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Bryn Mawr Communications; Reporting from the 2014 AECOS European Symposium in Barcelona, Spain

2014 AECOS European Symposium

In June, the American-European Congress of Ophthalmic Surgery (AECOS) held its annual European Symposium in Barcelona, Spain. The congress—the first to be chaired by the European Executive Committee—featured high-quality lectures and in-depth discussions on a range of noteworthy topics, including the integration of new technologies, the advancement of surgical techniques, and the navigation of the complex political environment in Europe and its effect on health care.

The 2014 AECOS European Symposium opened with the AECOS Innovation Forum: Perspectives on Applied and Emerging Technologies. To begin, Michael Knorz, MD, President of AECOS Europe, welcomed physician and industry attendees with an overview of AECOS Europe and the organization's mission to foster collaboration between leading surgeons, industry executives, venture capitalists, and entrepreneurs for the advancement of vision care. Next, keynote speaker Norbert Pfeiffer, MD, discussed changing population demographics in Europe, including an increased life expectancy and reduced birth rate, and the effect on health care; despite a growing demand for eye care, ophthalmologists are successfully reducing blindness and low vision, Dr. Pfeiffer reported. Following this talk, a number of applied and emerging technologies in ophthalmology were presented including ReLEx and hyperopic SMILE, nanosecond laser technology for flap creation and cataract surgery, surgical guidance systems, and femtosecond laser lenticule transplants. The session concluded with a lively discussion on the reputation of LASIK, in which panelists explored whether or not the procedure needs a new brand. Several suggestions for invigorating the LASIK market emerged, including placing an even greater emphasis on physician-industry partnerships—the kind of collaboration that AECOS represents.

Moving to the corneal space, the What Is New in Cornea? session encompassed discussions about novel surgical and therapeutic approaches to treating corneal conditions and pathology. Sheraz Daya, MD, overviewed advanced lamellar techniques, weighing in on how the femtosecond laser will improve outcomes and likening wedge resection and lamellar dissection to a facelift for the cornea. Jorge Alió, MD, discussed femtosecond laser-assisted keratoplasty, reporting that the technique enables a larger amount of diseased tissue to be excised with great precision. Beatrice Cochener, MD, covered refinements in intrastromal corneal ring segments for keratoconus, including new developments in design and computer-simulated response to implantation. Lastly, Rafael Barraquer, MD, described promising developments in the management of dry eye, such as novel multidose artificial tear systems and polyunsaturated fatty acid supplements.

On the refractive front, the Videos on Challenging Refractive Cases session opened with a keynote talk from Arthur Cummings, MD, in which he provided attendees with an

overview of customized ablation profiles in the modern era; of particular interest were new profiles for presbyopia treatment, including Presbyond, Supracor, PresbyMax, and IsoVision. Next, Tobias Neuhann, MD, walked surgeons through his approach to complications management with a posterior chamber phakic IOL, and William Wiley, MD, offered pearls for integrating the WaveTec ORA System—a device he considers “relatively robust” and useful in obtaining information. John Doane, MD, detailed lessons he has learned in his experience performing ReLEx SMILE—recounting even his very first SMILE patient—and Dr. Barraquer shared a teachable moment in his surgical career: a case of a “hyperopic ICL sizing nightmare.”

Shifting to glaucoma, the Microinvasive Glaucoma Surgery (MIGS) session opened with a keynote lecture by Ike Ahmed, MD, who provided an enlightening look at the definition, rationale, and optimization of MIGS, highlighting its main promise: earlier intervention. The subsequent talks were organized according to the three MIGS implantation targets: (1) Schlemm’s canal, (2) the suprachoroidal space, and (3) the subconjunctival space. Each section featured company and physician perspectives on a variety of MIGS treatment approaches, including the iStent, Hydrus, Cypass, iStent Supra, and XEN. The session concluded with a panel discussion on the pros and cons of MIGS, considering the value and success of a number of techniques and the optimal time for intervention.

In a unique outdoor Beachside Chat session, attendees convened for a comprehensive discussion on how European politics are influencing their ability to provide premium ophthalmic surgery and receive compensation for their services. A number of countries were represented, with perspectives from Dr. Knorz, of Germany; Dr. Cochener, of France; Dr. Alió, of Spain; Lucio Buratto, MD, of Italy; Dr. Cummings, of Ireland; Dr. Daya, of the United Kingdom; and Pavel Stodulka, MD, of the Czech Republic. Regardless of the individual state of politics and health care, all participants seemed to agree that members of the professional medical societies must engage with policymakers, as self-regulation is more beneficial than government regulation—for both doctors and the patients they serve.

Back in the surgical space, the Cataract Video Session: My Best Pearls incorporated tips and tricks for laser cataract surgery from Dr. Knorz; for repair of iris and pupillary abnormalities from Dr. Ahmed; and for patients with multiple previous surgeries and phaco from Roberto Zaldivar, MD. Following this, the Innovations from Industry session highlighted new surgical and technological advancements and their potential impact on the field. Burkhard Dick, MD, described his experience and results with a femto IOL and a fluid-based accommodating IOL. Katrin Gekeler, MD, delivered the first-ever talk on the new Tecnis Symphony IOL (Abbott Medical Optics), describing the lens’ diffractive echelette design and mechanism of action. Carlos Verges, MD, revisited the concept of scleral implant surgery, describing the Oculock implant for ensuring the lens stays in place, and Dr. Buratto weighed in on how smartphone apps and other mobile technologies are changing the doctor-patient relationship. Lastly, Steven Dell, MD, shared his experience with a pharmacologic treatment for presbyopia that, unlike an

aperture placed at the corneal plane, which could degrade optical quality, relies upon the pupil itself to create an expanded depth of focus. In the subsequent panel discussion, participants deliberated whether or not these innovations will survive.

As AECOS members and meeting attendees know, the late Joseph Colin, MD, has left a tremendous impact, both personally and professionally, on the ophthalmic community. In commemoration of Dr. Colin, AECOS Europe presented the annual Joseph Colin Award to his deserving colleague and friend, Dr. Cochener. After her gracious acceptance of the award, Dr. Cochener delivered a lecture on the modern management of primary and secondary ectasia, in which she emphasized the importance of evidence-based medicine in the treatment of keratoconus.

In the Cross-Linking: Basic Science and Clinical Applications session, John Marshall, PhD, considered several fundamental questions of crosslinking, discussing what it truly is and when and how it is accomplished. Keynote speaker John Kanellopoulos, MD, detailed the advantages of topo-guided PRK plus corneal collagen crosslinking (CXL). John Vukich, MD, presented outcomes of the AECOS multicenter CXL trial, with early results supporting the efficacy of accelerated crosslinking in select patients, and Francois Malecaze, MD, provided an update on the status of iontophoresis. John Tyrer, PhD, described new diagnostics for evaluating biomechanics and ectasia progression, stating that we are now beginning to understand the complexity of the strain states that exist within the cornea. Beyond treatment approaches, Theo Seiler, MD, lead a thought-provoking discussion on the ethics of CXL, including how to determine which patients should wait to undergo treatment, and William Trattler, MD, spoke about the much-debated issue of treating young patients with keratoconus.

Taking a look at the life and practice of the younger surgeons, moderators Arthur Cummings, MD, and William Link, PhD, lead a panel discussion on Challenges and Opportunities Facing Young Ophthalmologists. Panelists Lisa Toto, MD; Cosme Lavin, MD; Roger Zaldivar, MD; and Dr. Wiley shared their motivations for becoming ophthalmologists, their current interests in ophthalmology, and their predictions for the future of the field.

In a nod to the importance of ensuring one's practice remains current and business savvy, the Broadening the Premium Channel: How to Market in the Digital World session was devoted to covering the ways in which physicians can drive value in the premium channel and boost their practice success. Marketing methods discussed included the integration of intraoperative aberrometry, by Gerd Auffarth, MD, and building an excellent practice reputation, by Michael Prang, MD. A live demonstration on the impact of social media platforms such as Twitter was presented by Erik Mertens, MD, who captured (and posted) an on-stage selfie and engaged audience members in a digital conversation on his feed—using 140 characters or less.

Moving to the Presbyopia Correction session, keynote speaker Dr. Alió considered the controversial question of whether accommodating IOLs ever work, hypothesizing that

they will, but not in the capsular bag. Next, small-aperture, hydrogel, and multizone corneal inlays were described by Roger Zaldivar, MD; Dr. Cochener; and Dimitrios Bouzoukis, MD, respectively. Robert Rivera, MD, shared his personal experience with a corneal implant in his eye, a treatment he believes has made him a better surgeon. A variety of other methods for presbyopia correction were discussed, including presbyopia-correcting ablations, varifocal LASIK in hyperopic presbyopia, the Light Adjustable Lens (Calhoun Vision), and lens softening with a femtosecond laser. Painting a portrait of the medical market in Germany, Gerd Auffarth, MD, described reimbursement rates in his home country versus the rest of Europe and touched on factors prohibiting the adoption of multifocal IOLs. John Vukich, MD, discussed the US clinical trial results and regulatory status of a small-aperture corneal implant, predicting “much daylight on the path forward” with this device.

In the Femtosecond Laser Refractive Cataract Surgery session, keynote speaker Stephen Slade, MD, described the evidence, ethics, and potential of laser cataract surgery, asking audience members: How much better can you make your manual cataract surgery? Next, Dr. Dick discussed advanced femtosecond laser lens surgery, presenting his approach to pupil expansion and four approaches to the posterior capsulotomy. Detlef Holland, MD, demonstrated how to maximize surgical efficiency with a femtosecond laser cataract platform, describing advantages in higher-grade cataracts and subluxated lenses. Dr. Seiler discussed the benefits of a new mobile femtosecond laser for cataract surgery, including increased mobility and minimal cavitation gas development, and Dr. Stodulka presented clinical results of laser astigmatic arcuate keratotomy, describing favorable 6-month results.

In tune with AECOS’ dedication to advancing innovation and patient care, the European Symposium concluded with the New Horizons: Breaking News! session, featuring discussions on new technologies and the results they have afforded surgeons who have implemented them. First, Dr. Daya reviewed preliminary outcomes with a toric trifocal lens, reporting very good results in terms of spherical equivalent and astigmatism management. Carlos Buznego, MD, discussed an innovative microshunt that lowers IOP below 15 mm Hg in early clinical trials. Dr. Mertens described a multifocal phakic IOL of the future—or an extended depth of focus lens, as he characterized it—and Dr. Alió shared his early experience with a foldable acrylic clear keratoprosthesis. The meeting closed with an entertaining European edition of The Bond Report, presented by William Bond, MD.

We now look forward to the 2015 AECOS European Symposium, which will be held in Berlin on June 25-28.