Optical Coherence Tomography of Retinal Artery Occlusion Associated With Mucormycosis and COVID-19

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A 41-year-old woman presented with mucormycosis-induced orbital apex syndrome following SARS-CoV-2 infection. Magnetic resonance imaging showed pansinusitis with thickening and enhancement of the extraocular muscles. A histopathological examination disclosed broad-based, filamentous, aseptate hyphae, suggestive of mucormycosis. A fundus examination showed signs of central retinal artery occlusion, including loss of transparency, presumably from ischemia to the ganglion cell layer and boxcarring of the retinal arterioles. Macular folds on fundus photography with separation of the neurosensory retina from the retinal pigment epithelium on optical coherence tomography were noted (Figure). Prompt treatment with systemic amphotericin B (10 mg/kg/d) and debridement of the sinuses was performed, although the eye was exenterated.

We hypothesize that choroidal congestion because of orbital apex syndrome led to separation of the neurosensory retina from the retinal pigment epithelium. Cases of COVID-19 associated with mucormycosis in the setting of corticosteroid use and diabetes as potential predisposing factors have been reported in India.1

ARTICLE INFORMATION

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REFERENCES