Comment on: Retinal manifestations in patients following COVID-19 infection

Dear Editor.

We read with interest the case series by Goyal *et al.*^[1] titled "Retinal manifestations in patients following COVID-19 infection: A consecutive case series". After going through the article, we think that most cases were potential retinal pathologies from the side effects of medication, particularly systemic steroids, used for the management of the coronavirus disease 2019 (COVID-19) infection or its sequelae.

In Case 1, the patient got intravenous steroids approximately 1 week before the onset of ocular symptoms, and there was known evidence of steroid-induced diabetes, which potentiated the risk of endogenous endophthalmitis. Although ocular cultures were negative, blood culture and liver findings were not presented. As a matter of fact, liver abscess presented with endogenous *Klebsiella pneumoniae* endophthalmitis is particularly common in South Asian region.^[2]

In Case 2, steroid usage information was not available, yet for COVID-19 treatment in India, [3] systemic steroid should have likely been given. In Case 3, the time course relationship was clearly presented. The onset of nocturnal low-grade fever was overlapping with the start of systemic steroid treatment, making the reactivation of tuberculosis top the differential diagnosis list. Early morning sputum culture results for

acid-fast bacilli were not presented by the authors despite a negative Mantoux test and Quanti-FERON-TB Gold test.^[1] Also, airborne COVID-19 cases might have been hospitalized in the same isolation facilities simultaneously treating open pulmonary tuberculosis patients, where cross-infection might be another possibility.^[4]

For Case 6, the young lady was an intensive care unit (ICU) case, with anemia and thrombocytopenia. Further details on the previous history of airway intubation or cardiopulmonary resuscitation during her ICU stay would be helpful, particularly to rule out whether her bilateral prefoveal hemorrhages were the presentation of Valsalva retinopathy. [5] In addition, if prone posture was adopted for COVID-19 treatment, ocular decompression retinopathy might have happened after removing the sustained pressure on the globes.

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Conflicts of interest

There are no conflicts of interest.

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