

Animating Presbyopia-Correcting IOLs

A new module designed by David F. Chang, MD, and Eyemaginations, Inc., provides basic patient education about premium IOLs.

BY JULIA T. LEWANDOWSKI, SENIOR ASSOCIATE EDITOR

Eyemaginations, Inc. (Towson, MD), offers educational tools that use animation to explain various ocular conditions and surgical procedures to patients. David F. Chang, MD, has collaborated with the company to design a new module that describes the latest refractive IOL options for cataract surgery. *Cataract & Refractive Surgery Today* contacted Dr. Chang to talk about his goals for this new educational module.

CRSToday: Why did you decide to create this module for Eyemaginations?

With respect to refractive IOLs, I think all surgeons would agree about the importance of effective patient communication and education. Unfortunately, presbyopia, accommodation, refractive error, focal distance, contrast sensitivity, and optical quality are difficult concepts for the average patient to understand. It would be easy if we were able to simply tell everyone that they will never need eyeglasses, but this would be unrealistic and a recipe for disappointment.

Further complicating matters, we encounter a wide-ranging level of sophistication and education among our patients. Some remember more from reading a handout than from verbal explanations. Most learn difficult concepts better with the help of visual aids and graphic illustrations.

Like everyone implanting premium IOLs, I experience the daily frustration of trying to effectively communicate to patients what their options are and what they can expect, as well as to provide informed consent when they do select premium IOLs—all within the time constraints of a very busy practice. With so many options (monovision, toric IOLs, astigmatic keratotomy, multifocal and accommodating IOLs, mixing IOLs, and laser vision enhancement), I am not comfortable delegating the job of patient counseling to a staff member. I continually vary which options I highlight and what I recommend based upon the individual patient's priorities, level of interest, personality, refractive status, and ocular condition. This process requires an interactive, two-way flow of information, which is why I do this counseling myself.

Of course, I want to avoid having to repeat the same basic information to every patient. For this reason, we mail a handout describing presbyopia-correcting IOLs to every cataract patient in advance of the appointment. I wrote this handout to explain the concept of presbyopia and to introduce the idea of paying out of pocket for the convenience of reducing dependence on spectacles. I also ask patients to fill out the Dell questionnaire (available at <http://www.crstoday.com/Pages/patientQ.php>) prior to their visit. The Eyemaginations video further explains the basic concepts to interested patients so that I do not have to repeat this fundamental information to every patient.

CRSToday: What are the primary objectives of your Eyemaginations module?

All of the companies that manufacture premium IOLs have produced or funded patient-education videos for physicians to use in their offices. Most of them, however, have a fairly strong bias in favor of premium IOLs in general and their own product in particular. The key to satisfying



Figure 1. A simulation of halos produced in low light by multifocal IOLs prepares patients for this potential change in their postoperative vision.



Figure 2. Simulation of vision (A) provided by multifocal and monofocal IOLs (B).

patients is to under promise and then to exceed their expectations. This is hard to do if the educational material delivers an overly optimistic message. Advertising is all about the power of suggestion. Subliminal messages in images and interviews may suggest that patients will not need glasses, even if the narrator doesn't actually say that. Many of my patients already have inflated expectations about premium IOLs from the Internet and word of mouth. Part of my preoperative mission is to reign in these lofty expectations. For this reason, I wanted an educational video that was informative but neutral, and that would not contradict my attempts to create conservative and realistic expectations (Figure 1).

In addition, I do not want the 70% of my cataract patients who end up with a monofocal IOL to feel short-changed because they watched a video hyping the wonders of a lens they eventually did not get. Another test of an appropriately neutral tone was to imagine that a very unhappy refractive IOL patient was reviewing the same videos postoperatively. Would he conclude from a second viewing that we had been trying to oversell him on the merits of the more expensive IOL? I carefully wrote and

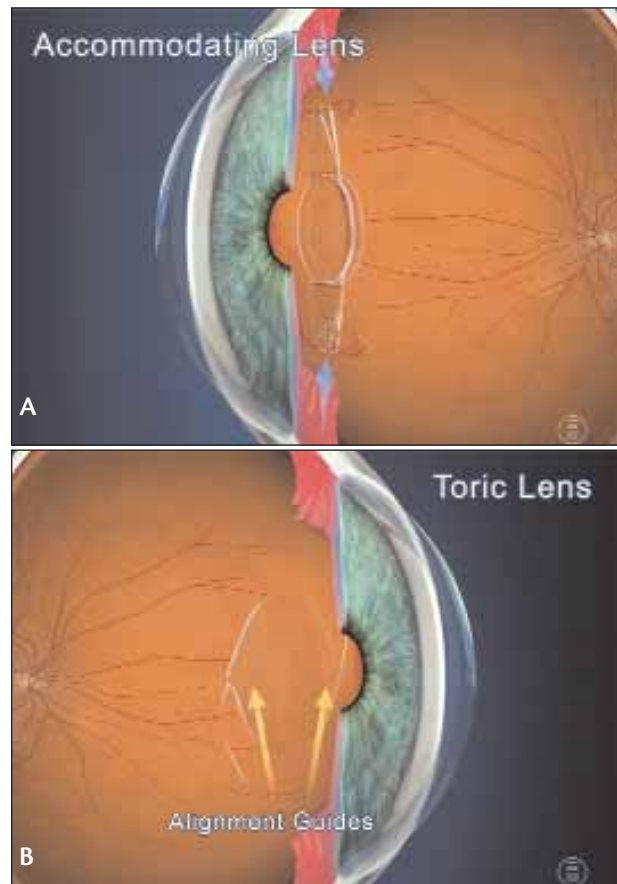


Figure 3. Animations explain the positioning and function of accommodating (A) and toric (B) IOLs.

refined the scripts with these considerations in mind.

I believe that we need to inform every cataract patient about the premium IOL options as a matter of basic education. Even if he is obviously a poor candidate, a patient may later wonder why these “wonderful” IOLs that his friends received were never mentioned to him preoperatively. My standard educational spiel has evolved with increasing experience in counseling patients about these options, and these scripts incorporate what I say to my own patients. After watching the videos, some patients immediately tell me that they are not interested in premium IOLs, whereas others are anxious to hear if they are good candidates and how much the lenses will cost.

CRSToday: How do you use the module in your practice?

As their pupils dilate, cataract patients and any accompanying family members view the appropriate video. I wrote modular scripts that each describe one IOL technology (eg, multifocal, accommodating, or toric) so that physicians can combine different videos together as they like. For example, I presumed that some doctors might only want to present multifocal IOLs, whereas others might only offer

accommodating IOLs (Figure 2). The rest of us can choose to explain both types of presbyopia-correcting IOLs routinely. I avoid discussing specific IOLs by name and do not mention that there are several different models of multifocal IOLs.

There are separate video modules on toric IOLs and refractive lens exchange. All of the components are concise enough that doctors can cover all three refractive IOL options in less than 10 minutes. The IOL information dovetails onto a standard 3-minute introductory overview of cataract surgery.

In my practice, I typically explain both multifocal and accommodating IOLs to interested patients, but the optometrist who does the refraction may also specify if a patient should view the toric IOL video (Figure 3).

Recently, I placed these videos on my Web site, which allows inquisitive patients to view the animations in advance of their office visit or to review them later from their computer at home.

CRSToday: Does your module provide informed consent?

No, these videos are not designed to replace the majority of patient counseling. There is no universal way that I counsel every patient, and what I stress and discuss will vary according to each individual. Furthermore, all physicians will have their own personal style, opinions, and biases about these IOLs. Therefore, I specifically avoided trying to provide informed consent in the videos. It is up to the clinician to discuss the disadvantages of each technology as they may relate to an individual patient. These videos are simply the educational foundation upon which ophthalmologists can build their individual discussions. They permit surgeons to decide how bullish or cautious they want to be about these IOLs for a particular patient.

CRSToday: What do your patients think of the videos?

I have been using these educational video modules since last fall, and they definitely improve patients' comprehension of premium IOLs. Most patients seem to learn concepts better when they can watch a video. The written handouts that I use complement the videos nicely. They allow patients to repeatedly review the information at home, where they can be shared with family members, and serve as a permanent written reminder of what was explained preoperatively.

CRSToday: Do you think your module will increase the number of patients who choose premium IOLs?

I tried to avoid selling the patient on refractive IOLs. The goal of the educational videos was not to increase patient adoption rates, but rather to do a better job of educating them more efficiently and effectively so that it requires less of my own time. The better that patients understand the technology and what to expect, the more likely they are to be satisfied postoperatively if they do select one of these IOLs. ■

David F. Chang, MD, is a clinical professor at the University of California, San Francisco, and he is in private practice in Los Altos, California. He is a consultant to Eyemaginations, Inc., but donates all royalties from this patient education module to the Himalayan Cataract Project. Dr. Chang may be reached at (650) 948-9123; dceye@earthlink.net.

