

Intraocular pressure measurement during COVID pandemic

Sir,

Furthering your concise and relevant editorial: "All eyes on Coronavirus – What do we need to know as ophthalmologists",^[1] we would like to elaborate on the concerns regarding noncontact tonometry and share our experience in changing our tonometry practices.^[2]

With the knowledge that a pulse of pressurized air blown towards the eyes can generate micro-aerosols and the previous 2003 experience of identifying the SARS-CoV in the tears of infected patients – potential viral dissemination via noncontact tonometry was a major concern in our crowded outpatient clinics.^[3,4] Furthermore, recent studies regarding the presence of COVID-19 particles in tears have had conflicting results and the infective risk from ocular secretions is still uncertain.^[4,5] Therefore, we have preemptively adopted three main measures to reduce the transmission risk; firstly, to limit intraocular pressure measurement only to indicated cases including recent postoperative cases, those on anti-glaucomatous and steroid eye drops, and first-visit cases; secondly, to cease all noncontact tonometry use in our triage stations and replacing it with iCare tonometry; and thirdly, to perform all Goldmann tonometry with disposable applanation tips.

With regards to reusable tonometer tips, the American Academy of Ophthalmology reported that 70% of alcohol solutions have been shown to disinfect them from SARS-CoV2 in the past but failed to sterilize them against adenoviruses. About 10% bleach has shown to be the best disinfectant but would require repeated handling by our healthcare staff thereby increasing the risk of exposure. We, therefore, opted

to switch to disposable tips to minimize the risk of both cross-infection between patients and transmission to staff.

While the risk of infection from ocular secretions is still uncertain, it is advised that these extra steps can be implemented to safeguard our staff and protect our patients during these trying times.

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Conflicts of interest

There are no conflicts of interest.

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