MedicalXpress

Patients undergoing dialysis shown to maintain antibody response for at least 6 months following SARS-CoV-2 infection

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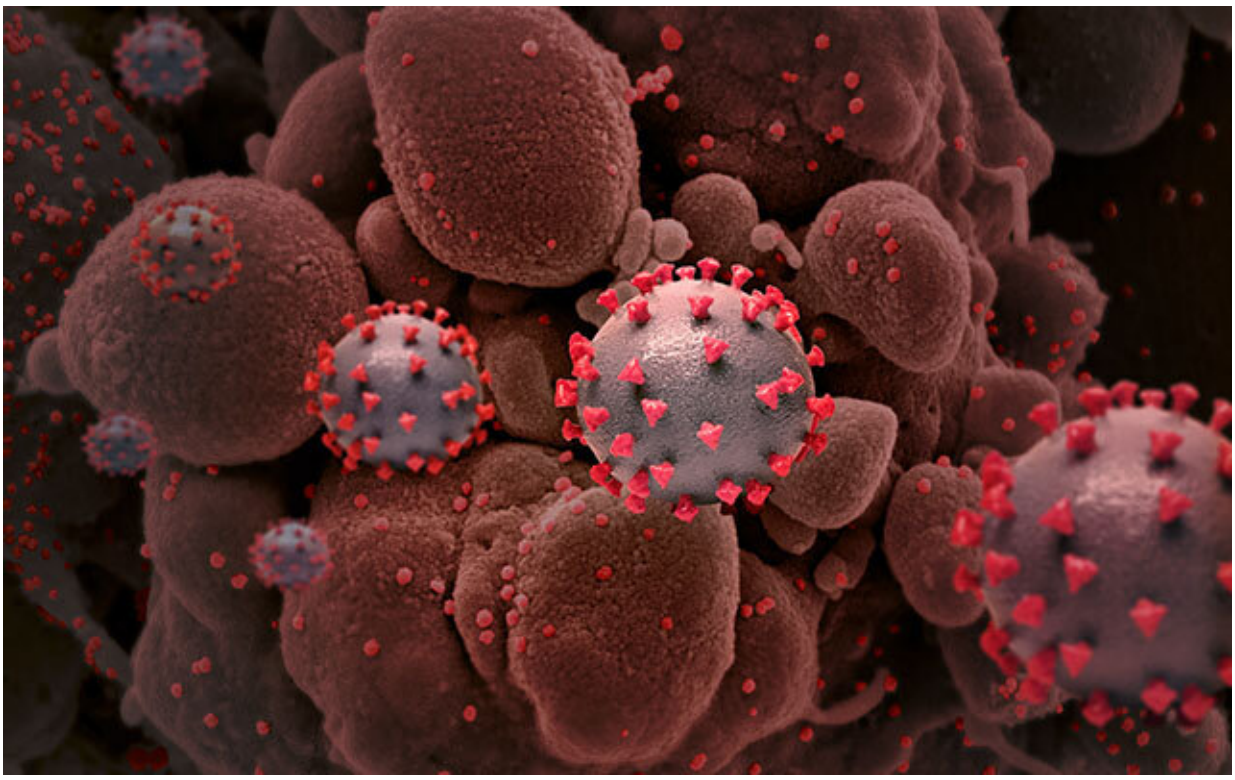

Creative rendition of SARS-CoV-2 particles (not to scale). Credit: National Institute of Allergy and Infectious Diseases, NIH

A large cohort study found that despite impaired immunity, the vast majority of patients receiving dialysis maintained SARS-CoV-2

antibody levels 6 months after infection. A slow and continual decline in median antibody levels was observed over time, but the researchers found no indication that subgroups with impaired immunity had a shorter-lived humoral response compared with a healthy population. The findings are published in *Annals of Internal Medicine*.

Patients receiving dialysis have an impaired immune system and therefore are among the most susceptible to SARS-CoV-2 infection. These are broadly representative of groups most affected by the pandemic, such as older people and those of minority racial/ethnic backgrounds. Therefore, it is important to understand their immune response.

Researchers from Stanford University studied 2,215 patients from a nationwide sample of dialysis facilities to evaluate the persistence of SARS-CoV-2 receptor-binding domain (RBD) IgG in seroprevalent patients. All of the patients were undergoing dialysis and had evidence of SARS-CoV-2 infection in or before July 2020. Labs were taken once a month for 6 months to test for antibodies. The researchers found that 93% of patients reached or maintained an assay detectable response. 60% of patients studied had an immune response classified as high, and 76% of these remained with a high immune response over the study period. They also found that older persons or persons with diabetes (versus people without diabetes) did not experience a faster decline in the antibody titers.

According to the authors, these results are important because studying immune response over time in dialysis patients can serve as a benchmark for clinicians evaluating response to vaccination in this and other vulnerable patient populations.

More information:
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