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LETTER TO EDITOR

CORONAVIRUS DISEASE-19 PANDEMIC AND VITAMIN D: SO MUCH FOR SO LITTLE?

Apropos of Kershenobich's interesting editorial titled: *Dilemmas of a physician in times of coronavirus disease (COVID-19),* in which he cites multiple drugs under study for COVID-19, many of which we now know to be ineffective, I have noticed the absence of Vitamin D[1]. It is well known that levels of regulatory T-lymphocytes are decreased in many patients with COVID-19 and can be increased by Vitamin D2 supplementation[2]. Furthermore, this Vitamin D deficiency is associated with an increase in thrombotic events, which are frequently observed in COVID-19 by multiple autoimmune-based mechanisms[3]. Vitamin D deficiency is more frequent in patients with obesity, asthma, and diabetes and therefore, among other factors, these pathologies lead to higher mortality in COVID-19. A recent prospective study of 930 patients showed that Vitamin D provided in the form of calcifediol during hospitalization reduces intensive care unit admission and mortality by more than 50%[4]. Considering that Vitamin D deficiency increases the cytokine storm and the risk of thrombosis in COVID-19 and that this supplement is safe (the risk of toxicity is extremely low at the usual doses), cheap, and well tolerated and is also useful for other pathologies, I believe it is worth using it at least during hospitalization for COVID-19, if not before. However, to date, there is no evidence that Vitamin D administration may have a role in treating patients with COVID-19, and therefore, prospective studies are needed to assess solidly this more than reasonable possibility[5,6]. Meanwhile, in these pandemic times, we are living in, it seems prudent to recommend the use of Vitamin D to the population now without waiting for more evidence. We have nothing to lose and much to gain!

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