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## Leap forward in wet lab surgical training and simulation using goat's eyeball during COVID-19 pandemic

Dear Editor,

The reduced patient volume during the COVID-19 pandemic had forced residents and fellows at every center to attend wet labs and improvise their surgical training and skills. Apart from training, there were a significant number of wet lab innovations to enhance training. We read the important article by Paul *et al.*<sup>[1]</sup> highlighting the utility of the goat's eyeball for surgical training. However, the authors have restricted their discussion to surgical steps of small incision cataract surgery (SICS) *per se*. Goat's eyeball can be used to practice nearly all ophthalmic surgeries with few potential limitations.<sup>[2]</sup> Here, we have a few potential points to add, which we experienced during wet lab training during the pandemic. We believe that these will help all the residents and trainees across the globe to improve their wet lab training.

1. During phacoemulsification training, the goat's eyeball can be used to practice clear corneal incisions, capsulorrhexis, nucleus rotation, trenching, and emulsification simulating phaco on the human eye.<sup>[3]</sup>
2. The goat's eye, we guess, is a perfect tool to practice anterior

vitrectomy (cut I/A, I/A cut) for surgeons who want to learn complication management part during surgery. The posterior capsule can be iatrogenically punctured, and vitreous cut can be practiced with a near-perfect feel. It also helps us to understand the chamber dynamics during vitrectomy.

3. The goat's nucleus is very soft can be replaced with a human nucleus extracted during SICS. This will also help in practice and learn trenching during phacoemulsification.
4. The goat's nucleus can also be replaced with a soap pellet to practice trenching during phacoemulsification. The soap pellet can be heated in an oven to make it hard and give a perfect feel of the trench.<sup>[4]</sup>
5. The collapsed goat's eyeball can be solidified for use by injecting 1 mL of formalin in the vitreous cavity through the sclera with a 23 G or 26 G needle. Formalin injection increases the intraocular pressure of the eyeball and makes it tense and sturdy for reuse.
6. The goat's eyeball can also be used to practice intravitreal injections, keratoplasty suturing, iris fixated IOL, SFIOL scleral pockets, XNIT SFIOL technique, and three-port placement for retinal surgeries.

We authors have practiced and experienced all these techniques, and we believe that the goat's eyeball has a tremendous role to play in training the incoming candidates and give a real time feel of the ophthalmic surgeries.

### Acknowledgements

Aravind Eye Hospital and Post Graduate Institute of Ophthalmology, Pondicherry.

### Financial support and sponsorship

Nil.

### Conflicts of interest

There are no conflicts of interest.

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Quick Response Code:	Website:
	www.ijo.in
	DOI: 10.4103/ijo.IJO_41_22

**Cite this article as:** Gurnani B, Kaur K. Leap forward in wet lab surgical training and simulation using goat's eyeball during COVID-19 pandemic. *Indian J Ophthalmol* 2022;70:1059-60.

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