

Spike RBD IgG antibodies persist after SARS-CoV-2 infection

July 13 2022



Children and adults with severe acute respiratory syndrome coronavirus

2 (SARS-CoV-2) infection have persistent antibodies up to 10 months after infection, and children have higher antibody titers than adults, according to a study published online July 13 in *JAMA Network Open*.

Costanza Di Chiara, M.D., from the University of Padua in Italy, and colleagues examined long-term anti-SARS-CoV-2 spike receptor-binding domain (S-RBD) immunoglobulin G (IgG) kinetics in [children](#) after SARS-CoV-2 infection in a single-center prospective cohort study. A total of 252 COVID-19 family clusters underwent serologic follow-up at one to four, five to 10, and more than 10 months after infection.

Overall, 697 of the 902 study participants had confirmed SARS-CoV-2 infection, including 351 children or older siblings and 346 parents. The researchers found that 96.7 percent of the 697 cases were asymptomatic or mild. Across all follow-up time points, children had significantly higher S-RBD IgG titers than [older patients](#), with an overall median S-RBD IgG titer fivefold higher for children younger than 3 years versus adults (304.8 versus 55.6 kBAU/L). In all age classes, antibodies persisted up to 10 months after infection in a longitudinal analysis of 56 participants, although there was a progressive decline over time.

"This study may provide an important basis to determine the schedule of COVID-19 vaccination in non-previously infected children and of booster immunization in [pediatric patients](#) who have already experienced COVID-19," the authors write.

More information: Costanza Di Chiara et al, Long-term Immune Response to SARS-CoV-2 Infection Among Children and Adults After Mild Infection, *JAMA Network Open* (2022). [DOI: 10.1001/jamanetworkopen.2022.21616](#)

2022 HealthDay. All rights reserved.

Citation: Spike RBD IgG antibodies persist after SARS-CoV-2 infection (2022, July 13)
retrieved 25 April 2024 from
<https://medicalxpress.com/news/2022-07-spike-rbd-igg-antibodies-persist.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.