I recently performed surgery on a 36-year-old high myope who developed a cataract just a few months after being implanted with collamer phakic IOLs (Visian Implantable Collamer Lens [ICL], STAAR Surgical, Monrovia, California) to correct his –16 D of myopia. This posterior chamber lens, which sits just beneath the iris and above the crystalline lens, is a good option for refractive correction of high myopes. However, lens opacification is a known complication, occurring in at least 1% to 6% of eyes with the ICL, with an even higher incidence in high myopes.

This patient, unfortunately, was a person who seems to form cataracts very quickly after phakic IOL surgery. He had been well counseled by the original cornea surgeon about the risk of cataract so he understood the need for the subsequent ICL removal and cataract surgery. For a number of reasons, I wanted to use the femtosecond laser in this case. I've performed more than 6,000 procedures with the Catalys Femtosecond laser (Abbott Medical Optics, Abbott Park, Illinois). In young patients, there are a higher rate of anterior capsule tear with manual capsulotomy, which I wanted to avoid. The accuracy of the femtosecond laser capsulotomy also decreases the chance of eccentric fibrosis for improved lens centration. In an ICL patient who has already undergone a procedure that involves some trauma to the endothelium, I wanted to minimize the use of ultrasound energy and keep the cataract procedure as atraumatic as possible. The laser could also make very accurate incisions to correct the small amount of astigmatism, experienced by this patient.

However, the sequence of events for surgeons whose femtosecond laser is in a separate laser room can be tricky since the ICL must be removed under sterile conditions. Doing that first and then taking the patient out of the OR for the laser portion seemed impractical, so I decided to try performing the femtosecond laser treatment with the ICL in situ.

Had the ICL caused some disturbance in the laser’s ability to image the lens and capsule, I would likely have gone to the OR to remove the ICL and do manual phaco. Fortunately, the laser accurately identified the ICL and the anterior capsule below it (Figure 1), so I proceeded with femtosecond treatment. The laser was able to create a complete capsulotomy without interference from the ICL and soften the lens as planned (Figure 2). Following laser treatment, removal of the ICL did not prove difficult.

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I cut the ICL nearly in half and then slowly rotated it out. Although there were some iris-corneal synechiae, there were no obvious problems with poor vaulting, position, or sizing that would have led to capsule touch and cataract formation. I remove one or two ICLs per year and find that they can be more challenging to remove than an IOL because the phakic lens is cumbersome and thin, shredding easily. Its position just under the iris also demands that care be taken not to damage the iris during removal.

The femto laser-treated crystalline lens was easily aspirated. I find that a disposable silicone capsule guard I/A tip (Bausch + Lomb, Bridgewater, New Jersey) is a useful adjunct in such cases due to its soft tip and larger port that allows for aspiration of slightly thicker nuclei after femto fragmentation. I implanted a +9 D monofocal lens. The patient was 20/25 uncorrected at 1 week postop. I sent him back to the cornea specialist for the fellow eye, which had had an ICL implanted more recently and still had some residual corneal edema. I would have liked to implant a presbyopia-correcting lens to provide more functional near vision for this young patient, but our options at the time of this procedure have a limited power range. In conclusion, this was an interesting case because many of us would consider the presence of an ICL to be a relative contraindication to femtosecond laser-assisted cataract surgery. Surgeons should check the image resolution and surface fits carefully. Provided they are accurate, my experience has been that ICL patients can benefit from the additional advantages of the femtosecond laser.

Reference

Become a Co-Managing Doctor and Share the Care!

Over 25 years ago Omni Eye Services pioneered the concept of co-management in New Jersey. It was a long and grueling fight with the medical and regulatory boards, but we emerged successful and because of this accomplishment, today we are able to provide quality post-operative care to our patients.

Most ODs do not remember a time when you would send your patients to an ophthalmologist and in all likelihood never see them again. Chris Quinn, along with a handful of other optometrists, who shared the same beliefs and convictions, fought for optometrists to be part of the healthcare team and not to be ostracized by it.

It was because of this that the idea of co-management was born and began to change the landscape of care, from a hostile competitive environment to one of mutual respect.

Are we there yet? Not by any means, but if all optometrists practice to the full extent allowed by their state laws and send patients to a specialist only when they need to be sent and communicate their findings before and after the referral, we will continue to prove our value in this ever-changing healthcare system. By co-managing with MDs who support our practices, our patients and our profession, the landscape will continue to improve.

By co-managing you will be providing the full scope of primary eye care and management, while employing the three C’s (Care, Commitment, and Compassion) that the optometry community prides itself on. Joint care of your patients will further solidify your relationship with them, thereby growing your practice.

If you want to be part of our co-management program or want more information about it, please contact our Director of Marketing, Erica Trentacoste (732) 510-2598.
Corneal Collagen Cross-Linking In The Treatment of Keratoconus

By Shanda Ross, O.D., Clinical Director, Clarity Refractive Services

On April 18, 2016, after years of clinical trials, Avedro, Inc., an ophthalmic pharmaceutical and medical device company, received FDA approval for Photrexa Viscous, Photrexa, and the KXL System for the treatment of progressive keratoconus.

With the advent of collagen cross-linking technology eye care physicians now have the tools necessary to arrest the progression of ectatic corneal disease, both idiopathic keratoconus as well as surgically induced ectasia. In some cases where the ectatic process is early in its evolution, treated patients can also enjoy a mild improvement in uncorrected as well as best-corrected visual acuity.

Collagen cross-linking works through the creation of a chemical reaction in the corneal stroma that is brought on through UV photo-activation of the riboflavin molecule in the saturated cornea. This chemical reaction results in increased covalent bonding of collagen fibers and lamella in the corneal stroma making the tissue stronger and thus resistant to further shape distortion and degradation. Ten-year postoperative data seem to indicate that 98% of patients treated in this manner will demonstrate the arrest of further progression of their disease.

In assessing patients with keratoconus for treatment, it is important to understand that this therapy is best offered early in the disease process where it has the greatest chance of having the desired therapeutic effect. Furthermore, patients must be educated on the fact that the therapy is not intended to improve acuity, although in early ectasia cases it can sometimes improve vision. Patients need to be evaluated both from the standpoint of risk of disease progression as well as that of current visual function.

Early detection of corneal ectactic disease is key to preserving vision. Contact Clarity Refractive Services today at (973) 325-3475 to schedule an appointment. We offer your patients a free keratoconus consultation.

Eyes On Optometry

Christopher J. Quinn, O.D., is the Founder and President of Omni Eye Services. He was first elected to the American Optometric Association Board of Trustees in June 2008, and President-Elect at the 119th Annual AOA Congress & 46th Annual AOSA Conference: Optometry’s Meeting® in July, 2016 and will be Inducted President in June 2017.

Dr. Quinn has always had his finger on the pulse of optometry. His accomplishments in the field are numerous. He has worked tirelessly to further the optometric scope of practice and ensure that optometry is represented on all levels – local, state and national. Your support of Omni allows Dr. Quinn to support our profession at this level.

Gone are the tranquil days of hanging a shingle on your door and starting up a busy practice. Just trying to navigate through the complexity of the Affordable Care Act may discourage even the most spirited doctor. The whole medical profession is struggling to adapt to a myriad of fundamental changes. That is why Omni and optometry are proud to have Dr. Quinn’s industry representation in today’s changing landscape of healthcare.

Below are some of the events that have taken place within the AOA over the last six months:

• Dr. Quinn represented the field of optometry leading a panel discussion on preventing the progression of myopia sponsored by the FDA at their headquarters in Silver Springs, MD. The joint workshop featured international experts on myopia and was co-sponsored by the American Academy of Ophthalmology; the American Optometric Association; The American Society of Cataract and Refractive Surgeons; the American Pediatric Ophthalmology Society; the Contact Lens Association of Ophthalmologists and the American Optometric Association.

• Dr. Quinn led a profession-wide Summit on accreditation of continuing education held in Dallas this past October. Over one hundred representatives from all major optometric organizations participated in the discussion and agreed upon a set of core principles for improving optometric continuing education.

• Dr. Quinn was the AOA representative at the NJSOP Therapy by the Sea Conference held in Atlantic City. He presented an update to the membership on issues of national importance to the profession and answered questions in a “Town Hall” format moderated by then NJSOP President Dr. George Veliky.

• Dr. Quinn was named one of 250 Innovators in Optometry in the Primary Care Optometry News listing for 2016. The list recognizes optometrists who practice progressively, provide innovative patient care, conduct optometric research, or excel in academia and share what they have learned with other optometrists to advance the profession.

• Dr. Quinn helped advance optometric care during a SUNY sponsored Envision Conference. Presentations included a panel discussion of co-management of surgical care, an update on femto assisted cataract surgery and was a featured panelist on the future of eye care delivery with SUNY President Dr. David Heath, Dr. Mike DePaolis and Dr. Tom Wong.
Upcoming Continuing Education Offerings

New Jersey
6:00 pm - 8:00 pm

Iselin, May 17th, 2017:
George Veliky, O.D. and the Omni Residents
Most Interesting Cases of the Year

Clarity/TLC
6:00 pm - 8:00 pm

West Orange, June 7th, 2017:
Shanda Ross, O.D.
Corneal Collagen Crosslinking Wet Lab