Indian J Med Res 153, January & February 2021, pp 199-200
DOI: 10.4103/ijmr.IJMR_3883_20

Quick Response Code:

Correspondence

Impact of the COVID-19 pandemic on clinical ophthalmology

Sir,

There are numerous reports of several ophthalmologists getting infected by COVID-19 and also of mortality among ophthalmologists, despite being fully gowned with a protective suit and N95 respirator[1]. We read with interest the review article by Gupta *et al*[2] and were impressed by their point of view. However, we have a few important observations and suggestions to make which may be beneficial for the readers to get more insight from the ophthalmologist point of view.

Considering the proximity of encounter, the ophthalmologists are at highest risk while doing slit-lamp examination, direct and indirect ophthalmoscopy and gonioscopy. The viral transmission through these instruments can be prevented by regular cleaning with an alcohol-based sanitizer after each examination. Moreover, these can be covered with a cling wrap on a daily basis. The authors have listed the ocular finding in COVID-19 patients holistically[2]. Recently many reports of retinal involvement in COVID-19 patients have come forward. The manifestations vary from retinal haemorrhage, cotton wool spots, central retinal artery occlusion[3] and hyper-reflective lesions at the level of ganglion cell and inner plexiform layers, more prominently at the papillomacular bundle documented on optical coherence tomography scan[4].

The authors have highlighted the screening protocol at the hospital entrance[2]. We would like to add a few points here. The order should follow like hand washing, three-ply mask application, thermal screening, relevant COVID-19 history and application of hand sanitizer before entering the clinic. Social distancing needs to be observed at each step[5]. The authors have segregated patients based on triaging. We would like to add that triage should be done while taking history from the patient and also while examination which can be based on torchlight examination or slit-lamp examination. Patients who are in need of urgent attention should be examined first and those who need routine examination can be tele-consulted or may be given a review date later. Fundus imaging has proven beneficial even while triaging the retina patients. While managing the outpatient department, the authors have correctly enlisted all the precautions[2]. We would like to add a few important points such as limited number of patients should be permitted inside the hospital on an appointment basis, alternate chair-sitting arrangement benefits for social distancing, separate conjunctivitis cubicle for red eye or conjunctivitis patients and an isolated cubical area with doctors wearing full personal protective equipment for examination of patients with a history of COVID-19 infection. Topical eye drops can be made available in the form of pre-assembled kits for emergency conditions such as conjunctivitis, trauma, corneal ulcers, hordeolum internum and externum and acute dacryocystitis.

For the operation theatre (OT) management protocol, the patients should wash their hands and face before entering the OT. If COVID-19 testing is not possible during emergency, a chest X-ray should be done mandatorily. Complete haemogram to rule out thrombocytopenia and electrocardiogram are must before any surgical intervention. Oxygen saturation levels should be monitored using a pulse oximeter during surgery in the OT. All surgeries should be done on a day-care basis. Syringing should be avoided, and this can be replaced by fluorescein dye disappearance test[6]. Betadine application should be mandatory as it is shown to reduce the flora in the cul-de-sac[7]. Saline jetting should be avoided to prevent aerosol dissemination. Viscoelastic spread over the cornea also helps in reducing the aerosol generation. Only one attender should be permitted

with patients, and all comorbidities should be ruled out. For surgery, the quickest and the safest procedure should be followed.

***Financial support & sponsorship*:** None.

***Conflicts of Interest*:** None.

Bharat Gurnani[1,*] **& Kirandeep Kaur**[2]
Departments of [1]Cornea & Refractive Services &
[2]Pediatric Ophthalmology & Squint Service,
Aravind Eye Hospital & Postgraduate
Institute of Ophthalmology,
Puducherry 605 007, India
[*]*For correspondence*:
drgurnanibharat25@gmail.com

Received September 14, 2020

References

1. Li JO, Lam DS, Chen Y, Ting DS. Novel coronavirus disease 2019 (COVID-19): The importance of recognising possible early ocular manifestation and using protective eyewear. *Br J Ophthalmol* 2020; *104* : 297-8.
2. Gupta PC, Kumar MP, Ram J. COVID-19 pandemic from an ophthalmology point of view. *Indian J Med Res* 2020; *151* : 411-8.
3. Acharya S, Diamond M, Anwar S, Glaser A, Tyagi P. Unique case of central retinal artery occlusion secondary to COVID-19 disease. *IDCases* 2020; *21* : e00867.
4. Marinho PM, Marcos AA, Romano AC, Nascimento H, Belfort R Jr. Retinal findings in patients with COVID-19. *Lancet* 2020; *395* : 1610.
5. Sharma N, Sachdev MS. All India ophthalmological society: Stance on COVID-19 pandemic. *Indian J Ophthalmol* 2020; *68* : 1239-42.
6. Ali MJ, Hegde R, Nair AG, Bajaj MS, Betharia SM, Bhattacharjee K, *et al*. All India Ophthalmological Society - Oculoplastics Association of India consensus statement on preferred practices in oculoplasty and lacrimal surgery during the COVID-19 pandemic. *Indian J Ophthalmol* 2020; *68* : 974-80.
7. Edington M, Ramaesh K, Lockington D. Virucidal benefits of povidone-iodine use on the ocular surface: A review. *BMJ Open Ophthalmol* 2020; *5* : e000509.