

Augmenting postgraduate ophthalmology residency training during the COVID-19 pandemic

Dear Editor,

The coronavirus pandemic resulted in an unsurmountable loss to human life worldwide and created unprecedented challenges for healthcare systems including ophthalmology. The postgraduate medical and surgical training was not far from this negative influence.^[1] We read an interesting article by Sarkar *et al.*^[2] regarding surgical simulator-assisted postgraduate training and we must congratulate the authors highlighting the impact of virtual reality simulators (Eyesi, VRmagic, Mannheim, Germany). Although surgical training forms the core of ophthalmology postgraduate training but as a trainee resident, other skills also deserve equal attention for a holistic training program.^[3] Here, we want to add a few important points for maximizing resident training output when the patient flow is less and surgical training is at a halt.

1. The residents can practice anterior segment slit-lamp examination and retinoscopy on dummy eyeballs. They can use a slit-lamp and dummy eyeball holders for practicing oblique illumination, retro, and diffuse illumination. In addition, they can also master how to identify the myopic and hypermetropic reflex using a retinoscope on dummy eyeballs.
2. The 3D printed or dummy eyeballs can be used for practicing indirect ophthalmology with the retinal image printed within.^[4] They can even practice scleral depression

using an earbud or a scleral depressor.

3. The dummy eyeballs can be employed for practicing manual keratometry by identifying mires on the eyeball. In addition, they can have surgical video discussions where they can exchange scientific ideas.
4. The wet lab can be utilized for practicing and tying sutures on a thermocol or a lemon. This initial technique can be taught by a senior, and later, scoring can be done based on the performance of the trainee.
5. The goat's eyeballs or leftover cadaveric eyeballs can be used to practice scleral tunnel incision, side port incision, tunnel sutures, rhexis in goat's eyeball, trench, and quadrant emulsification in goat's eye, and anterior vitrectomy.
6. One innovative technique we follow is that the goat's eyeballs can be hardened by baking them in the microwave so that the nucleus becomes hard and gives a real-time feel of trenching and emulsification. In addition, the goat's nucleus can be replaced with a human nucleus and soap pellet to give a real-time feel of phacoemulsification.

We believe that this training module can be implemented across different centers for maximizing medical and surgical output when the pandemic is at its peak.^[5]

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Conflicts of interest

There are no conflicts of interest.

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