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BRIEF19

A daily review of covid-19 research and policy

RESEARCH BRIEFING

Vitamin D found to be a dud in treating moderate and severe covid-19.

Last [week](#) in *Brief19*, we covered the [failure](#) of Zinc and Vitamin C as effective covid-19 treatments in the “Covid A to Z trial,” published in *JAMA*. Many have promoted the possible benefits of these and other supplements, but none have yet to show a positive effect when studied, despite seemingly endless anecdotal reports. Another supplement often popularly suggested as a therapy on social media is Vitamin D.

A study conducted in Brazil and published last week in *JAMA* investigated whether this vitamin lives up to the hype. This well performed double-blinded, randomized, placebo-controlled trial took place at two sites in Sao Paulo. Enrollment of the 240 patients occurred over the summer of 2020 with follow up through early October. Subjects received either a single oral dose of 200,000 IU of Vitamin D₃ or placebo. All of the included patients were moderately to severely ill with covid-19 and hospitalized at time of enrollment.

The researchers primarily looked to see whether the average length of stay in the hospital was affected. Other “secondary” outcomes included death, admission to intensive care units, and the need for mechanical ventilation. To be sure that the patients were appropriate for study, baseline Vitamin D levels were checked when the patients were enrolled into the trial.

As seen in the other supplement studies, a single dose did not affect length of stay in the hospital, which hovered at around 7 days in both the patients who received Vitamin D and those receiving placebo. None of the important secondary outcomes indicated any sign of benefit either. Vitamin D levels significantly rose among the group of patients who received the Vitamin D, which was hardly a surprise.

These findings show that in the moderate to severely ill subset of covid-19, no beneficial effect was attributable to the administration of Vitamin D. One group not studied was covid-19 defined as mildly ill. Whether Vitamin D does or does not prevent the worsening of symptoms, improves symptoms, or decreases the rates of hospitalization or lengths of stay was untested in this trial, meaning that future research is still warranted.

—*Christopher Sampson, MD, FACEP*

POLICY BRIEFING

UK eases restrictions as new data hint at decreased risk of hospitalization after coronavirus vaccination.

New information out of the United Kingdom on Monday [suggests](#) that the impressive vaccination effort undertaken there has reduced hospitalizations by a large margin. Citing data that has not yet been published or peer-reviewed, UK Prime Minister Boris Johnson announced the data stemming from the ongoing study and monitoring of infections at several locations across the country.

The UK has been one of the leaders worldwide in vaccinating the eligible population, with more than one-third of all adults having already received at least one dose of an authorized vaccine. Caution should be used in interpreting these announcements as scientific proof of vaccine effectiveness on a population-wide level, however, as the data are observational in nature and have not yet been reviewed by the scientific community for publication. However, the news that the Pfizer vaccine reduced hospitalization by 85 percent and the Oxford-AstraZeneca

vaccine showed a 94 percent reduction in hospitalization is welcome news nearly a year into the covid-19 pandemic.

The UK has been on widespread lockdowns for the better part of the last two months, in part due to the novel variant of SARS-CoV-2 found there, which is believed to be more infectious than previously known versions of the virus, and possibly more virulent. With these findings, the Prime Minister also announced the easing of some restrictions currently in place.

—*Jordan M. Warchol, MD, MPH*

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