

Rate of retinal vein occlusions up after COVID-19 infection

April 15 2022



The risk for retinal vein occlusion (RVO) may be increased in the six

months following COVID-19 infection, according to a study published online April 14 in *JAMA Ophthalmology*.

Bobek S. Modjtahedi, M.D., from the Southern California Permanente Medical Group in Pasadena, and colleagues conducted a [cohort study](#) involving 432,515 patients without a history of retinal vascular occlusion who were diagnosed with COVID-19 between Jan. 20, 2020, and May 31, 2021. The change in average biweekly incidence of new retinal artery occlusions (RAOs) and RVOs after COVID-19 was examined.

The researchers found that 16 patients had an RAO and 65 had an RVO (crude incidence rates, 3.00 and 12.20 per 1,000,000 patients, respectively). After adjustment for age; sex; self-reported race and ethnicity; [body mass index](#); history of diabetes, hypertension, or hyperlipidemia; and hospitalization, there was a higher incidence of new RVOs in the six months after COVID-19 infection compared with the six months before infection (adjusted incidence rate ratio, 1.54; 95 percent confidence interval, 1.05 to 2.26; $P = 0.03$). A smaller, nonsignificant, increase in the incidence of RAOs was seen after COVID-19 diagnosis (adjusted incidence rate ratio, 1.35; 95 percent confidence interval, 0.64 to 2.85; $P = 0.44$). At 10 to 12 weeks and six to eight weeks after COVID-19 diagnosis, the peak incidence of RAOs and RVOs occurred, respectively.

"The findings provide further evidence of the prothrombotic state induced by COVID-19 and indicate that the postinfection impacts may last several weeks," the authors write. "Large epidemiologic studies are warranted to better define the association between retinal thromboembolic events and COVID-19 infection."

Two authors disclosed financial ties to the biopharmaceutical industry.

More information: Bobek S. Modjtahedi et al, Changes in the

Incidence of Retinal Vascular Occlusions After COVID-19 Diagnosis, *JAMA Ophthalmology* (2022). [DOI: 10.1001/jamaophthalmol.2022.0632](https://doi.org/10.1001/jamaophthalmol.2022.0632)

K. Thiran Jayasundera et al, COVID-19 Diagnosis and Incidence of Retinal Thromboembolism, *JAMA Ophthalmology* (2022). [DOI: 10.1001/jamaophthalmol.2022.0666](https://doi.org/10.1001/jamaophthalmol.2022.0666)

© 2022 [HealthDay](#). All rights reserved.

Citation: Rate of retinal vein occlusions up after COVID-19 infection (2022, April 15) retrieved 25 April 2024 from <https://medicalxpress.com/news/2022-04-retinal-vein-occlusions-covid-infection.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.