

Retinal and choroidal manifestations of COVID-19

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Abstract

Purpose of review: The novel coronavirus disease in 2019 (COVID-19) has a wide range of systemic manifestations. Ocular manifestations are now well recognized, with conjunctivitis being the most common. Posterior segment involvement is uncommon and has mainly been described in case reports. This review provides an overview of the posterior segment involvement of COVID-19.

Recent findings: Severe acute respiratory syndrome coronavirus 2 affects the retina and the choroid through either direct entry or triggering an indirect inflammatory response. Majority of the retinal findings is a result of microvascular derangement leading to cotton wool spots, intraretinal hemorrhages, paracentral acute middle maculopathy, acute macular neuroretinopathy, or retinal vein occlusions. Rarely, inflammation involving the retina or the choroid, or reactivation of previously quiescent uveitis, can be seen.

Summary: It is important to recognize the possible correlation between ophthalmic conditions and COVID-19 as it can aid in diagnosis, management, and mitigation of the disease.

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