Device simplifies complex cataract

Lens fragmentation device eases difficult cases from phaco to small-incision extracapsular techniques

By Lynda Charters;
Reviewed by Alan S. Crandall, MD

A MICRO-INTERVENTIONAL DEVICE designed to deliver zero-energy endocapsular lens fragmentation (miLoop, Carl Zeiss Meditec) serves as an aid during cataract surgery to remove even the hardest cataracts safely.

“The [lens fragmentation device] is essentially a modernized snare that differs from similar devices because it is sterile and does not require assembly,” said Alan S. Crandall, MD.

The device—made of highly elastic, memory-shaped thin filaments—allows full-thickness lens fragmentation at low-energy levels, said Dr. Crandall, the John A. Moran presidential professor; senior vice chairman; director of glaucoma and cataract; and director, Moran Outreach Division, John A. Moran Eye Center, University of Utah, Salt Lake City.

A study in which the device was used during phacoemulsification and compared with manual phacoemulsification alone—the LEEP 103 study—evaluated energy delivered and fluidics.

Results showed that less fluidics and energy were needed—the fluidics and energy used were 27% and 53% higher, respectively ($p < 0.05$ for both comparisons).

See story on page 6: Photography

NOVEL DRUG TAKES ‘STEP FORWARD’ IN STEROID THERAPY

A NEW ITERATION OF A TOPICAL corticosteroid therapy, loteprednol etabonate ophthalmic gel 0.38%, provides a number of benefits for patients. Approved for the treatment of postoperative inflammation and pain following ocular surgery, the product is engineered with proprietary submicron technology that improves drug dissolution and penetration to target ocular tissues, notes Marguerite B. McDonald, MD.

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BLUE-STATE BLUES Those impacted by tax bill appeal to other half for assistance page 8
OPS at 50: How imaging led to birth of new profession

Ophthalmic Photographers’ Society continues to promote advancement in imaging excellence

By Timothy J. Bennett, CRA, OCT-C, FOPS; Special to Ophthalmology Times

Little did Harold R. Novotny, BS, and David L. Alvis, MD, know when they published their landmark paper in 1961 describing the basic techniques of fluorescein angiography (https://www.ahajournals.org/doi/pdf/10.1161/01.cir.24.1.82) that the response by the ophthalmic community would usher a new era of diagnostic testing. The sudden enthusiasm for fluorescein angiography created an immediate need for skilled, full-time retinal angiographers—and a new profession was born.

The photographers who formed the vanguard of this profession found a shared need to exchange information, collaborate on new techniques, and set standards of practice.

By April 1969, a group of ophthalmic photographers held an informal gathering during the Association for Research in Vision and Ophthalmology meeting in Sarasota, FL, to discuss forming a professional society. They agreed to have their first formal meeting later that year during the American Academy of Ophthalmology meeting in Chicago.

Attending the first meeting were 10 ophthalmic photographers, who set organizational goals, selected interim officers, and chose a name—the Ophthalmic Photographers’ Society (OPS).

**FLASH FORWARD**

Five decades later, the OPS includes more than 1,000 members from 27 countries. Membership—which is open to anyone with an interest in ophthalmic photography—including photographers, technicians, physicians, scientists, vendors, and students.

The society’s main objectives are to:

1. Provide primary and continuing education in the field of ophthalmic photography,
2. Set and maintain professional standards through certification, and
3. Promote scientific advancement in imaging technology and techniques.

Since its inception, the OPS has provided a central forum for the exchange of information through a number of programs and publications.

The society sponsors national and regional educational meetings; offers educational scholarships; publishes the peer-reviewed *Journal of Ophthalmic Photography*; maintains a website (www.opsweb.org) with news and technical information; has a strong social media presence with more than 24,000 followers, and offers certification in ophthalmic photography.

All of these programs and member benefits are accomplished through the efforts of dedicated volunteers from the OPS ranks, along with generous philanthropic support from sustaining members.

**CHANGING DEMOGRAPHICS**

The first generation of “ophthalmic photographers” to enter the field were mostly medical photographers who already had some experience in fundus photography and were able to make a quick transition to this new subspecialty of angiography.

These early practitioners often worked side by side with ophthalmologists and retinal specialists in exploring the diagnostic uses of fluorescein angiography and learning together as they unraveled the complexities of interpreting the images they were capturing.

This close clinical collaboration with physicians quickly elevated the profession. Many ophthalmic photographers contributed significantly to the ophthalmic literature of the time and were held in high regard as professional colleagues in ophthalmology. This spirit of scholarly collaboration between photographer and physician continues today in many academic practice settings.

Over time, there were gradual shifts in the professional experience of individuals entering the field. A second generation of fluorescein angiographers came from a cross-section of commercial, industrial, and scientific photo.
photography backgrounds, adapting their existing photographic skills to ophthalmic subjects. This was followed by another group of personnel who had experience in ophthalmology as ophthalmic technicians, but with no technical photographic training.

As diagnostic imaging has become ubiquitous in most ophthalmic practice settings, the roles and backgrounds of those performing photography has slowly shifted. An increasing number of ophthalmic technicians and assistants have cross-trained to do some imaging procedures.

Conversely, many ophthalmic photographers have gone on to obtain training in some of the skills required of ophthalmic technicians, further blurring the line between these two allied health professions and creating a universal need for education and sharing of information.

EDUCATION AND CERTIFICATION

The diverse makeup of the profession underscores the need for strong education in the field. The OPS sponsors national, regional, and international education programs that provide comprehensive training opportunities for ophthalmic imagers. The OPS annual educational program—held in conjunction with the American Academy of Ophthalmology annual meeting—provides a diverse curriculum from entry-level techniques and patient care to updates on the latest technology, advanced techniques, image interpretation, and electronic communication.

Education and certification go hand in hand in ophthalmic photography. The OPS-sponsored educational programs, which, when combined with certification, form a diverse curriculum for professional growth and education that extends well beyond “on-the-job training.”

The Certified Retinal Angiographer (CRA) program was established by the OPS Board of Certification in 1979. To date, more than 1,000 individuals have successfully achieved the CRA designation. This credential is recognized in the ophthalmic community as an objective measure of competence in fundus photography and fluorescein angiography, and is meant to assure employers and the public that an individual has demonstrated a high level of proficiency in the field.

Continuing education is important in maintaining one’s skills and is a requirement for recertification. The CRA Program is accredited by the National Commission for Certifying Agencies (NCCA).

ADVANCING INTO NEXT 50 YEARS

In summary, the ophthalmic field has witnessed several advances in imaging technology. Ophthalmology was quick to embrace digital technology for angiography as early as the mid 1980s. The 1990s saw the adoption of indocyanine green (ICG) angiography and scanning laser ophthalmoscopy (SLO).

After the turn of the century, clinicians witnessed a diagnostic revolution with the advent of optical coherence tomography (OCT) technology. Although utilization of fundus photography and fluorescein angiography has decreased with the advent of new technologies such as OCT and optical coherence tomography angiography (OCTA), the traditional tests that spawned a profession remain in common use today.

The future of ophthalmic imaging as a profession remains promising. New technology brings new challenges as well as opportunities to advance health care and improve the quality of life for patients.

The OPS remains a strong and vital professional organization. Membership numbers and resources remain stable; educational programs are exceptional in quality and diversity; the CRA program is accredited; and the Journal of Ophthalmic Photography has never looked better.

These successes are a testament to the vision of the founders of the OPS 50 years ago along with the commitment of time, talent, and energy of our members throughout the years.