

Experience of Oculoplastic Practice in Times of COVID-19 Pandemic at a Tertiary Care Centre: Precautions and Challenges

Sir,

Coronavirus infectious disease 2019 (COVID-19) is now a global pandemic, which is responsible for major concern in the health-care sector because of its highly contagious nature. A single case of COVID-19 in a healthcare provider can infect and jeopardise the capacity of the whole hospital.¹ Direct human-to-human transmission through cough, sneeze, droplet inhalation, and transmission through contact with mucous surfaces like mouth, nose, and eye are the major routes of transmission.² In procedures which deal with both diagnosis and treatment of patients with eye diseases, such chances of getting infection are more because of the lengthy surgeries performed under anesthesia. This is because of inhalation of airborne viral particles that can continue to be suspended in the air for long time.³

Ophthalmology, including orbit and oculoplastics, is among the specialties with high risk of getting infection.¹ To operate in cases of emergency conditions like eyelid laceration and exenteration, there are chances of direct exposure to the infected person's blood, oral fluids, or body surfaces, like, mucosal surfaces such as conjunctiva, nose and mouth. The later can easily harbour viral particles generated *via* activities associated with aerosol spread, like coughing, talking without a mask and indirect contact with contaminated devices in environmental surfaces because of working near the infected patients.⁴

Although COVID-19 pandemic is temporarily controlled in Pakistan, it is still in full swing in our neighboring countries like India. All sectors of life have been affected. Some medical specialties are on the top in terms of risk of getting the disease. There is a high risk of cross-infection in ophthalmology, especially orbit and oculoplastics due to their lengthy surgical reconstructive procedures, notably in patients with tumors and trauma.¹ Although, majority of our patients can be delayed but some cases present a real challenge. The triage system for screening patients related to orbit and oculoplastics only picks such important cases, which include advanced orbital tumors, eyelid lacerations and orbital cellulitis. Most of our patients need hospitalisation and workup.

Our experience in the past four months includes dealing with eyelid lacerations, orbital cellulitis, very large and advanced tumors and inflammatory conditions like, acute thyroid orbitopathy (Figure 1 a to d). Most of them need urgent intervention.



Figure 1: Some examples of eye emergencies requiring urgent oculoplastic procedures. (a) A 76-year lady with a large left orbital mass secondary to squamous cell carcinoma of conjunctiva. (b) Right orbital cellulitis in a child. (c) Extensive eyelid laceration. (d) Postoperative eyelid trauma after reconstruction.

We share some safe strategies for prevention from infection and safety of both patients and the healthcare providers in the operation room:

- (1) Use surgical loupe instead of microscope during surgery to maintain a safe distance.
- (2) Prefer to operate under local anesthesia (LA) as general anesthesia (GA) is associated with aerosol transmission during and after anesthesia induction.⁵
- (3) Awareness of patients regarding telemedicine should be promoted; this is important in non-urgent oculoplastic procedures like, chronic dacryocystitis (CDC) or small eyelid tumors. CDC patients can be instructed to use antibiotics and manual cleaning of a blocked duct.
- (4) Some oculoplastic procedures are lengthy and dangerous. Important examples include exenteration surgery for large tumors or repair of extensive eyelid lacerations (Figure 1a to d). Try to finish as quickly as possible with minimum or careful use of cautery as it is also responsible for aerosol transmission containing COVID-19 virus.
- (5) Try to reschedule non-urgent cases. According to our experience at Lady Reading Hospital, most of such patients understood the need for rescheduling their appointment due to increased chances of spreading the infection to both the surgeon and the patient.

In conclusion, the decision of selecting the right patient during the present pandemic is crucial, challenging, and is stressing the need for extra care, especially during long surgical procedures. Although, emergency patients present infrequently, these are the real challenges for an oculoplastic surgeon.

PATIENTS' CONSENT:

Informed consents were obtained from the patients to publish the data concerning this case.

CONFLICT OF INTEREST:

Authors declared no conflict of interest.

AUTHORS' CONTRIBUTION:

MI: Conception and design of work, acquisition, analysis and interpretation, drafting of content and final approval.

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