

## COVID-19 Lockdown: Not a Barrier for Retinopathy of Prematurity Screening

Dear Editor,

Teleophthalmology is already being used as a screening tool for diabetic retinopathy, glaucoma, and retinopathy of prematurity (ROP). ROP, is one of the leading causes of avoidable blindness globally.<sup>[1]</sup> Early detection and treatment of threshold and high-risk prethreshold ROP decreases the incidence of severe vision loss and improves the outcomes in premature infants.<sup>[2,3]</sup> This cross-sectional observational hospital-based study included ROP screening of 780 preterm infants between April 1 and July 31, 2020, at our tertiary hospital, Tirunelveli, Tamil Nadu. The mid-level ophthalmic professionals used to travel to hospitals in Tirunelveli and nearby districts (Kanyakumari, Thoothukudi) and screen the preterm infants using RetCam, images of which were sent to the base hospital. There, the retina specialist will make the diagnosis and decide on further management based on the diagnosis. Among the 780 preterm infants that were screened 466 (59.74%) were new patients and 314 (40.26%) were review patients. Of the 780 preterm infants that were screened

128 (16.41%) of them were diagnosed with ROP. Of these 18 of them were advised to undergo laser and 17 were given injection Avastin. A flow chart for ROP screening is shown in Figure 1.

Schwartz *et al.*<sup>[4]</sup> have compared teleconsultation evaluation and management with on-site evaluations of ten patients with ROP. Their study showed that plus disease was accurately identified in 95% (18/19) of eyes and they were also able to correctly identify the presence of prethreshold, threshold, and stage 4 or 5 ROP in 89% (17/19) of eyes. These findings correlate with our study.

With the help of RetCam imaging, we were able to accurately detect cases of high-risk ROP (prethreshold and threshold disease) and Aggressive posterior ROP, and provide appropriate treatment. With the help of teleophthalmology, we were able to diagnose and provide timely intervention, which if undiagnosed would have led to complications and blindness due to ROP. In conclusion, teleophthalmology for ROP screening has played a vital role for screening, detecting, and managing ROP during the COVID-19 lockdown period and preventing avoidable blindness.

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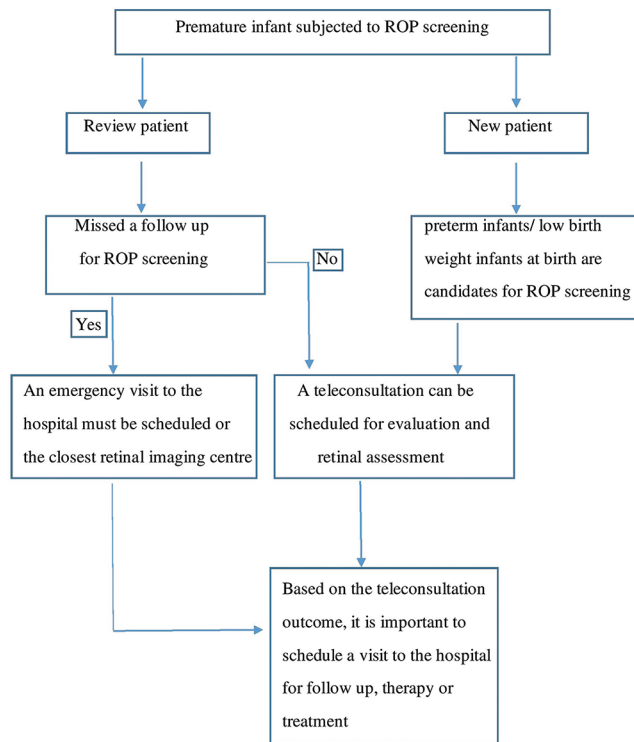
### Conflicts of interest

There are no conflicts of interest.

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**Figure 1:** Flow chart for retinopathy of prematurity screening

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