LETTER TO THE EDITOR

Using Immunoglobulin G Spike Antibodies as a Surrogate Marker for SARS-CoV-2 Infection: Additional Considerations

To the Editor:

We appreciated the recent article by Hsu et al,¹ which presents a retrospective observational study involving patients with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2)-vaccinated dialysis. The researchers examined the levels of immunoglobulin G spike antibodies (antispike IgG) after vaccination and the prevalence of SARS-CoV-2 infections, both confirmed and undiagnosed.

The study's retrospective nature is a potential limitation. The study design restricts the capacity to demonstrate causality or discern a temporal link between immunization and the observed results. In addition, the study uses antispike IgG titers as a surrogate marker for both identified and undiagnosed SARS-CoV-2 infection. Although antispike IgG levels can provide information about the immune response, they do not always correspond with infection protection or illness severity. Other immune responses and variables, including T-cell immunity, may also contribute to the vaccine's overall effectiveness.² There also may have been confounding variables, such as previous asymptomatic coronavirus disease 2019, comorbid conditions, socioeconomic status, or genetic differences.³

Despite these limitations, the study provides useful information on the prevalence of SARS-CoV-2 infections and the reduction of antispike IgG titers in vaccinated dialysis patients over time. Further study is needed to validate and generalize these findings, including prospective studies with larger and more diverse populations. Hinpetch Daungsupawong, PhD, and Viroj Wiwanitkit, MD

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