Wetlab training during COVID-19 era; an ophthalmology resident's perspective

Dear Editor,

COVID 19 pandemic has resulted in a huge disruption of postgraduate training programs all over the world. Surgical specialties were the worst hit among them. Regular outpatient

services were closed and non-elective surgeries were suspended. To reduce the risk of transmission and to conserve personal protective equipment only a limited number of staff were allowed inside emergency operation theatres besides surgeries being performed by only consultants and senior residents. Furthermore, surgical specialty residents were recruited in COVID 19 care areas to help tackle the rising number of cases.

A surge in virtual conferences was a boon that helped clarify many theoretical aspects of the subject. Routine academic



Figure 1: Wetlab training in progress

training was also continued through online platforms within the department, but hands-on surgical training remained a problem. As a final year ophthalmology resident, the anxiety about fewer training opportunities and decreased surgical exposures surpassed the fear of contracting the infection in this COVID era. A recent UK based survey among ophthalmology surgical trainees revealed that 80% named cataract surgery skills as their biggest concern in this pandemic.^[1]

Wetlab training has been a part and parcel of ophthalmic training programs due to its microsurgical nature requiring precise hand-eye coordination. It is known to improve the surgical efficiency of the residents and to reduce Intraoperative complications. ^[2,3] It also provides a platform to innovate and practice newer techniques.

With the pandemic drawn out longer than expected, residents in our institute were mandated to indulge in wet lab practice. A structured wetlab curriculum was prepared, incorporating residents at different levels of training, ensuring guidance at every level, keeping in mind social distancing with adequate PPE. Residents were mandated to possess individual instrument sets. Goat eyes were procured daily in handsome numbers and techniques such as sclerocorneal tunnel, anterior capsulorhexis, posterior capsulorhexis, phacoemulsification, or small incision cataract surgery with intraocular lens implantation (in the bag, in the sulcus, iris fixated, angle fixated, scleral fixated XNIT technique), penetrating keratoplasty with interrupted or continuous suturing, corneoscleral tear repairs and corneoscleral button excision, and iridodialysis repair were practiced. Human cadaver eyes unfit for keratoplasty were utilized especially to practice trabeculectomy as sclera of goat eyes were extremely thin. One-on-one wetlab sessions with preceptors watching through observer microscope tube and CCTV helped [Fig. 1]. Residents were also evaluated using OSCAR scores after every cataract extraction.

Day by day there was a newfound enthusiasm among us residents and the wet lab helped rebuild our confidence, alleviate anxiety, and made us challenge our boundaries in these difficult times. Therefore, a well-structured wet lab curriculum is quintessential in any resident training program, and more so in this COVID era. This positive outcome of the negatively impacted pandemic is likely to continue even when the outpatient and surgical volume returns to normal.

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Conflicts of interest

There are no conflicts of interest.

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