Choosing the Right Patient for Premium IOLs

Pre- and postoperative planning.

BY STEPHEN G. SLADE, MD

The accepted treatment goals for accommodating lenses include three indications and/or potential benefits to the patient:

- The correction or significant improvement of presbyopia
- The correction of appropriate amounts of nearsightedness, farsightedness, and/or astigmatism
- The restoration of clear vision following cataract extraction

As surgeons, we must balance these indications on a case-by-case basis to find the right patient for the right lens and surgery. For example, a patient with a high degree of myopia or hyperopia and no cataract might be best served by LASIK or a phakic IOL. If this person instead had a significant cataract, he or she might be better suited to cataract extraction and the implantation of a premium IOL.

PATIENT SELECTION

Careful patient selection is essential to a successful postoperative result. In general, if the patient desires and anticipates J1 near vision, a diffractive multifocal may be an appropriate choice. Multifocal IOLs are options in the presence of a ruptured posterior capsule, a tear in the anterior capsule, or zonular weakness. They are the only choice for implantation in the sulcus. I most often choose accommodating IOLs for patients who desire more intermediate vision and clear distance vision. These lenses are often better suited than multifocal IOLs to presbyopic patients with active lifestyles. In certain cases, it may be appropriate to mix accommodating and multifocal IOLs.

My rule is to select patients with visually significant cataracts and treat them like refractive surgery patients. My most satisfied patients are those for whom surgery removes visually significant cataracts and corrects their presbyopia. Patients who have clear crystalline lenses and presbyopia with a plano or slightly myopic refraction are the most challenging in terms of making them happy postoperatively. They have healthier eyes than our traditional cataract patients, they are paying out of pocket for much or all of the surgery, and they have the expectations of a refractive surgery patient.

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THE CONSULTATION

Perhaps the most important part of the consultation about a premium IOL is helping to set realistic expectations for patients. We must find out what they expect and want from the procedure. For which tasks do they want to be free of glasses, and when are they more willing to use them? We must review all of the options with patients and make sure they understand the risk and benefits of each. I explain to patients the best and worst case scenarios and the visual potential for each of their eyes. I also review a patient's unique characteristics that could influence postoperative outcomes such as astigmatism, ocular surface disease, and any reduced retinal visual potential. Patients need to understand that, in most cases, IOL surgery is part of a larger process that will include follow-up examinations, perhaps glasses, a YAG laser procedure, and enhancement surgery.

I believe it is better for a patient to expect to wear glasses after surgery and be pleasantly surprised than to be disappointed with an outcome he or she did not understand was possible. I help to adjust patients' expectations in two ways. Before surgery, I have them note in their chart the frequency with which they use reading glasses. In addition, I ask them to mark the smallest line they can read preoperatively on a printed near card, which is also placed in their chart. Postoperatively, we compare this information to their outcome.

Finally, I make sure patients understand that they may

not receive the planned lens. For example, an accommodating IOL should not be implanted in the presence of a significantly torn capsule.

SURGICAL PLANNING

When considering on which eye to operate first, I choose the eye for which surgery has the best chance of improving the patient's overall vision. We must ensure that our IOL calculations are as accurate as possible and should measure the keratometry before instilling any drops and after the eye has stabilized from contact lens wear. I use the IOLMaster (Carl Zeiss Meditec, Inc., Dublin, CA) or immersion A-scans, and I make sure the readings correlate with the patient's oldest refractions. I use the SRK-T formula for eyes over 22 mm long and the Holladay formula for eyes less than 22 mm long plus keratometry readings outside of 42.00 to 47.00 D. I aim for a small degree of monovision (-0.25 D) in most patients receiving an accommodating IOL.

POSTOPERATIVE COURSE

I complete my patient consultation and selection process after surgery. My patients use steroids and nonsteroidal anti-inflammatory drugs for 6 to 8 weeks postoperatively. I do not prescribe drugs to dilate or constrict the pupil after implanting an accommodating IOL.

I tend to treat clouded posterior capsules with the YAG laser a bit earlier after premium lens surgery than traditional cataract surgery. I find it best to delay the YAG treatment until after any enhancement procedure, however, so that the lens is in its final position for the best final refractive result. I keep the opening of the capsulorhexis within the diameter of the optic to keep vitreous from coming forward around the lens.

In my experience, premium IOL patients tend to be less tolerant of a decrease in their vision after surgery than traditional cataract surgery patients. I aggressively investigate any decrease and will perform retinal examinations and optical coherence tomography if needed. I make sure the ocular surface is optimal and am more insistent about treating residual refractive errors than with traditional cataract patients. I also rely much more on LASIK or PRK than incisional refractive surgery. If needed, I will show patients the notes from their chart about their preoperative use of readers and preoperative near card to compare with their postoperative outcome.

Finally, I always congratulate patients on their good results. ■

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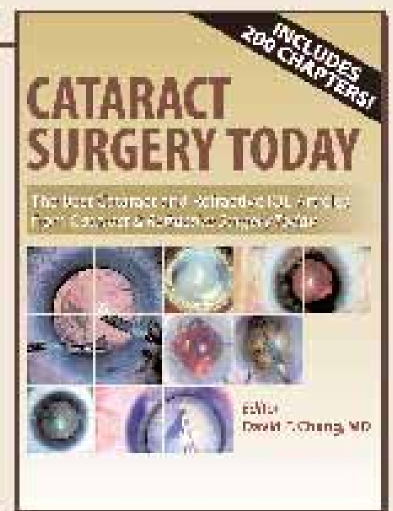

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