

Severe acute respiratory syndrome Corona virus and intraocular fluid sampling

Dear Editor,

We congratulate the authors for the excellent documentation of their cases.^[1] We would like to share our experiences dealing with similar cases and would also like to seek clarifications from the authors.

We have also been routinely doing reverse transcriptase polymerase chain reaction (RT-PCR) for severe acute respiratory syndrome Corona virus (SARS-CoV-2) in our patients with retinal vascular occlusion, endogenous endophthalmitis, panophthalmitis (unpublished data), and with posterior uveitis.^[2,3] The authors statement "To the best of our knowledge, no study to date evaluated the intraocular fluids for the presence of SARS-CoV-2 in live humans is not correct." Bilgic *et al.*^[4] have isolated the SARS-CoV-2 in patients with endophthalmitis from the vitreous sample. In another study by Koo *et al.*^[5], six (19.4%) patients demonstrated detectable SARS-CoV-2 RNA in the aqueous sample, and fortunately, all these individuals did not have any systemic symptoms.

We were not able to isolate the SARS-CoV-2 virus in either aqueous or vitreous sample. We have been adopting the following procedure for processing the samples. Our samples are collected in a 1 mL tuberculin syringe and capped, transported in an viral transport medium available from Bhat Bio-Scan™ to the laboratory maintaining a temperature between 2 and 8°C.

TaqPath™ Corona Virus Disease-19 (COVID-19) Multiplex Diagnostic Solution from Thermo Fisher Scientific™ is used for multiplex real-time RT-PCR test. This helps in qualitative detection of nucleic acid from SARS-CoV-2. Three regions of the SARS-CoV-2 single-stranded RNA genome – The Orf1ab, N gene, and S gene – are amplified and detected with the help of primer and the probe.

It is of importance as SARS-CoV-2 is either not detected or detected in a very low percentage, of ocular samples in patients who have COVID-19.^[6] We would also like to suggest that a positive control may be useful by adding a known quantity of viral RNA to ocular fluid to rule out the presence of polymerase chain reaction inhibitors.

It would also be useful if the authors could share if SARS-CoV-2 antibodies and other inflammatory markers were raised in their seven patients. Our patients who were not vaccinated had raised levels of antibodies in addition to raised levels of D-dimer, serum ferritin, and lactate dehydrogenase.

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Conflicts of interest

There are no conflicts of interest.

Srinivasan Sanjay, Venkata Ramana Anandula¹,
Padmamalini Mahendradas, Ankush Kawali,
Rohit Shetty²

Department of Uvea and Ocular Immunology,
Narayana Nethralaya, ¹Department of Molecular Diagnostics &
Laboratory Services, Narayana Nethralaya,
²Department of Cornea, Refractive Services and Neuro-
Ophthalmology Narayana Nethralaya,
Bengaluru, Karnataka, India

Correspondence to: Dr. Srinivasan Sanjay,
Department of Uvea and Ocular Immunology,
Narayana Nethralaya, Bengaluru - 560 010,
Karnataka, India.
E-mail: sanjaygroup24@gmail.com

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