Mastering the Patient Conversation

Create realistic expectations to achieve the most satisfying outcomes.

BY ARTHUR B. CUMMINGS, MB ChB, FCS(SA), MMed(Ophth), FRCS(Ed); AND PAVEL STODULKA, MD, PhD

Premium IOLs at Wellington Eye Clinic, Dublin, Ireland

ARTHUR B. CUMMINGS, MB, ChB, FCS(SA), MMed(Ophth), FRCS(Ed)

The first item on the Wellington Eye Clinic mission statement is this: *Patient satisfaction is our top priority.* Time and experience have taught me that the biggest reason for patient dissatisfaction is when the patient expected more of the postoperative result than was achieved. We strive, therefore, to provide patients with an accurate indication of what to expect as the outcome or result of an anticipated surgery. This is achieved through a comprehensive dialogue between surgeon and patient. Like most other surgeons who offer premium IOLs, we follow the mantra *under-promise and over-deliver*. If the patient experiences a surprise outcome postoperatively, may it always be a positive surprise.

The No. 1 complaint from patients is that outcomes differ from what was expected. With all the hype of improved outcomes in the cataract and refractive fields, it is easy to get overconfident and promise too much. The patient conversation must be about creating realistic expectations, including, whenever possible, simulating the postoperative effect with contact lenses.

Despite the fact that multifocal lens designs have improved significantly—and to date I do not have a single patient in whom I have explanted a multifocal lens—my initial approach is monovision. We have treated approximately 6,000 patients with monovision. I favor this modality because it does not compromise the eye's optics. In the distance eye, the light coming from distance is focused on the macula, whereas the reading eye has the light from near focused on the macula. If the patient's brain can comfortably suppress the eye that is not being used, monovision is a good solution. In my experience, however, approximately 25% of men and 15% of women cannot overcome the neural compromise. It is in this group—patients who have tried monovision with a contact lens trial and found it to be unsuitable or who did not like the look of monovision when it was demonstrated during clinical examination with the phoropter—that I feel multifocal IOLs make the most sense.

CONVERSATIONS WITH MOTIVATED PATIENTS

When the topic of multifocal lenses is raised, it is usually a familiar concept because the patient will have read educational material in the waiting room and potentially watched an animated video (Eyemaginations, Inc., Towson, Maryland) on multifocal lenses. At this point, I have a motivated patient in front of me who knows that monovision is not the ideal solution for him and who is keen on achieving greater spectacle independence.

Before I discuss multifocal lens options, I broach the topic of monovision again. I usually say something like the following: "If you had three eyes, I could give you the solution you are looking for. I would make one eye good for distance, make the second eye good for reading, and make the third eye good for intermediate distances such as the computer screen. If you were a good candidate for monovision, your whole range of vision would then be in focus. Unfortunately, you do not have three eyes, and therefore one distance will always be compromised. It is important to know that nothing we can do currently will give you the vision of an emmetropic 20-year-old. It will always involve some kind of compromise."

I continue the conversation by explaining that multifocal lenses have improved greatly over the years and that the latest models are likely to work in the right candidate. To know if the patient falls into this category, I implement a multifocal contact lens trial prior to multifocal lens surgery whenever possible. This is the ultimate safety

net for me; patients who do well with multifocal contact lenses also do well with multifocal IOLs.

BILATERAL IMPLANTATION

Success with multifocal IOLs depends on how the brain perceives images. I explain to the patient that multifocal lenses are made up of rings with different powers and that these rings focus light coming in from all distances onto the retina. The brain determines whether to look up close, intermediate, or far.

Patients undergoing unilateral surgery are forewarned that results are not optimal until the second eye is treated. The moment the second eye is treated, there is a synergistic effect, and within days patients notice an increased range of vision. I always show patients an example of the binocular clinical defocus curve (Figure 1), typically for the AcrySof IQ Restor +3.0 D IOL (Alcon Laboratories, Inc., Fort Worth, Texas), because this is my lens of choice. I tell patients that I expect them to achieve good distance vision, to have good reading vision at approximately 40 to 50 cm, and to have adequate intermediate vision. The binocular defocus curve graph acts as a visual aid to demonstrate that some aspects of vision, namely distance, are better and some are more functional, namely intermediate vision. I also warn patients that side effects such as glare and halos at night can occur, but that these tend to decrease with time. As mentioned above, I have not yet explanted a multifocal Restor lens.

If patients are adequately warned and know exactly what to expect, it is far easier to satisfy their needs. I warn patients that to get the maximum effect and performance from the IOL, their refraction must be close to emmetropia and they must have minimal astigmatism. This is normally possible following lens surgery, but on occasion there is some residual astigmatism or spherical refractive error. For these patients, we perform corneal laser refractive surgery to achieve emmetropia and greatly enhance the performance of these lenses. Patients are informed that there is no charge for fine-tuning laser surgery. This practice not only encourages us to get the intraocular surgery right the first time, but it also produces good ambassadors for the clinic because patients find it generous that enhancements are included in the price of the procedure.

WHAT COMPROMISE IS BEST?

Whether dealing with monovision or multifocal patients, I always say the following to a presbyopic patient: "Whatever we do surgically, once you have reached the age of 45 years and older, visually speaking you are compromised. If you have perfect distance vision, you need glasses for reading. If you have perfect reading vision, you need glasses for distance. If you have monovision, in which one eye is for distance and one eye is for near, or you have multifocal implants, each of these solutions represents a compromise. It is my job to figure out which one of these compromises suits you best."

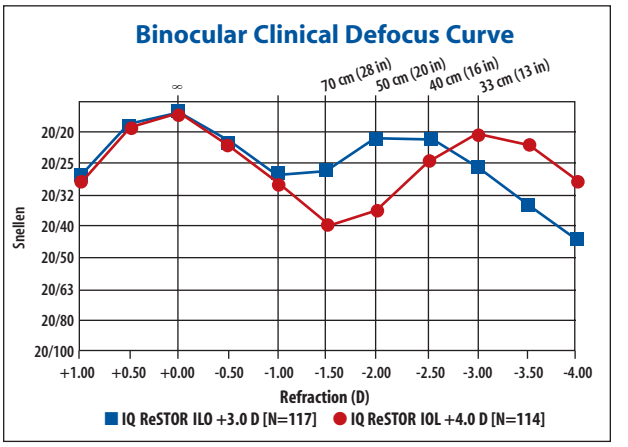

Figure 1. Binocular clinical defocus curve.

When patients undergo presbyopia-correction surgery, they must have realistic expectations that coincide with what we can currently achieve. Patients with realistic expectations perceive their postoperative results as miraculous. The only patients who are less than satisfied are those who expected more than we delivered.

CONCLUSION

I often tell patients the following: "When we have the technology to implant an IOL that functions like the 20-year-old natural crystalline lens, that will be the ultimate solution in terms of correcting presbyopia. Until then, the multifocal lenses that we currently have are the closest thing to mimicking this through very clever technology—but they are not perfect."

When patients understand and can accept the compromises of current premium lens technologies, they will enjoy their postoperative results. After the consultation, patients should have a good understanding that their outcomes are not going to be perfect. But they should also understand that, of all the compromises to be considered, this particular compromise suits their needs best. There is no question that it takes more time and input to prepare patients for surgery with multifocal lenses; however, it turns out to be extremely rewarding for both doctor and patient when the patient is elated with the outcome.

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Premium IOLs at Gemini Eye Center, Czech Republic

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Mastering the patient conversation becomes exponentially harder the more lens options patients have to choose from. Therefore, before I discuss premium IOLs, I ask the potential patient to read a brief overview of our available IOL selection. If from there the patient is interested in a premium IOL, we follow a more thorough preoperative consultation process that assesses the psychological traits of the patient.

All preoperative patient conversations begin with a description of what a cataract and IOL are. We describe the standard IOL as an injectable, monofocal, transparent, spherical-optic lens with an ultraviolet (UV) filter. Most patients are not aware that the standard IOL has a UV filter, and the occasional patient does not know that a replacement lens is implanted during cataract surgery.

Our selection of premium IOLs includes three basic categories: blue-light–filtering aspheric monofocal IOLs, toric IOLs, and multifocal and accommodating IOLs. We find it practical to combine blue-light–filtering and aspheric designs into one option because patients tend to understand and select these features quite often.

Blue-light–filtering aspheric IOLs. We mention that blue-light–filtering IOLs have the safety factor of protecting the retina from blue wavelengths in addition to UV. For patients to understand what asphericity is, we have found it beneficial to explain that the specific shape of the optic reduces the optical deviation of light at the periphery of the lens optic, thus producing better optical quality. We also mention that high-quality optical devices such as cameras have aspheric optics. After this explanation, patients often choose this option. We do not discuss positive and negative asphericity values, as it is too difficult for most of our cataract patients to understand.

Toric IOLs. We reserve toric IOLs for patients with significant astigmatism (at least 2.00 D). Our general strategy is to keep all lenses in stock; however, we are unable to carry a complete stock of toric lenses. Thus, we choose to compensate for lower astigmatism with a slightly enlarged incision placed on the steep axis and limbal relaxing incisions. We treat higher astigmatism with laser refractive surgery or by ordering a toric implant for a particular patient.

Multifocal IOLs. These lenses are increasingly popular. Patients tend to understand the difference between mono- and multifocal lenses and correlate the latter with less need for reading glasses. When patients ask how a multifocal lens works, we describe the basic principle of the multifocal optic as dividing the light into two main foci.

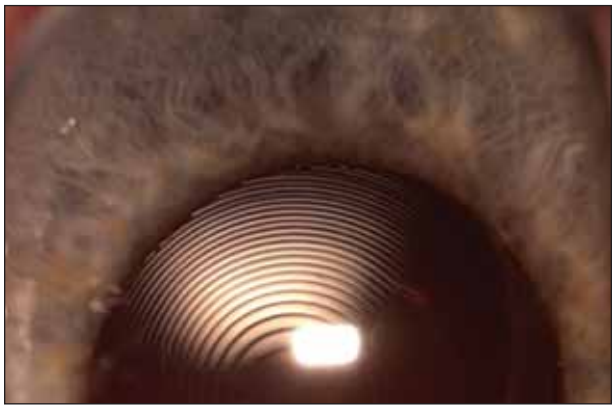

Figure 2. The IDIFF has up to 32 diffractive steps on the front optical surface.

We use two multifocal IOL designs, giving preference to multifocal diffractive lenses and less commonly using a vertically progressive optic design. Diffractive lenses are the better option because they work independent of pupil size. We use the AcrySof Restor aspheric SN6AD3 (Alcon Laboratories, Inc.) and feel that the aspheric design provides a true advantage to the patient. Among our favorite diffractive lenses is the IDIFF (Eyeol UK, Ltd., Dunstable, United Kingdom; Figure 2). This is a hydrophilic acrylic lens with no glistening problems. It can be implanted through a 2.2-mm incision. The IDIFF has up to 32 diffractive steps on the front optical surface, and the double-haptic design gives this implant excellent stability. Another new diffractive lens is the Acriva Reviol (VSY Biotechnology, Istanbul, Turkey). Although our experience with this lens is limited, results thus far are promising. What is outstanding about the Reviol is its optical power range. The standard power range among most multifocal IOLs is 0.00 to 32.00 D, but this company is able to produce on request high optical power diffractive multifocal IOLs from 32.00 to 42.00 D in 0.50 D increments; negative optical power lenses for extremely high myopia are also available. Therefore, we are now able to offer multifocal implants for highly ametropic eyes. We use this option for high hyperopia.

Another multifocal design is the Lentis Mplus IOL (manufactured and distributed by Oculentis GmbH, Berlin, and Topcon, Rotterdam, Netherlands). This lens has vertically progressive optical power, with the upper and central optical part of the lens designed for distance vision and the lower optical part for reading. We usually do not discuss which particular multifocal IOL we choose for the patient, only the basic principles of the given implant.

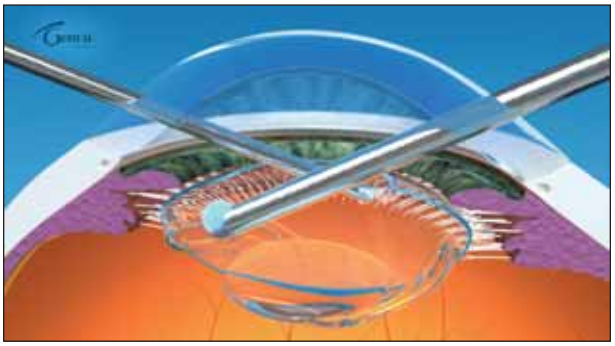

Figure 3. Laser capsular opacification prevention uses laser pulses to remove lens epithelial cells with proliferative potential.

Multifocal lenses are increasingly popular, but mini-monovision with monofocal IOLs (spherical or aspheric) is still a good solution. When we plan monovision with refractive lensectomy, we suggest a contact lens trial to assess the patient's adaptation to monovision, which is not possible with multifocal IOLs.

Accommodating IOLs. Patients find this option very attractive. We refer to accommodating IOLs as pseudoaccommodative lenses, explaining that they do not fully accommodate like a young human crystalline lens but that they reach a fair amount of depth of field by combining several principles. When patients ask how this lens works, we describe the principle of pseudoaccommodation as a combination of optic movement, tilt, and increased depth of focus. We use the Crystalens HD (Bausch + Lomb), targeting a small amount of monovision. Patients accept this IOL very well.

CONSULTATION

During preoperative consultation, we assess the patient's psychological profile. For people who pay attention to every detail, and also for people who insist on being 100% spectacle independent, we do not recommend multifocal IOLs. We always mention photic phenomena related to multifocal optic designs.

Considering the patient's profession, we do not recommend multifocal IOLs to people who need high resolution of detail, especially those working with shiny objects under bright light, such as jewelers or welders. Recent multifocal IOL models are not contraindicated for people working on computers, as they provide adequate vision for computer distance compared with previous multifocal lenses.

We include enhancements in the price for both multifocal and toric IOLs and choose to use femtosecond LASIK to achieve emmetropia in patients with hyperopic or higher myopic residual refractive error after implantation. Alternatively, we use PRK for minor myopic residual error, mainly in patients older than 60 years. We instruct patients preoperatively that, even though we use the latest noncontact infrared biometry (OA 1000 with Okulix software; Tomey Europe, Erlangen, Germany), it is not possible to achieve 100% accuracy.

TAKE-HOME MESSAGE

- The patient conversation must focus on creating realistic expectations.
- Warn patients undergoing unilateral surgery that results are not optimal until after the second eye is treated.
- Instruct patients preoperatively that it is not possible to achieve 100% accuracy.

Patients understand that, for optimal multifocal implant function, they must achieve emmetropia, and therefore LASIK might be needed to correct residual refractive error after multifocal IOL implantation. Another thing patients should understand is that the optical effect of an aspheric optic is minimal when the eye has a residual refractive error. Usually we perform LASIK 2 months after implantation. With contemporary microinicions, however, LASIK can be performed as little as 1 week after implantation in cases of refractive surprise. Patients accept this additional procedure well, provided they are aware of the possible need for it before implantation.

We also instruct patients about the possible need for Nd:YAG laser capsulotomy. In hyperopic eyes after refractive lensectomy, we tend to perform laser capsulotomy as soon as we notice the onset of posterior capsular opacification (PCO). It is not acceptable for patients to experience poor visual quality due to PCO after refractive lensectomy. Therefore, we recently started to conclude premium lens surgery with a procedure called *laser capsular opacification prevention* (Figure 3). Lens epithelial cells with proliferative potential are removed from the capsular bag, anterior capsule, and equator by laser pulses (ARC Laser, Nuremberg, Germany) after IOL implantation.

In summary, patients with multifocal or pseudoaccommodating IOLs need more counseling time pre- and postoperatively than patients who opt for a monofocal IOL. In our opinion, the availability of laser refractive fine-tuning is mandatory. Premium IOLs are a rewarding addition to the portfolio of products and services offered by our clinic. ■

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