

Novel Techniques and Technologies

BY WILLIAM B. TRATTLER, MD

Eyetube.net has a variety of surgical and educational videos that appeal to cataract and refractive surgeons. This month's column highlights several recent submissions that share new techniques for handling both basic and complicated cases. Additionally, one of the videos utilizes new technology to help improve outcomes in corneal surgery.

NEW TECHNIQUES IN CATARACT CASES

Marcos Gomez, MD, from Valencia, Spain, provides a video on a different style of chopping—called microchop—which he applies in cases of dense cataract. Dr. Gomez uses a cystotome as his second instrument for creating the microchops. His video demonstrates this technique for disassembling a very hard nucleus (Figure 1) (<http://eyetube.net/v.asp?hoodug>).

Suhas Haldipurkar, MD, from Maharashtra, India, shares a technique for handling a spontaneously dislocated, hypermature cataract. After removing the cataract, he demonstrates a technique for suturing a three-piece IOL to the posterior side of the iris. Dr. Haldipurkar contributes a second case of a decentered IOL, which he repairs with an exchange of the IOL.



Figure 1. The surgeon demonstrates endonucleus dissection and aspiration.

A third case demonstrates his management of a recurrent iris cyst and a partially absorbed cataract (Figure 2) (<http://eyetube.net/v.asp?jetalo>).

Another video on Eyetube.net that shares a challenging case was submitted by James Lewis, MD. The eye has a white cataract and an iris coloboma. Dr. Lewis uses trypan blue and an endocapsular tension ring to successfully complete the cataract procedure (Figure 3) (<http://eyetube.net/v.asp?loodev>).

Ming Chen, MD, attempts to correct 5.00 D of corneal astigmatism in the eye of a patient undergoing cataract surgery by combining a toric IOL with paired limbal relaxing incisions. To help guide his placement of the toric IOL and determine the effect of the limbal relaxing incisions, Dr. Chen uses the ORange intraoperative wavefront aberrometer (WaveTec Vision Systems, Inc., Aliso Viejo, CA) (Figure 4) (<http://eyetube.net/v.asp?sisuno>).

NEW TECHNIQUES IN CORNEAL CASES

Juan Carlos Abad, MD, from Medellin, Colombia, demonstrates a new technique for inserting a Descemet's stripping automated endothelial keratoplasty graft through a 3.2-mm incision. He explains how to use the Endoshield

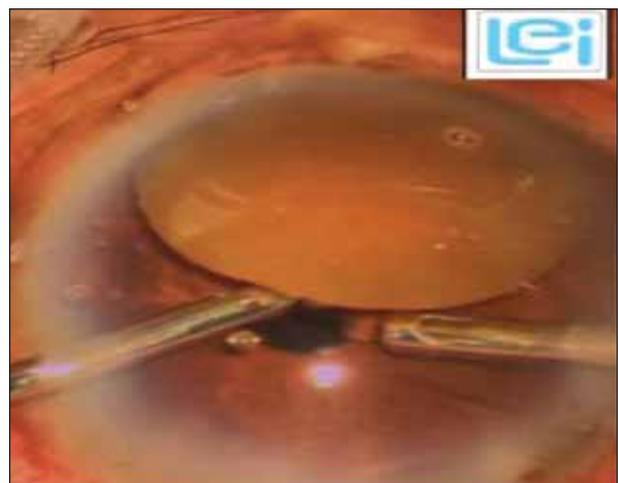


Figure 2. The surgeon uses quick chop and horizontal chop to dislocate a hypermature cataract.



Figure 3. Trypan blue is used to aid the capsulorhexis' formation, and the cataract is phacoemulsified through a 2.2-mm incision.



Figure 4. The surgeon performs intraoperative wavefront aberrometry with the ORANGE to ascertain the refractive cylinder.

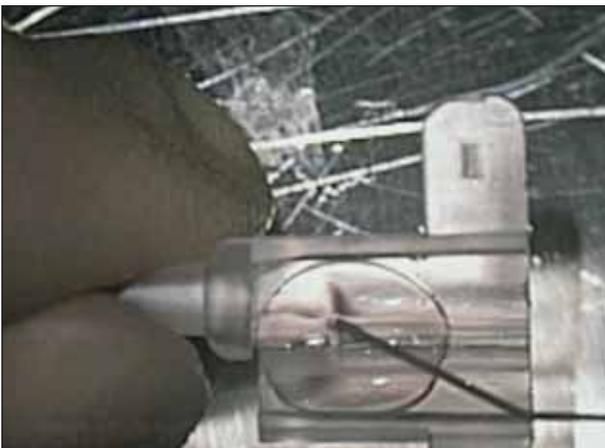


Figure 5. The surgeon demonstrates injection with the Endoshield Graft Injector System in an eye with pseudophakic bullous keratopathy.



Figure 6. Shareef Mahdavi shares his ideas on the business of ophthalmology with Christine Conellan, MBA.

Graft Injector System (KeraMed, Inc., Sunnyvale, CA) and makes the Descemet's stripping automated endothelial keratoplasty procedure appear extremely easy. This technology has received a CE Mark and is pending approval in the United States (Figure 5) (<http://eyetube.net/v.asp?kufigi>).

NEW METHODS FOR CREATING A POSITIVE EXPERIENCE

A topic that is important both before and after surgery is creating a positive experience for patients. On Eyetube TV, Shareef Mahdavi, president of SM2 Strategic (Pleasanton, CA), presents his pearls. Mr. Mahdavi shares helpful ideas like these at various medical meetings throughout the year, but it is convenient to listen to his thoughts in the comfort of one's office or home (Figure 6) (<http://eyetube.net/v.asp?tuseeh>).

CONCLUSION

With so many innovative and educational videos to choose from, viewing the videos highlighted herein can be readers' first step toward introducing new techniques and technologies in their practices. ■

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