hughes B, et al. Skeletal and extraskeletal actions of vitamin d: current evidence and outstanding questions. ***Endocr Rev*** 2019; 40: 1109-1551.
6. Scientific Advisory Committee on Nutirion (SACN), 2016. Vitamin D and Health. [Updated 2016 July. Accessed 2020 October 16]. Available from URL: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/537616/SACN_Vitamin_D_and_Health_report.pdf

doi: 10.15537/smj.2020.12.25571