

Letter to Editor/ Editöre Mektup

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Dynamic Shifts in Vitamin D Status Following Liposuction: Implications for Patient Monitoring and Health

Liposuction Sonrası D Vitamini Durumundaki Dinamik Değişimler: Hasta İzleme ve Sağlık Açısından Etkileri

Mustafa Can Şenoymak^{1*}, İrem Şenoymak²

1.Department of Endocrinology and Metabolism, University of Health Sciences, Sultan Abdulhamid Han Training and Research Hospital, Istanbul, Türkiye

2.Department of Family Medicine, Üsküdar State Hospital, Istanbul, Türkiye

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*Sorumlu Yazar

Mustafa Can Şenoymak

Phone: +90 535 317 89 59, E-mail: senoymak@gmail.com

ORCID: 0000-0002-1977-5127

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We have read with great interest the research article by Kandulu, titled "Dynamic Shifts Vitamin D Status in Following Liposuction: Implications for Patient Monitoring and Health" published in the first issue of Ağrı Medical Journal in 2024 (1). We extend our gratitude to the author and the editorial team for their valuable contribution. Through this letter, we aim to highlight specific elements that we believe will enrich the ongoing discourse surrounding the article.

As underscored by Kandulu, vitamin D exerts influence not only on the musculoskeletal system but also on various other physiological pathways (2). Therefore, it is recommended to maintain serum 25 hydroxy (25-OH) vitamin D levels, which are the major circulating form, particularly above 20 ng/mL. Since vitamin D is a fat-soluble vitamin, investigating its fluctuation in patients undergoing liposuction is intriguing. Such an approach not only facilitates the identification of replacement needs in this patient cohort but also holds promise for effectively managing vitamin D deficiency/insufficiency during liposuction procedures. Considering these facets, we commend the significance of Kandulu's study.

However, we wish to address a concern regarding the exclusion criteria of the study. As it is not stated in the methods section, it appears that patients receiving vitamin D supplementation were not excluded from the study cohort, which may pose challenges in accurately evaluating the changes of 25-OH vitamin D levels after liposuction.

It is well-established that sources of vitamin D include sunlight exposure, dietary intake, and supplements (3). When administered as a supplement, cholecalciferol is metabolized in the liver by the hepatic enzyme 25-hydroxylase, leading to the formation of 25-OH vitamin D (caldiol) (4). The half-life of caldiol is approximately 2-3 weeks (5). Consequently, if patients received vitamin D supplementation at any point during the study period, the results could be prone to misinterpretation. For instance, preoperative vitamin D replacement administered approximately 2-3 weeks prior to surgery may initiate a decline

in levels, potentially confounding the findings. In the study, postoperative 25-OH vitamin D levels decreased from 27.70 to 15.196 prompting the author to emphasize the statement "Furthermore, we observed increased rates of Vitamin D deficiency following the surgery, indicating the necessity of a closer follow-up of this parameter in the patient group". Notably, 25-OH vitamin D levels in patients increased during the postoperative 3rd and 6th months. Moreover, while 3 patients had adequate 25-OH vitamin D levels postoperatively, this number increased to 12 patients at the 1-month mark, raising questions about the ongoing replacement therapy in these individuals. If replacement therapy was not administered, the underlying reasons of increasing vitamin D levels of patients should be explored.

In conclusion, while acknowledging the merits of Kandulu's study, we believe that addressing the aforementioned concerns regarding the exclusion criteria and interpretation of results would further enhance the scientific rigor and clinical relevance of the findings. We appreciate the opportunity to provide feedback and eagerly anticipate further advancements in this area of research. Additionally, we extend our heartfelt thanks to the author, Kandulu, again for their valuable contribution to the field of research.

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