



# WITNESSING EVOLUTION

**W**hen I was trained in ophthalmology 2 decades ago, the practice of refractive surgery was much different from what it is today.

What started as a single type of corneal intervention has become a highly effective and standardized class of procedures that, today, also includes lens-based surgical interventions. On the corneal side, we can offer our patients LASIK, PRK, and small-incision lenticule extraction (SMILE), and on the lens-based side, we can offer refractive lens exchange, phakic IOLs, and corneal inlays.

Part of the reason that many of us have seen a surge in our lens-based refractive surgery volumes is that cataract surgery has continued to evolve. Diagnostics such as optical interferometry and wavefront analysis have helped us to improve patient outcomes, and today any cataract surgery procedure can truly be considered a refractive procedure.

From the modern IOL calculations we use to the methods we employ to position corneal incisions based on keratometry, cataract surgery has become more precise and exact. We also have more knowledge on how our surgical manipulations can affect postoperative outcomes. For

instance, simply placing the cataract incision along the steepest meridian can reduce corneal astigmatism, making the surgery a mild refractive procedure.

We also have at our fingertips a number of advanced technologies that have further transformed cataract surgery into a refractive procedure. This, also, has helped to entice many of us to turn to lens-based procedures more often for refractive correction.

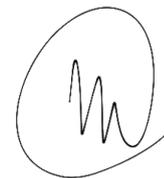
For instance, we know that phakic IOLs are a solid alternative to corneal refractive surgery. Throughout the world, these lenses can be implanted to address sphere and astigmatism. Toric IOLs have become an everyday tool for cataract surgery. More than 80% of the IOLs that we implant in our practice are toric, and we aim for a maximum of 0.50 D of residual with-the-rule cylinder postoperatively. The use of multifocal and trifocal IOLs is well established as a solid choice for patients who seek a long-term solution for both ametropia and presbyopia correction.

Our increased knowledge in diagnostics and our procedural training in calculating optimal IOL power, toricity, and potentially asphericity also expands our possible use of

premium lens technologies in refractive correction. With this understanding, we can enhance visual performance in patients presenting for cataract surgery who have had previous cornea-based refractive surgery such as PRK, LASIK, SMILE, RK, and astigmatic keratotomy.

The evolution of lenses and technologies, in the hands of skilled cataract surgeons, allows us to give patients outcomes we could only have dreamed of just a few decades ago.

As I explore the articles in *CRST Europe's* cover focus on lens-based refractive correction, I am inspired by the cataract and refractive surgeons who share their vast knowledge and expertise. Although the care we provide now is superior to anything that we have been able to do in the past, we are still learning and growing. I can't wait to see what is yet to come. ■



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