The Role of IOL EXCHANGE in Modern Cataract Surgery

As refractive surgeons, we are fortunate to have an array of tools and technologies that help our patients achieve independence from glasses and contacts. Spectacle independence hasn't always been a priority in the cataract space. Over the past 15 years, however, we have seen a shift toward spectacle independence after cataract surgery becoming an attainable goal for most patients. As a result, patient expectations are higher than ever, which puts added stress and responsibility on the surgeon.

Modern cataract surgeons are often faced with high-risk, high-reward scenarios. Despite incredible advances in biometry/intraoperative biometry, femtosecond lasers, IOLs, and phaco machines, outcomes are not always successful. Sometimes, an additional intervention such as LASIK, PRK, IOL exchange, or a piggyback IOL is required to bring patients across the finish line. Knowing when to intervene and what procedure to use is challenging, and the answer is not always clear. The timing of IOL exchange procedures is critical because the capsule continues to fibrose, making the lens more challenging to remove safely.

Many solutions for refractive enhancement require advanced surgical skills that might not have been taught during training and can be associated with significant complications if not executed perfectly. This issue of *CRST* takes a deep dive into IOL exchange and shares insights from experienced surgeons. What was once considered a procedure reserved for severely dislocated IOLs is now a standard solution to refractive surprises, lens intolerance, and/or patient dissatisfaction with presbyopia-correcting IOLs.

IOL exchange procedures are often quick and easy to perform, but they can also be extremely challenging and fraught with complications. For example, IOL exchange in patients who have already undergone an Nd:YAG laser procedure are associated with increased risk for hyphema, endothelial damage, iris prolapse and trauma, capsular integrity issues, vitreous hemorrhage, and even retinal detachment. The procedure can be intimidating given that it is often for a cosmetic refractive goal.

Some surgeons have the luxury of using the Light Adjustable Lens (RxSight) for a safer alternative to correct residual refractive error. Adoption of the technology is likely to continue. There is also a need for more low-powered, premium-optic IOLs that can be used as a secondary lens in the sulcus or capsule. Another option for refractive enhancement is to perform a cornea-based procedure a few months after the initial procedure (for more on this topic, scan the QR code to listen to an episode of *CRST: The Podcast*). Not all surgeons, however, have access to corneal refractive lasers.

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As always, patient safety is paramount. Like the computer Joshua said in the 1983 movie *War Games*, sometimes "the only winning move is not to play." For the foreseeable future, our success as surgeons will hinge on our ability to deliver safe, painless, quick, and optimal visual outcomes. IOL exchange will become increasingly routine, and we should prepare our patients preoperatively for the possibility. I hope the pearls shared in this issue help you on your quest. ■

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