THE BENEFITS OF LESSER-ADD LENSES

Customize your patients' visual experience.

BY KERRY K. ASSIL, MD

Today's cataract surgery candidate is often an active adult who enjoys outdoor activities, night driving, and the regular use of a computer and handheld electronic devices. Currently, people older than 65 years of age number upward of 39.6 million (12% of the population), and this demographic is on the rise, with a projected increase to 72 million (19% of the population) by 2030.[1] Additionally, we are seeing a greater percentage of patients under the age of 65 benefitting from cataract surgery. These individuals are increasingly well informed regarding their health options and have come to expect excellent visual outcomes. To optimize patients' satisfaction, cataract surgeons must take great care in evaluating each patient's lifestyle when selecting an IOL and, more specifically, the add power (IOL plane), to deliver the anticipated results.

SELECTING THE BEST ADD POWER

Newly approved IOLs with lesser-add power such as the Tecnis Multifocal IOL +2.75 D and +3.25 D (Abbott Medical Optics) and the AcrySof IQ Restor multifocal IOL +2.5 D (Alcon) provide patients with a widened depth of focus and speak to a greater range of lifestyle needs. These lenses provide comfortable vision at a practical working distance while allowing patients to retain superb pupillary independence (including rapid reading speed) provided by the multifocal lens platform. For the patient who drives a significant amount and uses the computer intensively or those who would otherwise benefit from a slightly expanded range of vision for working, these lesser-add lenses are an option.

When choosing the appropriate add power for a patient, multiple factors come into play. For instance, the lower add powers of +2.50 or +2.75 D nicely accommodate the patient who favors intermediate vision activities such as working at a desktop computer or shopping. For patients who regularly engage in activities requiring farther reading distances, such as computer use, the +2.75 D add power is an excellent option. The patient who prefers near-vision activities like reading books or sewing, is typically best served by a higher-add-power lens such as the +4.00 D. At lower-add powers, patients enjoy an extended range of focus without the use of prescription glasses, an appealing benefit particularly compatible with modern computer-heavy lifestyles.

I have used the Tecnis line of IOLs. Clinical studies indicate that, among patients who received the ZKBoo lens (Abbott Medical Optics), 91% reported no difficulty with night vision at 6 months, 77% reported no problems with glare/flare, and 69% reported no difficulty with halos.[2] In my experience, the degree of halos among the +2.75 D add IOL recipients nearly rivals that of a monofocal IOL, and the +3.25 D add power was associated with minimally higher halos and glare, still significantly lower than with the +4.00 D add. An impressive 97% of the low-add lens patients indicated that they would request the same lens again (the ultimate measure of satisfaction).[2] These satisfaction ratings were achieved in the absence of any allowable limbal relaxing incisions or LASIK correction of residual refractive error, either sphere or cylinder. Such satisfaction rates are rarely observed in a clinical study.

The AcrySof IQ Restor is also associated with impressive results, with 66% of patients reporting mild to no halos,

AT A GLANCE

- To optimize patients' satisfaction, surgeons must take great care in evaluating each patient's lifestyle when selecting an IOL and, more specifically, the add power to deliver the anticipated results.
- Many factors come into play when selecting lower-add powers for patients. Consider exactly how patients use their vision and at what distances they most often work.
- Patients' vision can be customized by mixing and matching add powers.

> **“My patients experience a customized approach to their surgical plan yielding excellent visual outcomes.”**

75% of patients reporting mild to no glare (data on file with Alcon) and more than 93% of patients receiving the Restor saying they would choose the same lens again.[3]

CUSTOMIZING THE VISUAL EXPERIENCE

With multiple add powers available, surgeons have the ability to customize patients' visual experiences by using the same add power in both eyes or implanting a lesser-add IOL in the distance-dominant eye and a higher add in the nondominant eye. This effectively creates a micro-monovision approach for near while maintaining full binocular vision at distance. Initial studies indicate excellent visual function in terms of distance, intermediate, and near visual acuities with high patient satisfaction rates.[4] I fully expect increased application of multiple add powers. This approach will allow surgeons to personalize IOLs to accommodate each patient's unique set of needs as the defocus curves overlap for all three lenses, thus no visual "bald spots" will occur when mixing them.

As a surgeon offering lower-add-power lenses, I find my patients experience a customized approach to their surgical plan yielding excellent visual outcomes. I am no longer confined to a limited range of options, which allows me to ensure that every qualified patient has the opportunity to achieve an optimal outcome befitting his or her individual lifestyle. Happy and satisfied patients benefit my practice, and they are the reason that I chose medicine as my profession. ■

1. US Department of Health and Human Services. Aging Statistics. Administration for Community Living. http://www.aoa.acl.gov/Aging_Statistics/index.aspx. Accessed January 12, 2015.
2. Tecnis Multifocal Patient Brochure. Abbott Medical Optics.
3. AcrySof IQ ReSTOR IOL Brochure. August 2012. RES1219SA. Independent third party research; data on file, December 2011.
4. Hamid A, Patel V. Pilot study of the new low add Tecnis multifocal intraocular lens implant. Poster presented at: 18th ESCRS Winter Meeting; February 14, 2015; Ljubljana, Slovenia.

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