



Vitamin D deficiency in oncology practice—more roads to cross

Ali Alkan¹ · Görkem Türkkân² · Özgür Tanrıverdi¹

Received: 28 June 2019 / Accepted: 30 July 2019 / Published online: 3 August 2019
© Springer-Verlag GmbH Germany, part of Springer Nature 2019

To the editor,

We read the paper by Nath et al. with great interest [1]. Vitamin D deficiency (VDD) is an important topic in medicine and especially for the clinicians caring for cancer patients. However, there is considerable heterogeneity in the published literature concerning vitamin D deficiency. As a result, we cannot decide which cancer patient we should screen for VDD and which one we should treat for VDD. In addition, several of the published clinical studies in VDD report confusing or conflicting results. The association between peripheral neuropathy and VDD reported by the authors is an important topic and should be focused on. However, there are some confounders that should be included in the analysis to conclude an association.

The study by Nath and colleagues was conducted between March and July 2018. The seasonal changes and also the angle of sunlight reaching to earth should be considered. A study covering all months and seasons could provide us a better VDD prevalence. At least the analysis of seasons could exclude the seasonal bias. In our D-ONC study, we found VDD in 72.0% of 706 cancer patients [2]. And all those patients were also living in a hot climate with high sunlight exposure. In addition, we showed the importance of sun exposure level instead of months or seasons. The angle of sunlight reaching to earth is different in different countries. So, instead of seasonal comparison, by using sun exposure levels declared by authorities in the city, we could get more exact results.

The neuropathy is sometimes hard to work on. Because in the treatment period, the patients are exposed to numerous neurotoxic drugs. In the study, the patients were prescribed different treatments, including alkylators, steroids, proteasome inhibitors, immunomodulatory agents, monoclonal antibodies, and/or bisphosphonates. As we know, chronic steroid usage and bortezomib can also cause neuropathy in the long term [3]. In addition, comorbidities are also important as predisposing factors for both VDD and neuropathy. Previous history of neurosurgery, diabetes mellitus, and medications used for other comorbidities should be included in the analysis.

The paper by Nath and colleagues provides important data about VDD in myeloma patients. As concluded by the authors, prospective vitamin D supplementation trials are warranted in multiple myeloma to determine the impact of repletion.

Compliance with ethical standards

Conflict of interest The authors declare that they have no conflict of interest.

References

1. Nath K, Ganeshalingam V, Ewart B, Heyer E, Watt K, Birchley A, Casey J, Lai HC, Morris E, Hodges G (2019) A retrospective analysis of the prevalence and clinical outcomes of vitamin D deficiency in myeloma patients in tropical Australia. *Supp Care Cancer*. <https://doi.org/10.1007/s00520-019-04942-7>
2. Alkan A, Koksoy EB (2019) Vitamin D deficiency in cancer patients and predictors for screening (D-ONC study). *Curr Probl Cancer*. <https://doi.org/10.1016/j.cupp.2018.12.008>
3. Jones MR, Urits I, Wolf J, Corrigan D, Colburn L, Peterson E, Williamson A, Viswanath O (2019) Drug-induced peripheral neuropathy, a narrative review. *Curr Clin Pharmacol*. <https://doi.org/10.2174/1574884714666190121154813>

Publisher's note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

✉ Ali Alkan
alkanali@yahoo.com

¹ Medical Oncology, Muğla Sıtkı Koçman University School of Medicine, Muğla, Turkey

² Radiation Oncology, Muğla Sıtkı Koçman University School of Medicine, Muğla, Turkey