CORNEAL REFRACTIVE SURGERY

CORNEAL INLAYS: RESEARCH AND RESULTS
By R. Luke Rebenitsch, MD; Y. Ralph Chu, MD; and Robert K. Maloney, MD
Three US surgeons provide updates on the corneal inlay devices they use: the Kamra inlay (AcuFocus), the Raindrop Near Vision Inlay (ReVision Optics), and the Presbia Flexivue Microlens (Presbia). Dr. Rebenitsch says he typically recommends the Kamra for patients under the age of 55 years and refractive lens exchange for those who are older. Dr. Chu says that, in his experience, patients implanted with the Raindrop have good functional vision with average binocular acuities of approximately 20/20. Currently in US FDA trials, the Flexivue generally provides patients with reading vision that is much better than they could achieve with 1.00 D of monovision, Dr. Maloney says.


HOW TO PRESENT REFRACTIVE LENS EXCHANGE TO PATIENTS
By George O. Waring IV, MD
A digital lens-centric preoperative evaluation can help to identify patients with dysfunctional lens syndrome (DLS), Dr. Waring says, adding that this terminology should be preferred to the alternative terms such as precataract or very early cataract. In his article, Dr. Waring shares his grading scale for DLS and overviews the various treatment options that correlate with DLS grades 1 through 3.


COMPLEX CASE MANAGEMENT

POSTTRAUMATIC WHITE CATARACT
By Asha Balakrishnan, MD; D. Michael Colvard, MD; Nicole R. Fram, MD; Sumit “Sam” Garg, MD; Cynthia Matossian, MD; Sebastian Lesniak, MD; and Brandon D. Ayres, MD
After a nail was removed from a patient’s left eye, and after a computerized tomography scan in the emergency room ruled out a metallic foreign body, a patient underwent urgent repair for corneal perforation. Eight weeks later, the patient reported progressive vision decline. On examination, visual acuity was hand motion that did not improve with pinhole refraction, and the pupil was irregular and dilated. Slit-lamp examination showed a nasal corneal scar with three interrupted sutures in place outside the visual axis. There was also a white cataract and violation of the anterior capsule. The seven surgeons responding to this case present their surgical strategies, which include use of a posterior chamber IOL with a capsular tension ring and segments, fixation of a secondary IOL, and implantation of a three-piece scleral-glued or scleral-sutured IOL.


DECENTERED PUPIL WITH A LOW REFRACTIVE ERROR
By William B. Trattler, MD; David R. Hardten, MD; Arthur B. Cummings, MB ChB, FCS(SA), MMed(Ophth), FRCS(Edin); and Jerry Tan, MBBS(S’Pore), FRCS(Edin), FRCOphth, FAMS
Examination of a patient presenting with anisometropia after a scleral buckling procedure for a retinal detachment was remarkable only for an irregular pupil in his right eye. Knowing that the patient had undergone bilateral Nd:YAG capsulotomy after cataract surgery, these four surgeons offer their advice for this complex case. Dr. Trattler suggests that LASIK, PRK, or a piggyback IOL be considered, whereas Dr. Cummings suggests addressing the anisometropia by means of PRK or other surface ablation. Drs. Hardten and Tan state that they would prefer PRK and topography- or wavefront-guided LASIK, respectively.