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. 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. 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. 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%. 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. 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!

REFERENCE