

# Presbyopia-Correcting IOLs: in the Eye of the Beholder

Judging the present success of presbyopia-correcting IOLs depends purely on whom one asks. Patients have a rainbow of answers, from complete elation to utter regret. Physicians' opinions typically depend on the outcomes their patients experience with a particular technology. The previous sentence belies my belief that presbyopia-correcting IOL technology must and will improve so that we ophthalmologists may close the gap between levels of average preoperative expectation and levels of average postoperative visual performance and satisfaction.

In the past 6 years, which composes over half of my postfellowship professional career, I have had the opportunity and privilege to be involved in the clinical research and FDA-approved implantation of presbyopia-correcting IOLs. Also, I have implanted all of the commercially available versions of these lenses. Have I had 100% success in all patients? The short answer is no. Yet, I am convinced this technology represents the correct path in our search for the Holy Grail of refractive procedures. The correction of emmetropia and presbyopia concurrently seems to be the highest achievement possible in ophthalmic refractive surgery.

So, what are the remaining hurdles? I believe the answer comes from our patients. If one asks the typical patient or even oneself what would bring absolute happiness with the visual performance of a presbyopic correction, the answers are (1) high-quality 20/15 distance vision, (2) perfect intermediate focusing ability for viewing the computer screen, dashboard, and similar focal

lengths, and (3) J1 acuity at near. And, let's not forget that both eyes should work together perfectly and be without scotopic dysphotopsia. Now, that is a tall order. The field is not quite there yet, but we are hitting a very high percentage of "miraculous" or "near-miraculous" outcomes with the current presbyopia-correcting IOL options.

In this edition of *Cataract & Refractive Surgery Today*, we are exploring several aspects of presbyopia-correcting IOLs. Illuminative topics include the centration of multifocal IOLs and excimer laser enhancements after the implantation of presbyopia-correcting IOLs, among others. Also featured is a roundtable discussion of presbyopia-correcting IOL case studies. All

three of these articles and the others in this series should provide readers with solutions to optimize surgical outcomes.

In closing, I believe that we are performing a great service for refractive patients knowing that most will be able to function without spectacles. Yet, we have room to increase the percentage of patients achieving unaided 20/15 to 20/20 UCVA at distance and J1 at near. At the same time, we need to provide excellent intermediate vision with minimal-to-no mesopic-to-scotopic dysphotopsia. We still have work before us, but my hat is off to all the innovators who are going to make a solution to presbyopia a reality in our lifetimes. ■



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