

# MYTHS AND TRUTHS OF THE ASSOCIATION OF RETINAL VASCULAR OCCLUSION WITH COVID-19

Ashish Sharma <sup>1</sup>, Nikulaa Parachuri <sup>1</sup>, Nilesh Kumar <sup>1</sup>, Mario Rosario Romano <sup>2</sup>, Barbara Parolini <sup>3</sup>, Sengul Ozdek <sup>4</sup>, Mohamed A Tawfik <sup>5</sup>, Ameen Marashi <sup>6</sup>, Baruch D Kuppermann <sup>7</sup>, Quan Dong Nguyen <sup>8</sup>

Affiliations + expand

PMID: 34907124 DOI: [10.1097/JAE.0000000000003371](https://doi.org/10.1097/JAE.0000000000003371)

## Abstract

**Purpose:** To critically review data published in the recent past to scrutinize a causal relationship between retinal vascular occlusion and COVID-19.

**Method:** A comprehensive literature search was performed on Pubmed with the key words retinal vascular occlusion, retinal vein occlusion, retinal artery occlusion, and COVID-19.

**Results:** A total of 17 case reports were published during this period, and 10 were on retinal vein occlusion and 7 on retinal artery occlusion. Most of the published reports lacked convincing evidences in one or the other aspects, such as insufficient laboratory workup or presence of multiple confounding risk factors.

**Conclusion:** In this index article, strength of the data is insufficient to establish a definitive cause-and-effect relationship of retinal vascular occlusive disorders with COVID-19. Hence, clinicians can continue to manage these cases according to the standard guidelines until there are more robust evidences to support this association to alter the diagnostic and treatment modalities.