

The Convergence of Cataract and Refractive Surgery

The toric IOL represents an opportunity for cataract surgeons to become refractive cataract surgeons.

BY SARA E. SMITH, MANAGING EDITOR

Ophthalmology has realized refractive cataract surgery with the availability of premium IOLs such as presbyopia-correcting and toric lenses. “With the current generation of premium lenses, ophthalmology has reached the point where cataract surgery is refractive surgery,” Stephen S. Lane, MD, said during an interview with *Cataract & Refractive Surgery Today*. “It means that it is no longer acceptable to only offer to improve a patient’s vision after cataract surgery such that they will still need to wear glasses on a regular basis.” With the availability of the premium lenses, giving cataract surgery patients the opportunity to achieve good uncorrected distance and near vision clearly exists, and patients need to be aware of this option. In the past, the goal of cataract surgery was to improve overall visual acuity without regard to whether spectacle lenses were needed or not. With the latest generation of IOLs, however, emphasis is placed not only on the overall improvement of visual acuity but also on achieving emmetropia. Technology has made this achievement possible as ophthalmologists realize the capabilities of presbyopia-correcting and toric IOLs.

What about surgeons’ trepidation when it comes to adopting these lenses and associated technology? According to Dr. Lane, in terms of presbyopia-correcting IOLs, potential constraints within a cataract surgery practice may consist of a lack of personnel or willingness to spend the time necessary to deal with these patients or a deficiency in the surgeon’s skill sets. “In this respect, I think toric IOLs provide a wonderful way to introduce cataract surgeons to the whole concept of refractive cataract surgery,” said Dr. Lane. “I want surgeons to start to use toric IOLs as a modality to get accustomed to the idea of refractive cataract surgery so that they can introduce and use even more sophisticated lenses later. For example, not too far off in the distant future, there may be a presbyopia-correcting

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toric IOL that will further expand our capability to ‘emmetropize’ the cataract surgical population.”

“The last frontier for good uncorrected distance vision has been the correction of astigmatism,” Dr. Lane said. “The AcrySof Toric IOL [Alcon Laboratories, Inc., Fort Worth, TX] is the latest incremental step that ophthalmology has made to improve spectacle-independent distance vision outcomes following cataract surgery.”

With first-generation toric IOLs, ophthalmologists have experienced significant rotational instability and inconsistency in outcomes. These problems combined with the silicone plate haptic design prevented the widespread adoption of the lens. The new AcrySof Toric IOL is based on the familiar AcrySof single-piece acrylic platform and, according to Dr. Lane, exhibits excellent rotational stability with very predictable correction of astigmatism and distance vision outcomes.

Dr. Lane adds that toric IOLs will help ophthalmologists to segue into the realm of premium refractive cataract surgery in terms of the required preoperative discussion about achieving better uncorrected distance vision than with a standard monofocal lens.

Dr. Lane explained that surgeons need to make only a few minor changes in technique to implant toric IOLs versus standard monofocal IOLs. First, surgeons use Web-based programs to determine the proper IOL model and cylindrical power required for patients (the AcrySof Toric program

also compensates for surgically induced astigmatism, which makes the overall calculation more precise). Second, ophthalmologists mark the patient's eye to ensure the correct orientation of the axis of astigmatism at the time of surgery. Third, the precise placement of the IOL in the correct meridian is required. "Surgeons by their very nature like doing 'surgical' things, so learning this skill is really quite simple and straightforward [for] most," Dr. Lane explained.

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Dr. Lane believes that toric IOLs allow surgeons the opportunity to offer a great service to their patients and provide a segue into the refractive cataract marketplace. Compared to presbyopia-correcting IOLs, toric IOLs are easier to implement in a practice, according to Dr. Lane. Chair time, commitment to staffing, educational development, and practice-process retooling are substantially less, according to Dr. Lane. Financially, surgeons will realize improved reimbursement as a result of the Centers for Medicare & Medicaid Services' ruling allowing physicians to charge Medicare patients for the difference between the cost of fitting and inserting this lens and a conventional lens.

"Refractive cataract surgery creates an environment where everyone is a winner," Dr. Lane said. "The patient receives a superior product allowing improved, uncorrected vision and the potential for total independence from spectacles. Surgeons will be reimbursed more fairly for their work while enjoying the gratification of delivering improved results. Manufacturers will be more fairly paid for the advances they bring forward, which will allow them to continue the expensive and time-consuming research, development, and regulatory measures necessary to continue to advance the field. Finally, there is no increase in governmental spending as the addition of these technologies is budget neutral, eliminating further financial pressure on an already stressed system. As the Nike [Beaverton, OR] advertisement advises, 'Just do it!'" ■

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