Ophthalmic surgery on a COVID-19 positive patient – First experience!

Dear Editor,

We operated on our first coronavirus or COVID-19 positive case (CPC), who had an extensive eyelid and canalicular tear and needed early surgery. While the risk of operating on a positive patient is high due to aerosols generated,^[1-3] no team member refused to be a part of the surgery. We did have some hiccups which is expected given that it is our first such experience. Hence, we have listed some guidelines, as operating on CPCs in an ophthalmic setup is a distinct possibility in the near future:

- For operation theatres (OT) with a centralized air-conditioning (AC) system, no other surgeries should be scheduled during a CPC surgery in the OT complex or should be switch off in those OTs with a split AC and positive pressure ventilation is best avoided
- Personnel should be kept to a bare minimum and in full personal protection equipment
- Priority should be given to a CPC the patient should be in the hospital premises for the least possible time. Most ophthalmic centers will not be equipped to handle a medical emergency if the patient become symptomatic.
- One ward with an attached bathroom to be dedicated as a waiting and recovery room for CPC's
- Asymptomatic CPC's to be considered for surgery and only if an emergency ophthalmic intervention is required
- CPCs should be taken up as the last surgery and considered as a 'biohazard'
- Instruments should be cleaned with 70% isopropyl alcohol
- All equipment, OT tables, and floor to be cleaned immediately after surgery
- Surgical plan should be discussed with the team prior to the surgery to avoid undue delays
- Fit individuals should preferably be selected to be a part of the surgical team
- Post-operative follow-up should be planned so as to minimize visits during the first 2 weeks. Teleophthalmology is an option till the patient turns negative.^[4]

Besides the risk of infection to the surgical team, other concerns are the extra costs involved while operating on a CPC. There are guidelines on safe surgical practice during the pandemic.^[5-7] However, experience on eye surgeries for COVID-19 patients is limited. We have been cautious with elective procedures, but surgery for ocular trauma or sight-threatening conditions cannot be put off for the fear of COVID-19. Other specialties, such as obstetrics and cardiac surgery have reported measures appropriate to their surgeries.^[8,9] With the pandemic showing no signs of abating, the above guidelines and precautions may help expedite the decision-making process on whether to perform urgent ophthalmic procedures on COVID-19 positive patients.

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Conflicts of interest

There are no conflicts of interest.

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References

- Shetty R, Balakrishnan N, Shroff S, Shetty N, Kabi P, Roy D, et al. Quantitative high-speed assessment of droplet and aerosol from an eye after impact with an air-puff amid COVID-19 scenario. J Glaucoma 2020. doi: 10.1097/IJG.000000000001672.
- 2. Shetty N, Kaweri L, Khamar P, Balakrishnan N, Rasheed A, Kabi P, *et al.* Propensity and quantification of aerosol and droplet creation during phacoemulsification with high-speed shadowgraphy amid COVID-19 pandemic. J Cataract Refract Surg 2020;46:1297-301.
- 3. Khamar P, Shetty R, Balakrishnan N, Kabi P, Roy D, Basu S, *et al.* Quantitative shadowgraphy of aerosol and droplet creation during oscillatory motion of the microkeratome amid COVID-19 and other infectious diseases. J Cataract Refract Surg 2020;46:1416-21.
- 4. Jayadev C, Mahendradas P, Vinekar A, Kemmanu V, Gupta R, Pradhan ZS, *et al.* Tele-consultations in the wake of COVID-19-Suggested guidelines for clinical ophthalmology. Indian J Ophthalmol 2020;68:1316-27.
- Al-Khersan H, Kalavar MA, Tanenbaum R, Lazzarini TA, Patel NA, Yannuzzi NA, *et al.* Emergent Ophthalmic Surgical Care at a Tertiary Referral Center during the COVID-19 Pandemic. Am J Ophthalmol 2020. doi: 10.1016/j.ajo.2020.08.044.
- Saleh OA, Jammal H, Alqudah N, Alqudah A and Abu-Yaghi N. Clinical experience in the administration of intravitreal injection therapy at a tertiary university hospital in Jordan during the COVID-19 lockdown. Clin Ophthalmol 2020;14:2473-80.
- Agarwal D, Chawla R, Varshney T, Shaikh N, Chandra P, Kumar A. Managing vitreoretinal surgeries during COVID-19 lockdown in India: Experiences and future implications. Indian J Ophthalmol 2020;68:2126-30.
- Niknam J and Rong LQ. Asymptomatic patients with coronavirus disease and cardiac surgery: When should you operate? J Card Surg 2020;35:2486-8.
- 9. Ferrazzi E, Frigerio L, Savasi V, Vergani P, Prefumo F, Barresi S, *et al.* Vaginal delivery in SARS-CoV-2-infected pregnant women in Northern Italy: A retrospective analysis. BJOG 2020;127:1116-21.

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