

Vitamin D supplementation to prevent COVID-19 in older people

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To the Editor—Since the review on the immune modulating effects of vitamin D in coronavirus disease 2019 (COVID-19) infection by Kaler et al¹ last year, there has been an open-label trial showing positive effects of vitamin D supplementation in COVID-19 patients in Spain. Out of 838 COVID-19 in patients, 447 were routinely given calcifediol (25-hydroxycholecalciferol) 532 µg on admission, and 266 µg on day 3,7,15 and 30. The treatment group had very significantly lower rates of intensive care unit admission (4.5% vs 21%) and death (4.7% vs 15.9%).² In contrast, two randomised trials of a single large dose of vitamin D3 on admission in moderate to severe COVID-19 patients have showed no significant benefits.³ The discrepant results may be due to differences in vitamin D formulations. As compared with vitamin D3, calcifediol does not require hydroxylation in liver which is often impaired in acute illness. Therefore, vitamin D supplementation should preferably be started before exposure to COVID-19. Older people who seldom go outside, especially those in old age homes, have high prevalence of vitamin D deficiency. Indeed, an expert group recommended routine use of vitamin D3 1000 units daily in old age homes.⁴ A randomised trial of vitamin D3 in older people showed that doses up to 2000 units daily for four months was very safe.⁵ In the midst of the pandemic, I recommend vitamin D3 2000 units once daily in homebound older people to prevent COVID-19 infection and its complications, especially those who are not fully vaccinated.

Author contributions

The author contributed to the Letter, approved the final version

for publication, and takes responsibility for its accuracy and integrity.

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