The benefits of a pre-loaded IOL delivery system

Surgeon says IOL injector system is critical to preserving lens quality and preventing complications

For years, surgeons’ interest in foldable IOLs has revolved around their ability to create small incisions and implant lenses in a compact way in order to minimize induced astigmatism. However, folding IOLs led to important considerations.

What is the best way to insert a folded lens? How can the surgeon minimize lens damage during the folding and insertion process? If an injector system is used, how can the surgeon minimize variability in handling and loading the IOL?

Donald Serafano, M.D., in private practice, Complete Eye Care Associates, Los Alamitos, Calif., and associate clinical professor of ophthalmology, University of Southern California, has strong views on these matters. He believes that it’s critical to properly insert the IOL to preserve its pristine condition.

“We occasionally see damaged lenses because the surgeon didn’t match the appropriate inserter with the IOL,” Dr. Serafano said.

Dr. Serafano recommended the AcrySert C preloaded IOL injector (Alcon, Fort Worth, Texas). Importantly, the injector is custom designed to implant the AcrySof IQ IOL (Alcon), he said. AcrySof IQ IOLs provide excellent visual performance based on proven functional vision even in the most challenging conditions.

There’s well thought-out technology behind the AcrySert C device that supports a worry-free IOL injection for every procedure, Dr. Serafano said.

“Right now, for most lenses in the operating room, three things have to be opened,” Dr. Serafano explained. “We have to open an insertion device, a cartridge, and a lens implant. We have to take the lens implant, load it into a cartridge, and load that into an insertion device. But imagine if we could open a packet and all three of those items are already assembled and ready to go.”

What this does is eliminate variables such as who on staff is trained to properly load a lens. “With AcrySert C, the operating room staff do not have to be experts in lens loading,” Dr. Serafano said.

Regardless of who handles the AcrySert C system initially, a surgeon can be sure that when he or she advances the plunger for IOL insertion, the lens will be free of any marks caused by mishandling.

The AcrySert C delivery system has other advantages over previous insertion devices. One relates to plunger resistance.

Higher diopter IOLs are actually slightly thicker lenses, and these lenses sometimes advance with more resistance. However, if a surgeon advances them with too much force, they could inject too quickly into the anterior chamber, causing iris damage or breaking through the posterior capsule.

This problem is solved with the AcrySert C delivery system, Dr. Serafano said. Resistance is actually built into the plunger itself.

“Whether a 10-diopter lens or 30-diopter lens is being used, resistance is the same for the surgeon,” Dr. Serafano said. “We don’t have to worry about feeling a difference every time we insert the lens and being unsure of how hard to advance the plunger. I think this is an excellent innovation.”

Dr. Serafano said that it’s easy to use the AcrySert C system. “The AcrySof IQ can fit comfortably through a smaller incision size due to the small diameter of the nozzle.”

The plunger design is optimal, he said. “The plunger tip is designed to give a consistent fold to the haptics,” Dr. Serafano said.

“This should prevent any override or underride on the IOL, which sometimes happens with different plungers.”

Surgeons may
LenSx Laser technology has value in the ophthalmic practice, surgeon says

New femtosecond cataract laser provides precision and reproducibility

Maybe the biggest news in cataract last year was the Food and Drug Administration’s approval of the femtosecond cataract laser. Femtosecond lasers have improved the safety of refractive surgery and reduced surgical times, and it makes sense that what the femtosecond laser did for refractive procedures, it would be able to do for cataract surgery, according to Richard L. Lindstrom, M.D., adjunct professor emeritus, department of ophthalmology, University of Minnesota, founder, Minnesota Eye Centers, Minneapolis, and associate director, Minnesota Lions Eye Bank, Bloomington.

“The LenSx Laser (Alcon, Fort Worth, Texas) as applied to cataract surgery will provide some of the same benefits that it did for corneal refractive surgery,” he said. “For the first time, we were able to increase the reproducibility of the procedure from one surgeon to another and from one surgical case to another.”

Refractive corneal surgery with the introduction of femtosecond LASIK “took a significant leap in improvement” from manual microkeratomes, Dr. Lindstrom said. “I believe the femtosecond cataract laser will improve the performance of the surgeon doing cataract surgery as it replaces many of the manual steps in traditional cataract surgery.”

For instance, he cited an analysis by Guy Kezerian, M.D., that found 55% of patients are within 0.5 D of emmetropia after cataract surgery, and the same percentage has successfully eliminated astigmatism.

“In LASIK, 95% of patients are reaching target refraction,” Dr. Lindstrom explained. “We’re trying to get cataract surgery to the level of LASIK, and it’s clear we cannot get there with manual approaches.”

When surgeons attempt to deliver outcomes within 0.5 D of target, reproducible incisions and capsulorhexis become the key components, he said. The LenSx Laser will be able to offer patients and surgeons enhanced precision and reproducibility compared to manual procedure steps, potentially impacting the ability to account for the clinical effects of the incisions themselves, Dr. Lindstrom said.

The LenSx Laser is an optical coherence tomography (OCT) image-guided femtosecond laser that addresses the first three steps of cataract surgery: incisions, including arcuate; capsulotomy; and nuclear fragmentation. Cortical removal and IOL insertion techniques remain the same.

Safety advantages

Some issues facing all cataract surgeons include spherical error and reproducible lens positions, which ties into reproducible capsulorhexis, Dr. Lindstrom said. The laser capsulotomy reduces the risks of radial tears and posterior capsular ruprures during the creation of the anterior capsulorhexis, Dr. Lindstrom added, although there is nothing published in the literature on the topic yet. Although most surgeons do “fairly well with manual techniques,” the femtosecond cataract laser can reproduce capsulorhexis to within 1/10 of a millimeter, he said.

Some surgeons are also using the laser to soften the nucleus. More damage is inflicted on the corneal endothelium with harder cataracts, and ultrasound times increase as well. Using the femtosecond laser to soften the nucleus helps avoid those situations, Dr. Lindstrom said.

“We’d like to move to only vacuum-based lens aspiration with a small amount of ultrasound assistance,” he said. “This laser lets us have routine +1 cataract removals instead of +2, +3, or even +4. The laser inadvertently gives us a safer surgery.”

Dr. Lindstrom noted manual techniques produce “quite a difference in outcomes from one surgeon to another. Femtosecond technology will increase the reproducibility among surgeons.”

For instance, Dr. Lindstrom said, although cataract surgery is safe, there is a higher complication rate in cataract surgery compared to LASIK (about five times higher). About 5% of eyes that undergo cataract surgery have a capsule tear and/or vitreous loss, he said, based on his own assessment of vitreous packs sold. Even within a single operating environment, rates can differ wildly—he cited one ambulatory surgery center where vitreous loss rates ranged from 0.8% to 21%.

“Vitreous loss should be at 1% or less, and we’re not achieving that,” he said.

Limited obstacles

Dr. Lindstrom said incorporating the femtosecond laser into a cataract practice will likely increase the time of the surgery (although not by much) and will increase the cost of the procedure. Because so many baby boomers are willing to pay for enhanced quality of life, are affluent enough, and expect to share in the cost of the surgery, Dr. Lindstrom does not believe these are insurmountable obstacles.

The femtosecond laser will allow surgeons “to charge for the technology, just like we do for refractive surgery. Today’s baby boomer cataract patients have a refractive surgery outcome goal,” Dr. Lindstrom said, and they are willing to pay for enhanced safety and better perceived outcomes.

“One thing to keep in mind is that the patients of the future are the baby boomers who overwhelmingly accepted contact lens technology and refractive surgery to rid themselves of spectacles,” he said, which suggests a patient base already familiar with laser surgery.

In short, he said, the precision offered by the femtosecond cataract laser technology is designed to have benefits for the doctor, the patients, and the ophthalmic practice.

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Putting Intelligent Phaco to the test

Surgeon explains the mechanism and benefits of OZil IP

I f surgeons have any doubt about using the INFINITI Vision System with OZil (Alcon, Fort Worth, Texas), especially with the Intelligent Phaco (IP) software addition, Terry Kim, M.D., professor of ophthalmology, Duke University School of Medicine, and director of fellowship programs, Duke Eye Center, Durham, N.C., recommended performing the following procedure as a test.

"During cataract surgery on a dense lens, such as a 3+ nuclear sclerotic cataract, divide the nuclear material into four quadrants using your usual technique of divide-and-conquer, pre-chop, or chop," said Dr. Kim. "Then go ahead and emulsify the first two quadrants using 100% torsional ultrasound without IP activated. When you’re finished, turn IP on and emulsify the last two quadrants with IP activated. You will be able to see and feel the difference in terms of the enhanced efficiency in lens removal."

Dr. Kim said that OZil IP represents an advancement in the management of phaco energy where short pulses of longitudinal ultrasound are automatically added to OZil torsional ultrasound when a preset vacuum threshold is met. This feature enhances OZil ultrasound by keeping the lens material at the ideal shearing plane of the phaco tip and increasing followability by not allowing occlusion of the phaco tip to occur. As a result, the IOP fluctuations in the eye are reduced and post-occlusion surge is essentially eliminated. The software automatically manages this ultrasound power modulation so that it becomes a seamless event with minimal effort from the surgeon, according to Dr. Kim.

"OZil was an advance in ultrasound technology where the side-to-side shearing motion of the phaco tip, as opposed to traditional front-to-back motion of longitudinal ultrasound, was found to be more efficient in phacoemulsification by reducing repulsion of lens material, improving followability, and stabilizing the anterior chamber. The OZil IP software accentuates the efficiency of the OZil platform by eliminating the need to ‘blend’ in longitudinal ultrasound and by automatically adding in short pulses of longitudinal energy only when needed, which becomes clinically applicable not only in routine cases but also in denser lenses and other complex phaco cases,” Dr. Kim said.

Dr. Kim recommended using the OZil IP default settings to start, although they are customizable as the surgeon becomes more comfortable with the technology. For the majority of cases, Dr. Kim uses the default OZil IP settings of 95% vacuum limit threshold, phaco pulse width of 10 ms, and a longitudinal/torsional ratio of 1.0. With Dr. Kim’s phaco settings of 100% linear torsional and 0% longitudinal ultrasound power, 350 mmHg vacuum limit, 35 cc/min of aspiration flow rate, and a bottle height of 95 cm H2O, each activation of the OZil IP mode will deliver up to twenty 10 ms-long pulses of longitudinal ultrasound (for a maximum total of 200 ms) every time the vacuum exceeds 332 mm Hg (95% of 350 mm Hg).

“All of this translates to increased phaco efficiency with more stable anterior chambers and a safe thermal profile. OZil torsional ultrasound will be a no-brainer for routine cases and will be a helpful attribute for the more complex cases that involve denser lenses, shallow anterior chambers, loose/brittle zonules, and small pupils. In all of these scenarios, we want to maximize the efficiency of phacoemulsification, minimize the turbulence in the anterior chamber, decrease the stress on the capsule, zonules, and iris, and reduce the trauma to the corneal endothelium,” Dr. Kim said.

Given his experience as a microincisional cataract surgeon, Dr. Kim advocated the use of OZil IP for small-incision cataract surgery. “We have been able to show some clinical benefits of using OZil torsional ultrasound in micro-incision (2.2 mm) versus standard-sized corneal incisions (2.8 mm) in terms of lower cumulative dissipated energy (CDE, which refers to ultrasound energy use) and better endothelial cell counts,” said Dr. Kim. “Now there is clinical evidence to support the enhanced safety and efficiency of adding OZil IP to OZil torsional ultrasound.” In this study, the use of IP resulted in lower CDEs (by 37%) and shorter total ultrasound times (by 33%) in cataract surgeries performed with OZil IP versus OZil torsional phacoemulsification alone. This difference was even more noticeable in denser lenses where clog...

continued from page 1

wonder if a mistake can be made in the lens delivery process using this system. "If you forget any step along the way, the lens is not able to be delivered," Dr. Serafano said.

For instance, if a surgeon forgets to fill the AcrySert C injector with viscoelastic, but he or she pulls off the lens stop and advances the plunger, the implant will not advance, Dr. Serafano said.

"There will be too much resistance between the lens implant and nozzle," he said. "It’s impossible to advance the lens that way.”

Other lens injection systems require cleaning and sterilization.

AcrySert C does not. It’s a single-use device, entirely disposable.

"We once had a problem with toxic anterior segment syndrome (TASS),” Dr. Serafano said. "The causes were tracked down and a lot were found to be related to instruments that had any kind of cannula that was not cleaned properly. They were sterilized and reused, but there was a toxic substance formed from the residue of whatever was in the cannula and subsequently sterilized. An acute inflammatory response occurred."

All the while, the original reason to implant foldable IOLs in the first place is preserved. “The incision is more predictable as it gets smaller,” Dr. Serafano said. Although he doesn’t believe any incision is astigmatically neutral, efforts to make incision sizes smaller—such as through foldable IOLs—have helped to reduce unwanted effects of induced astigmatism.

Hence, Dr. Serafano believes AcrySert C is a step in the right direction as it combines the benefit of an efficient pre-loaded device with the AcrySof IQ technology.

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Surgeon says IP provides best of both ultrasound worlds

Dr. Masket says IP delivers the best combination of torsional and longitudinal ultrasound

Intelligent Phaco (IP) is a critical part of a trinity of phacoemulsification innovation, according to Samuel Masket, M.D., clinical professor of ophthalmology, Jules Stein Eye Institute, David Geffen School of Medicine, Los Angeles.

"There are three key parts of the INFINITI Vision System [Alcon, Fort Worth, Texas]," Dr. Masket said. "The first is OZil, making phacoemulsification a more efficient cutting tool. It changed the landscape for phaco.

Then there's the INTREPID FMS [Fluidics Management System], which allows for fluidic stability. Then came the concept for IP, which is a software modification. Each of these adds to the continuum for improvement in chamber stability and cutting performance.”

Dr. Masket explained that IP enables the INFINITI to incorporate not only the OZil torsional side-to-side oscillating ultrasonic movement that maintains the nucleus at the tip, but also pulses of longitudinal ultrasonic to help clear the tip and prevent system occlusion.

In the default IP setting, if 95% of the vacuum limit is achieved while working with torsional phaco, a 10 millisecond longitudinal burst of phaco is automatically induced.

These settings are customizable. "You can choose to have IP kick in anywhere between 90% to 100% of the vacuum limit," Dr. Masket said. "Five to 20 milliseconds are also allowable.

"Because this software modification has been well received, I no longer exhibit any tendency for clogging," Dr. Masket said.

There are real benefits to using the OZil torsional handpiece with a fraction of longitudinal ultrasound compared to competitor systems with 100% ultrasound, Dr. Masket said.

"Recently I used one of the other machines that does not have OZil and only has longitudinal phaco," Dr. Masket said. "While it does cut well, the nuclear chatter, which is the tendency of longitudinal, is very real."

That lens chatter, which involves the repulsion of lens material by the longitudinal movement, can create inefficiencies and more cumulative dissipated energy (CDE), Dr. Masket said.

"My personal CDE dropped significantly when I went to OZil," Dr. Masket said. "The torsional movement cuts lens material moving in both directions. Longitudinal only cuts going on the forward stroke. Half of the movement is wasted with longitudinal."

It's important to consider the INFINITI Vision System holistically, with OZil, the INTREPID system, and IP as parts that make a refined whole device, Dr. Masket suggested.

Source: Samuel Masket, M.D.
Tracking the FS200 Femtosecond Laser from research to practice

For instance, both the Intrepid FMS and IP components help reduce post-occlusion surge, Dr. Masket said. “One of the advantages of INTREPID FMS is reducing post-occlusion surge,” Dr. Masket said. “With IP, because it doesn’t allow occlusion with full vacuum, it reduces the tendency for post-occlusion surge.”

Reducing surge makes it safe to work bevel-down to subdivide nuclear material, Dr. Masket said, which is his preference. “I work bevel-down and I feel safe doing so,” Dr. Masket said. Dr. Masket said working bevel-down allows him to be more efficient at achieving and maintaining purchase on the nucleus for the purpose of chopping.

“An analogy would be slicing a turkey at Thanksgiving,” Dr. Masket said. “Unless you have a firm purchase with the fork, it’s almost impossible to slice the turkey with a knife.”

Still, the original concept in phacoemulsification was to use the phaco needle bevel-up. “Historically, there wasn’t a fluidics system that had surge protection,” said Dr. Masket, adding that INTREPID FMS makes bevel-down surgery safer.

The INTREPID FMS has low compliance tubing and cassette that improve fluidics as well by giving surgeons more stable anterior chambers. It allows surgeons to use their own custom phacoemulsification settings—whether with small or even smaller incisions, high or even higher vacuum—and still perform surgery safely and comfortably.

Dr. Masket’s other surgical preferences give insight into the utility of the OZIL handpiece. “In order to obtain the true value of OZIL, you need to have an angulated tip,” Dr. Masket said. “The tip I use is one designed by Robert Osher, M.D., which is a reverse Kelman, 12-degree angle, mini-flared tip.”

This tip optimizes the side-to-side shearing motion of torsional phacoemulsification, which again prevents chatter and minimizes CDE. “I don’t have to chase the lens material with OZIL,” Dr. Masket said. “It comes to me.”

According to Alcon, this improved followability is more convenient and it makes surgery more efficient.

Specifically, the company notes, the lack of repulsion increases followability and allows surgeons to lower their fluidic parameters without sacrificing surgical efficiency.

At the end of the day, Dr. Masket said the INFINITI Vision System “makes surgery easier for a greater number of surgeons.” The OZIL handpiece provides an advancement in ultrasound quality while IP optimizes that evolution, he said. “The IP software modification prevents total occlusion of the tip, allows for clearing of the material from the tip, and helps hold the nucleus at the tip for more efficient emulsion,” Dr. Masket said.

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The FS200 was fast, creating a flap in a matter of 6 seconds. I was impressed with it.”
Better biomechanics for all-laser LASIK vs. traditional LASIK

**FS200 femtosecond preserves patient eye health, surgeon says**

Femtosecond lasers have been making LASIK flaps for at least a decade. Up until now, practitioners have heard a lot about femtosecond lasers in ophthalmology, but not nearly as much about the WaveLight FS200 Femtosecond Laser (Alcon, Fort Worth, Texas).

Does it deliver in terms of flap-making performance? How will it support eye health in eyes that undergo the LASIK procedure? What sets it apart from the competition?

**Ronald Krueger, M.D.**, medical director, department of refractive surgery, Cole Eye Institute, and professor of ophthalmology, Cleveland Clinic Lerner College of Medicine of Case Western Reserve University, Cleveland, Ohio, is an excited user of the FS200 technology.

"It's a newer femtosecond laser that has a fast pulse repetition rate of 200 kHz," Dr. Krueger said. Such speed provides standard flap creation in about 6 seconds, according to Alcon.

Dr. Krueger said that the impact of this laser on the biomechanical properties of the cornea is considerably improved compared to other femtosecond lasers in the marketplace. For one, he is eager to use the system more because of its advanced suction mechanism that reduces IOP increases during LASIK.

"It has two suctions instead of one," Dr. Krueger said. "The first one is able to give an adequate fixation on the eye. The second one is to applanate the cornea, and it sucks into the ring already fixated on the eye."

The geometry of the ring is such that it has a special spacer (distance pieces), which deforms the sclera less than a standard suction ring with the IntraLase (Abbott Medical Optics, Santa Ana, Calif.), Dr. Krueger said. The result is that IOP doesn't have to rise as high with the FS200, improving patient safety.

"The IOP rise with the FS200, in my opinion, is lower compared to the IntraLase," Dr. Krueger said. "Surgeons would like to avoid excessive IOP rise. We don't want to have too much stress on the eye. Patients can have glaucoma, in which case you can do LASIK but you don't want to have too much stress."

Consistent suction is applied via automated vacuum control of the patient interface, while ocular distortion is minimized, according to Alcon.

Bubbles created by the femtosecond pulses are released in a less concerning manner with the FS200 laser. With the IntraLase, Dr. Krueger said, laser pulses can yield bubbles that become sequestered in the cornea. Instead of being released, the bubbles can form an opaque bubble layer (OBL), he said.

With the FS200, there is a ventilation path that allows the bubbles to escape more efficiently. This is designed to minimize the formation of OBL by evacuating the gas from the eye.

The beam control check feature is a nice add-on to the FS200 laser. "Femtosecond pulses are focused based on a presumed thickness and orientation of the applanation plate," Dr. Krueger said. "It's nice to have a way of checking the distance from the optics to the edge of the flat plate, which assures precise flap thickness."

This check is performed within 4 seconds of treatment. "Before you operate, within 4 seconds it does the check, you know what the thickness is verified to be, this is calibrated, and it provides a more predictable thickness," Dr. Krueger said.

Dr. Krueger said femtosecond lasers continue to be a step above microkeratomes. "They provide uniform thickness flaps that don't go
Femtosecond Lasers

The first femtosecond lasers were of large size, plagued with technical limitations, sensitive to environmental conditions, and not reliable enough for clinical use, according to a report by Michael Mrochen, Ph.D., IROC AG, Zurich, Switzerland, and colleagues. “In recent years, this situation has markedly improved. Contemporary femtosecond lasers used in industry and in ophthalmic application provide a high degree of stability and reliability.”

The study, published in November 2010 in the Journal of Refractive Surgery, investigated the feasibility and technical features of the FS200 in refractive and corneal laser surgery. It analyzed 30 porcine eyes upon which the FS200 was used to cut an intended flap thickness of 128.7 ±1.0 microns and a flap diameter of 10.0 mm. The flap was precisely cut. The mean actual thickness was 128.7 ±1.0 microns and the mean flap diameter was 10.0 ±0.4 mm.

“The flap thickness measurements with the WaveLight FS200 demonstrate a higher predictability of the flap dimensions when compared to mechanical microkeratomies and a comparable predictability to other femtosecond lasers,” Dr. Mrochen wrote.

There are some special characteristics of the FS200 that should help it to achieve excellent performance, some of which were mentioned in the study.

One is the laser’s ability to self-check parameters that affect the laser beam’s performance. “To avoid possible misalignments, the system has integrated energy and beam quality control through manifold measurements and sensors at different points in the beam path,” Dr. Mrochen noted. “This assures a high quality spot and beam profile along the optical pathway.”

This beam control check is performed for each patient. “The laser system can compensate up to 300 microns of z-positioning caused by tolerances and variations in the room temperature,” Dr. Mrochen reported. “Such a beam control check can be performed before each treatment, and enables a distance setting of the laser optics to every new plane applanation glass.”

Dr. Mrochen also suggested the femtosecond laser cutting.”

“Shooting a large number of laser pulses within a small region of the cornea can cause a disturbing layer of metastable gas bubbles,” Dr. Mrochen reported. “Whereas the cavitation bubbles that are directly created during the plasma expansion typically collapse after several microseconds, the observed metastable gas bubbles have a lifetime of up to several minutes or even hours. It is thus critical to minimize or, better yet, even avoid the formation of an opaque bubble layer that might occur during the femtosecond laser cutting.”

This is no small issue. Dr. Mrochen referenced an article by Kaiserman et al, which reported that 84 of 149 (56.4%) consecutive eyes treated with the IntraLase (Abbott Medical Optics, Santa Ana, Calif.) developed OBL.

With the FS200, optimized scanning algorithms allow OBL creation to be minimized, Dr. Mrochen said.

In the study, the FS200 created an externalizing channel peripheral to the hinge of the corneal flap while optimizing the spatial and temporal scanning algorithm to allow gas to diffuse outside of the cornea.

“This is an encouraging result and demonstrates that patient discomfort or even complications associated with opaque bubble layer can be avoided,” reported Dr. Mrochen.

Given the solid research behind the FS200, Dr. Slade’s positive feedback about it in practice, and the FS200’s ability to seamlessly integrate with the WaveLight Eye-Q Excimer Laser, ophthalmologists should expect to hear more from their fellow surgeons about this new femtosecond laser.

Reference

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Reference

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December 14, 2010 marked the 20th anniversary of the first operation using the AcrySof lens implant (Alcon, Fort Worth, Texas).

Up until her treatment at the age of 73, Nellie Diaper had depended on glasses for most of her life, but was able to see without the aid of spectacles after her operation. Ms. Diaper, now 93, still has excellent vision and can read without glasses.

Ms. Diaper returned to King Edward VII Hospital in Windsor, U.K., on the 20th anniversary of her surgery to be reunited with her eye surgeon, Richard Packard, M.D., senior surgeon, Prince Charles Eye Unit, Windsor, and director and consultant ophthalmic surgeon, Arnott Eye Associates, London, and to mark the historic milestone in the treatment of cataracts.

“At the time I had no idea it was going to be momentous,” Dr. Packard said. “The material was unlike anything I’d used before. I was used to working with silicone rubber and rigid plastic implants in cataract surgery. This new material felt sticky and was initially awkward to handle. The lens implanted in Ms. Diaper’s eye was monofocal and the surgery was routine. At the time, none of us thought of it as being revolutionary—it was just the start of a clinical trial.”

Dr. Packard has implanted AcrySof lenses in more than 8,000 cataract patients over the past 20 years. “I choose to use AcrySof lenses because they have delivered excellent results. The lens fulfills the demands of my patients, whether they want spectacle independence, enhanced distance, or near vision. The lens can be inserted through an incision of about 2 mm, is stable, reliable, and has a low level of secondary intervention,” he said.

Since the introduction of the AcrySof IOL, over 50 million AcrySof lenses have been implanted.

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Ms. Diaper reunited with her eye surgeon, Dr. Packard

Dr. Packard, Ms. Diaper, and Ian Makepeace, sales and marketing manager, Alcon Surgical U.K.