# Comments on: Preferred practice guidelines for glaucoma management during COVID-19 pandemic

#### Dear Editor:

We read with interest the article "Preferred practice guidelines for glaucoma management during COVID-19 pandemic". by Tejwani S *et al.* in the current issue of IJO<sup>[1]</sup> We have a few suggestions and clarifications.

- 1. The authors have suggested using isopropyl alcohol to disinfect GAT prisms between patients. As isopropyl alcohol is ineffective against Adenovirus and Herpes Simplex Virus (HSV), they have specifically recommended soaking the GAT prisms in 0.5% bleach/sodium hypochlorite (1 part of 5% sodium hypochloride in 9 parts distilled water) or 3% hydrogen peroxide for 5 minutes but only at the beginning and end of the daily OPD. If the aim is to protect against adenovirus and HSV, using sodium hypochlorite to disinfect the GAT prism only twice a day "morning" and "evening" would not achieve this purpose since a potentially infected patient could present at any time to the OPD. If we are concerned only about protecting against the corona virus, then cleaning with isopropyl alcohol should suffice. To prevent the spread of other nosocomial infections such as adenovirus, even a lower concentration of sodium hypochlorite (0.1%) could be used as a disinfectant at least whenever a patient with a red eye is examined and not only to disinfect GAT but also the external surface of the slit lamp
- Many organizations including the European FDA have recommended the use of 0.1% sodium hypochlorite in healthcare setting.<sup>[2-5]</sup> We had earlier suggested the use of 0.1% sodium hypochlorite for sanitization of glaucoma instruments<sup>[6]</sup>
- The authors have recommended that three ply/cotton mask be used by patients and their attendants during their time in the eye care facility. However, studies have shown that

compared to other masks, commercially available fabric masks are least effective with a filtration efficiency of only 39–65% for PSL particles (994 nm to 160  $\mu$ ).<sup>[7]</sup> Since the SARS COV-2 virus is approximately 120 nm in diameter, we recommend the use of only three-ply surgical masks for staff and paramedical faculty as well as patients while in the clinic

- 4. The authors also discuss cleaning protocols for the Schiotz tonometer. We recommend using only a Goldmann Applanation Tonometer as it is acknowledged to be the current gold standard for IOP measurement and can safely be used during the pandemic with appropriate precautions. We agree with the authors advise about using fresh disposable probes for the Icare Tonometer and fresh sleeves for Tonopen for each patient but would like to point out that this guideline is the standard of care for these tonometers irrespective of current pandemic
- 5. The authors also suggest that visual fields should be done only "if necessary" for diagnosis, planning, or changing management. These are the standard indications for visual fields; presenting them as a separate recommendation may create confusion in the minds of readers. Automated perimetry is an essential part of glaucoma diagnosis and management and is necessary for decision making. The current coronavirus pandemic is predicted to last for at least 18-24 months and smaller outbreaks may even occur for even longer.<sup>[8]</sup> We recommend doing perimetry, with due precautions, regularly in patients having moderate/ severe glaucoma, those whose IOP is not well controlled or in patients showing signs of progression clinically.<sup>[6]</sup> The rest of patients could be monitored with Optic Disc and RNFL imaging for time being. However, given the potential duration of the pandemic, visual fields may be required at least annually in early disease too. We would like to re-emphasize that virtual perimeters do not have validated progression software and is not likely to be beneficial in chronic diseases such as glaucoma which need monitoring for progression

6. It is difficult to access Reference 13 as provided currently. We have provided links to these recommendations.<sup>[9,10]</sup>

We hope some of these clarifications and modifications would be helpful in managing glaucoma patients at this time. Since our knowledge about COVID-19 and SARS-CoV-2 is constantly evolving, our guidelines may need change and readers should keep themselves updated about this dynamic process.

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#### **Conflicts of interest**

There are no conflicts of interest.

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