

Medical and Surgical Solutions for COMPLEX CORNEAS



Like all of you, I am excited by the advances currently occurring in ophthalmology. New and innovative approaches that harness state-of-the-art therapies and treatment options for patients with complex corneas are helping to enhance eye care and improve quality of vision in this population.

Evolution in scleral lens designs, CXL, small-aperture IOLs, and even the off-label use of pupil-modulating drops are just some of the techniques we can now use to treat patients with complex corneas.

In addition to highlighting several medical and surgical solutions for complex corneas, this cover focus provides guidance on decision-making for patients with keratoconus and other corneal irregularities. A panel of surgeons discusses their strategies for cataract surgery on patients with Fuchs dystrophy, a history of radial keratotomy, and corneal ectasia. Another panel shares complex cornea cases in which a specific intervention was key to management.

A hot topic in this issue is small-aperture technologies that constrict the visual pathway to improve the vision of patients with complex corneas, including those with keratoconus and irregular astigmatism. Pilocarpine has long been used to help these patients. Two more recently available technologies are the presbyopia-correcting drop pilocarpine HCl ophthalmic solution 1.25% (Vuity, Allergan) and the

IC-8 IOL (AcuFocus). These innovations have really brought the area into focus—no pun intended.

Of course, keratoconus is a major topic in this issue. It is to be hoped that the early work being done in Hawaii by Neda Nikpoor, MD, to pilot a school screening program for keratoconus can be expanded across the United States. As we know, there are many advantages to identifying keratoconus early in its course. These include delaying or avoiding the need for penetrating keratoplasty and preventing unnecessary blindness. CXL and scleral lenses are two tools we can use to optimize the care of patients who have been diagnosed with keratoconus. One of the biggest challenges of planning cataract surgery in this population is calculating the IOL power. This issue provides helpful pearls.

Understanding the medical and surgical solutions we have at our fingertips is crucial to ensuring that we provide the best care to patients with complex corneas. In some situations, our best option may be to partner with colleagues who specialize in specific therapies. I am fortunate to have many outstanding local experts on scleral lenses who can restore vision to patients who have experienced significant visual loss owing to the complexity of their corneas.

I appreciate the time and effort that the authors in this series devoted to preparing their articles. There is so much to learn, and there are no greater teachers than our experienced colleagues. ■



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