

## Cornea Society News Advancing the treatment of corneal disease

A Cornea Society publication

### Reporting from the 2012 AAO annual meeting, Chicago

#### "Careful, honest, ethical" approach needed to perform new surgical techniques

phthalmologists need to prepare with care when learning a new technique to be ethically, legally, and medically ready to perform it for the first time.

"A careful, honest, and ethical approach will distinguish the competent ophthalmologist as he or she learns a new technique," said Roberto Pineda II, MD, Boston. "The foregoing suggestions will help place the patient first, minimize the risk of complications, and allow the ophthalmologist to gain technical expertise with confidence."

The American Academy of Ophthalmology has applicable rules of ethics on the subject, he said, with the first rule being competence, wherein an ophthalmologist must have specific training or experience to perform the procedure in question or be assisted by someone who has. The second rule is informed consent.

Dr. Pineda said medical legal issues include whether physicians are covered by malpractice insurance for the new surgical technique, whether they should tell a patient if it is their first case, and if the consent process should be supplemented.

When preparing for the first case, physicians should have all necessary equipment and material at hand, consider being proctored, choose an easy case, have a rehearsal, avoid any time pressure, and prepare for any potential complications, according to Dr. Pineda.

Editors' note: Dr. Pineda has no financial interests related to his comments.



Surgeons attending the 2012 AAO annual meeting partook in sessions covering topics such as premium IOLs and the top reasons for performing DMEK.

#### Lens issues, complications dominate Refractive Subspecialty Day

In a point-counterpoint discussion session, leading refractive surgeons offered their perspectives on everything from astigmatic correction to premium IOLs. Louis D. "Skip" Nichamin, MD, Brookville, Pa., started off the session by noting, "I am able to safely and reproducibly correct up to 3 D of astigmatism through the use of limbal relaxing incisions [LRIs]" based on a patient's age. At levels higher than that, he prefers to combine the use of toric IOLs with LRIs.

"I believe we will all become increasingly dependent upon the excimer laser to reduce residual astigmatism following 'successful' implant surgery," he said. While surgeons are currently working on leaving patients with no more than 0.75 D of cylinder, "my prediction is that the bar will soon be raised to a level of 0.25 D, for both sphere and cylinder," Dr. Nichamin said.

Albeit uncommon, inadequate capsular support can be a potential complication of cataract surgery, and the best approach is to suture a posterior chamber IOL, said Walter J. Stark, MD, Baltimore. He suggested suturing the IOL to the peripheral iris using a modified McCannel technique.

"Doing this through a 3.5-mm incision gives the surgeon greater flexibility in treating patients with no capsule support," he said.

Sadeer Hannush, MD, Philadelphia, prefers gluing a posterior chamber IOL to suturing it, using a modified technique originally described by Amar Agarwal, MD.

"There's less risk of iris prolapse," he said, but acknowledged the technique does require surgical expertise.

"Glued IOLs are a novel approach for PC IOL implantation," he said. "It avoids complications related to sutures, large incisions, and hypotony."



Winter 2013

Dear Colleagues,

We came to the end of 2012 on a high note with the Cornea Society well represented in various academic programs at the annual meeting of the American Academy of Ophthalmology in Chicago. The Cornea Society/EBAA Fall Educational Symposium saw a good attendance laced with lively discussions among speakers and participants throughout the course of the program. The AAO Cornea Subspecialty Day was indeed "Pushing Surgical Boundaries, Professional Development and Popular Opinion," featuring evidence-based treatments for ocular surface disorders, the expanding realm of anterior segment surgeries and important professional development, and ethical issues challenging corneal specialists and comprehensive ophthalmologists today. Also well received was the Cornea Society's Castroviejo Symposium titled "Non-Bacterial Keratitis" that provided participants with advanced management and eradication strategies for various forms of non-bacterial keratitis. Social program-wise, our Young Physician Dinner was oversubscribed, and the Chaos in Chicago Round Three had to turn away many. All these suc-



cessful events can be attributed to the diligent and creative members on the Board involved in the planning of the various social and scientific programs, namely, Natalie A. Ashfari, MD, Anthony Aldave, MD, Michael Belin, MD, Kathryn A. Colby, MD, PhD, David B. Glasser, MD, Terry Kim, MD, W. Barry Lee, MD, and Shahzad Mian, MD.

The Society recognizes the importance of working collaboratively with regional and international ophthalmic societies and associations as it progressively acquires further international standing. Michael Belin, MD, vice president for international relations, has been particularly instrumental in obtaining recognition for the Society through his tireless efforts in organizing Cornea Society symposia. Our first Memorandum of Understanding with the Asia Cornea Society was established in 2007, under Michael's presidency, and we are pleased to announce that this MOU was renewed during the Society's Business Meeting on Nov. 9, 2012. Through this affiliation, both societies have now developed CorneaEd, a corneal fellowship, observership, and training program registry that will serve as a comprehensive repository providing key information on available corneal subspecialty observerships and fellowship training programs. CorneaEd was launched at the Society's Business Meeting, and we immediately received requests from various international corneal societies to participate. Both societies have pledged funds to be disbursed to their members in the form of international corneal training grants to enable post-corneal fellowship members to undertake short training observerships overseas. CorneaEd was also launched to an Asian audience at the 3rd Asia Cornea Society Scientific Meeting held in Manila on Nov. 28-29, 2012, where the Cornea Society co-organized the Advanced Keratoplasty Symposium—as we anticipated, the latter received an overwhelming attendance.

Cornea Society members can soon look forward to a website facelift that will be both refreshing and contemporary, complete with new features allowing easy navigation and a more interactive experience, planned by the Communications Task Force led by **Penny Asbell, MD**. Soon available to members will be an electronic version of *Cornea Society News* so members will not miss out on important events and deliberations of the Society.

My first term as president has certainly been a busy year, abuzz with activities, and I am thankful for the wonderful support I continue to receive from the Board of Directors. I have certainly learned a lot and will continue to learn from each and every one as I serve my second term. Most of all, I would like to thank you, our members, for your continuous support of the Society, allowing us to be more determined in our pursuit of establishing the Cornea Society as the international society promoting corneal development worldwide.

In closing I would like to thank **Denise de Freitas**, **MD**, for serving on the Board of Directors the past four years and welcome **Stephen Kaufman**, **MD**, to the Board of Directors starting in 2013.

On behalf of the Board of Directors, I wish you a happy New Year.

Donald TH Tan, FRCS President continued from page 1

Editors' note: Dr. Nichamin has financial interests with Abbott Medical Optics (Santa Ana, Calif.), Allergan (Irvine, Calif.), Bausch + Lomb (Rochester, N.Y.), and other ophthalmic companies. Dr. Stark has financial interests with VueCare Media (Columbia, Md.).

## Majority of patients would benefit from laser refractive surgery

According to Michael C. Knorz, MD, Mannheim, Germany, the current published data "seems to support the suggestion that most patients would benefit from laser refractive lens surgery." During an overview addressing which patients would be most likely to benefit from this type of surgery, he said using a femtosecond laser "has a lot more potential than former lens surgery approaches."

A laser capsulorhexis is "better than a manual one," he said, citing several studies on the topic. Using a femtosecond laser also results in fewer anterior capsule tears than manual procedures, and it seems to be "at least as good and possibly better" than manual procedures, he said.

Patients most likely to benefit from a femtosecond laser refractive lens surgery include those with large pupils, "which will give the laser access to the lens capsule and nucleus," he said.

Editors' note: Dr. Knorz has financial interests with Alcon, ForSight Labs (Menlo Park, Calif.), and Optical Express (London).

## Laser refractive lens surgery called "crucial" to successful cataract surgery

Zoltan Nagy, MD, Budapest, Hungary, widely credited as the first surgeon to use a femtosecond laser in refractive lens surgeries, said a "precise and well-centered capsulorhexis" is "crucial" to successful cataract surgery. The effect of having such a predictable capsulotomy is called "photodisruption," he said.

"This technology has the potential to reduce the risk of capsular tear and other complications such as inflammation and endophthalmitis, creating selfsealing corneal incisions," Dr. Nagy said.

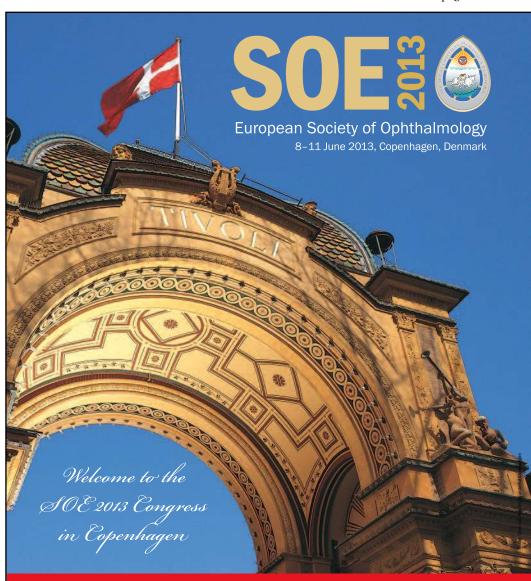
Editors' note: Dr. Nagy has financial interests with Alcon.

## Melles provides top reasons for performing DMEK

Gerrit RJ Melles, MD, Rotterdam, the Netherlands, provided an overview of the "Top 10 Reasons Why You Should Be Performing Descemet's Membrane Endothelial Keratoplasty (DMEK) in 2012." Dr. Melles is the inventor of the procedure, and he prefaced his list by

saying that endothelial keratoplasty has been evolving over the years. In joking that all the best things come from Holland, Dr. Melles' first point was this is a Dutch technique. Many of his other reasons pertained to the surgery's impacts on both patients and doctors, as well as the generally good outcomes and follow-ups. "It's a safe technique," he said. In addition, you will usually have happy patients and happy doctors because of the smooth aftercare, Dr. Melles said. "There are low risks of complication and from a clinical view, this

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**Online Registration and Abstract submission now open** 

Abstract submission deadline – 10 January, 2013 Early Bird registration deadline – 5 March, 2013



Please stay updated on the SOE 2013 Congress website

## Reporting from the 2012 Asia Cornea Society (ACS) meeting, Manila

he first day of the Asia Cornea Society's 3rd Biennial Scientific Meeting held in Manila kicked off with a symposium sponsored by the Cornea Society, followed by an opening ceremony in which the ACS bestowed a number of awards, including the Asia Cornea Foundation Medal Lecture and the Asia Cornea Foundation Lecture (Asia).

#### Penetrating keratoplasty "not dead"

In any discussion of advanced keratoplasty today, that old standard penetrating keratoplasty (PK) remains a valid option. "PK isn't dead yet," said **Penny Asbell, MD**, New York. It remains indicated for just about any case and, with current refinements in technique and instrumentation, offers the potential of excellent results with an easier learning curve and without the interface problems of newer modalities.

In fact, it is the preferred option in some cases, such as those that involve full-thickness corneal penetration and advanced keratoconus involving a break in the Descemet's layer.

PK's resilience is in fact aided rather than obviated by new technology: Femtosecond laser-assisted keratoplasty and the option to perform post-PK excimer laser ablation have helped optimize outcomes with the procedure.

#### Femto keratoplasty—future or fad?

Is the use of the femtosecond laser really the future for keratoplasty, or merely a fad? **Anthony J. Aldave, MD**, Los Angeles, contemplated the question.

Dr. Aldave enumerated the advantages of femtosecond laser keratoplasty, including greater wound strength and wound configuration with better donorhost interface match.

Using the laser also means the possibility of earlier suture removal, which has resulted in significantly better measurements of topographic astigmatism at six months. However, this advantage disappears at one year; apparently, he said, suturing technique remains the main determinant for postop topographic astigmatism.

Still, he said, widespread adoption is limited by the disadvantages: the cost, the risk of intra-op complications including suction loss, and the fact that many patients are not candidates for the procedure owing to anatomic factors.

It therefore remains to be seen whether femtosecond laser keratoplasty is indeed the future, or just a fad.

#### The thinner the better?

In the evolution of keratoplasty, there has been a rapid transition from PK to

endothelial keratoplasty (EK), said Edward J. Holland, MD, Cincinnati. EK has achieved broader acceptance by having had its early disadvantages of an increased rate of primary donor failure and endothelial cell loss mostly addressed, but current disadvantages include visual outcomes that are still not on par with cataract surgery, and endothelial cell loss remains higher than would be ideal.

In other words, said Dr. Holland, EK is "doing better, but not as well as we would like."

The procedure continues to evolve, and one direction the procedure is headed toward is using thinner tissues.

There used to be a bias toward thicker tissue that was easier to manage, but surgeons have since found that thinner tissue results in better visual acuity. What's more, the development of donor insertion devices such as the Busin Glide (Moria, Antony, France) and Tan EndoGlide (Angiotech, Vancouver, B.C.) have made thin tissues more manageable.

The next trend, said Dr. Holland, is Descemet's membrane EK (DMEK), which eliminates stroma from donor tissue to create the thinnest donor tissue possible. However, donor preparation is even more difficult, there is an increase in endothelial cell loss, and there is the risk of rebubbling.

In the future, he said, new methods for donor preparation need to be developed, and prospective studies need to compare DMEK with thin EK to establish the true value of the procedure.

Editors' note: Drs. Asbell, Aldave, and Holland delivered their lectures in a symposium sponsored by the Cornea Society. None of the doctors have financial interests related to their lectures.

#### Standing on the shoulders of giants

Celebrating the meeting's theme of "Expanding the Realm of the Possible," Richard Abbott, MD, Mill Valley,



Watch Dr. Tan and others share tips and pearls from their presentations at www.EWrePlay.org/ACS2012.

Calif., delivered a lecture on "Corneal transplantation: The quest for perfection through innovation."

Innovation, said Dr. Abbott, is "to make a change in something established," distinguished from invention in that it hinges upon a knowledge of prior methods and technology.

Dr. Abbott embarked on a fascinating review of the history of ophthalmology, focusing on the groundbreaking work of two giants of modern ophthalmology: Ramon Castroviejo, MD (1903-1987), and Max Fine, MD (1908-1989).

Dr. Fine, who had been a mentor and sometime colleague of Dr. Abbott, was the first to perform penetrating keratoplasty in the Western United States in 1937, using the technique of square keratoplasty advocated by his friend and rival, Dr. Castroviejo.

Having dug up old film reels made by Dr. Fine in the 40s and 60s, Dr. Abbott had the films restored and converted to a digital format, which he then presented to the audience at the opening ceremony of the meeting.

The differences between now and then are fascinating and educational: In his life, Dr. Fine worked barehanded—never once performing surgery wearing surgical gloves, believing they impaired his performance. And yet he achieved remarkably clear corneas and good outcomes for the time.

Where do you draw the line between using a new technology and what's good for the patient?

There is no definite answer, but, said Dr. Abbott, it is the responsibility of surgeons to ask the question.

"Our role is to pick and choose [the best option for our patients]," he said. Innovation is clearly a necessity, but the bottom line, he said, is whether a particular development is good for the patient.

Editors' note: Dr. Abbott has no financial interests related to his lecture.

#### Safety with contact lenses

Given the ubiquity of contact lens use, the incidence of contact lens-related microbial keratitis—that such infections should occur at all—should be of concern to ophthalmologists.

Fiona Jane Stapleton, PhD, Sydney, looked into the various risk factors affecting the incidence of keratitis.

Among the modifiable risk factors Dr. Stapleton examined, she found that using contact lenses six to seven days a week resulted in a six-fold increase in risk; other factors include extended wear, internet purchase, occasional overnight use, poor case hygiene, smoking, daily disposable contact lens use, and failure to hand wash lenses.

Nonmodifiable risk factors include the initial six-month extended wear of contact lenses, socioeconomic factors, age less than 49 years, hypermetropia, and male gender.

Daily disposable lens use, she said, had the curious effect of increasing the risk of microbial keratitis, but lowering the incidence of severe disease compared with planned replacement daily wear—50% against the 70% seen in patients using the latter.

Dr. Stapleton concluded that incidence has not changed with newer contact lenses, contact lens fluid formulations, and modalities, but that it is possible to limit the severity of the disease by favoring daily disposable lenses and avoiding delay in treatment.

Contact lens and lens case hygiene being risk factors, Dr. Stapleton emphasized the need for ophthalmologists to work with industry, regulators, and researchers to establish a standardized set of guidelines for proper product care.

Editors' note: Drs. Holland, Sheppard, and Stapleton spoke at a lunch symposium sponsored by Bausch + Lomb.

## Deconstruction, control, restoration

Much has been said about the evolution of corneal transplant surgery, the way the procedure has, over the years, rapidly shifted from one paradigm—the wholesale replacement of the full thickness of the cornea—to another: the deconstruction of the cornea with selective lamellar keratoplasty.

The current paradigm has most recently led to the development of what may be the ultimate iteration of selective lamellar keratoplasty—
Descemet's membrane endothelial keratoplasty (DMEK)—but as the procedure is unrefined, at the moment, cornea surgeons are likely to stay focused on the procedure whose advantages are often touted at cornea meetings: Descemet's stripping automated endothelial keratoplasty (DSAEK).

But while the advantages—less post-op astigmatism, better UCVA, BCVA, and survival than PK, etc.—are well known, **Donald Tan**, **MD**, Singapore, president of the Asia Cornea Society, asked in his plenary lecture: Can these advantages be adopted in Asia?

One major impediment to acceptance, said Prof. Tan, is the cost of the ALTK microkeratome. As daunting as economic issues typically are in the region, this may not necessarily be insurmountable—the use of precut tissue from a central eye bank, for instance, offers one solution—but there are clinical challenges as well, including:

- 1. The technically challenging procedure is even more challenging in Asian eyes, which tend to be smaller, with greater vitreous pressure.
- 2. The main indication for keratoplasty in the region is pseudophakic bullous keratopathy (PBK); the procedure has been documented to have lower survival and more complications in these cases compared with cases performed for the typical indication in Western countries—Fuchs' dystrophy.

Nonetheless, said Prof. Tan, the procedure is gaining some ground in the region. In Singapore, 77% of keratoplasty cases in 2012 were lamellar. And while it is technically more difficult, their experience further supports the procedure's advantages.

Successful DSAEK, he said, is all about control.

Every step in the development of the procedure, such as in terms of the donor insertion phase—from taco fold-

## Surgeons share study results, tips, and techniques

escemet's membrane endothelial keratoplasty (DMEK), corneal transplantation techniques, and corneal imaging were just some of the topics covered at the Cornea Society/Eye Bank Association of America Fall Educational Symposium.

The symposium took place in Chicago before the American Academy of Ophthalmology annual meeting.

#### **Examining DMEK**

A number of presenters examined best practices for the increasing popular approach of DMEK. A study from **Julia Talajic**, **MD**, University of Montreal, and co-investigators found better results for DMEK insertions with a glass pipette compared with a plastic pipette. However, Dr. Talajic said the difference was not significant.

The study involved 16 pre-stripped DMEK tissues assigned to one of four groups. Investigators compared mean endothelial cell loss between the insertors and found the glass pipette had the least amount of mean endothelial cell loss. "The tissue tends to adhere to the plastic more," Dr. Talajic said.

Mark A. Terry, MD, director of corneal services, Devers Eye Institute, and professor of clinical ophthalmology, Oregon Health & Science University, Portland, presented results from the first report using tissue that was pre-stripped for DMEK by U.S. eye bank technicians. As surgeons say that a common barrier to DMEK is the risk associated with stripped donor tissue, the prospect of pre-stripped tissue may lead more surgeons to perform the technique, Dr. Terry said. The study he presented found that donors that are pre-stripped at the eye bank for DMEK do not increase the risk of graft failure or rebubbling compared with surgeonprepared tissue, according to Dr. Terry's abstract. He believes the use of pre-stripped tissue will become more common in the future.

A study comparing single versus triple DMEK procedures found that both approaches had comparable graft clearing and endothelial cell survival rates, said **Francis W. Price Jr.**, **MD**, founder, Price Vision Group, Indianapolis. His work analyzed a consecutive series of 550 DMEK cases and found a graft success rate of 97.7% for single DMEK procedures versus 97.1%

for triple DMEK procedures, the latter of which were combined with cataract extraction and IOL implantation. Another reason that surgeons should consider the triple procedure when appropriate is that patients seem to prefer having the procedures done at once, Dr. Price said.

#### A better view with OCT

Other presenters shared results on the use of modern imaging devices. For instance, research led by Dennis Cortés, MD, University of California, Davis, revealed that anterior segment optical coherence tomography (OCT) and in vivo confocal microscopy in patients who previously had Boston Type 1 keratoprosthesis (KPro) surgery helped surgeons to view epithelial ingrowth, periprosthetic gaps, and retroprosthetic membranes. These kind of imaging devices have not been used before with the KPro and provide new anatomical information to clinicians, Dr. Cortés said.

Research led by Fouad El Sayyad, MD, Bascom Palmer Eye Institute, Miami, found that OCT is also a helpful and noninvasive technique to diagnose ocular surface lesions. The study found that OCT is particularly useful for a better view of ocular surface squamous neoplasia, Dr. El Sayyad said.

Another presentation, led by **Jacek P. Szaflik**, **MD**, Warsaw, Poland, discussed the use of intra-operative OCT for Descemet's stripping automated endothelial keratoplasty.

#### **Award winners**

The Fall Symposium also presented a number of awards to clinicians. Peter Watson, FRCS, Cambridge, U.K., received the Claes H. Dohlman, MD, PhD Award. His presentation focused on corneo-scleral disease. Jonathan H. Lass, MD, University Hospitals, Cleveland, was the R. Townley Paton Awardee and spoke about corneal preservation. Kaevalin Lekhanont, MD, Thailand, received the Troutman



Price, focusing her talk on subjconjunctival bevacizumab for recurrent pterygium. **CN** 

Editors' note: Dr. Garg has financial interests with Abbott Medical Optics (Santa Ana, Calif.). Dr. Price has financial interests with Alcon (Fort Worth, Texas), Allergan (Irvine, Calif.), and other ophthalmic companies. Dr. Szaflik has financial interests with Alcon, Bausch + Lomb, and THEA. Dr. Terry has financial interests with Alcon, Bausch + Lomb, and other ophthalmic companies. The other physicians have no financial interests related to their presentations.

### Society launches new, improved website

he Cornea Society is
nearing completion
on an overhaul of
the Society's website.
The new site is scheduled to
launch during the first
quarter of 2013 and will
streamline member benefits,
provide electronic scientific
content more effectively,
and have an improved ecommerce component.
Additional improvements
will be launched in phases



www.CorneaSociety.org

to include a member directory, membership renewal section, and a direct partial to the *Cornea* journal.

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ing to insertion with the EndoGlide (Angiotech, Vancouver, B.C.) that Prof. Tan himself helped develop—has been about improving control.

And yet in order to take the next step, it is often necessary to relinquish the same control that has brought you to the point at which it is possible to take that step. Or something.

DMEK must be among the most extreme forms of selective lamellar keratoplasty ever conceived to date, a procedure in which the tissue to replace is confined to the endothelium, separated from the donor at the Descemet's membrane.

This, said Prof. Tan, means harvesting and handling tissue that is even thinner and, subsequently, more difficult to control than the thinnest DSAEK.

Regardless, Frank Price, MD, Indianapolis, thinks that there is unquestionably a role for DMEK in Asia.

Apart from the potential of providing the best possible visual quality of any EK procedure to date, in a very basic sense, DMEK is the next, possibly ultimate, step in the natural progression of EK: By avoiding the creation of an interface, an additional layer where there would not normally be one, DMEK may be the first procedure to truly restore the normal corneal architecture.

While techniques for donor preparation and insertion as well as post-op

management can be improved, the results Dr. Price currently achieves with the procedure are far superior to the results of any form of DSAEK. Sites from around the world that frequently prepare donor tissue for DMEK have donor tissue loss rates less than 1%—at least as good as donor tissue loss rates for ultrathin DSAEK. The cell loss rates

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#### 2013 Advanced Cornea Courses

Dr. Francis W. Price, Jr. - Price Vision Group Cornea Research Foundation of America



#### **NOW ACCEPTING REGISTRATIONS FOR 2013**

All Advanced Cornea Courses are held in Indianapolis, Ind., U.S.

#### DMEK/DMAEK

Addresses the most common reason for repeat DSEK/DSAEK: Wrinkles and Folds

Two-day course: Registration fee: \$3,000 (Category 2 CME)

- January 15–16, 2013
- February 19-20, 2013
- March 19-20, 2013
- May 14–15, 2013
- June 11-12, 2013
- August 20-21, 2013
- September 24–25, 2013
- October 8-9, 2013
- November 5–6, 2013

#### **COMPREHENSIVE ANTERIOR LAMELLAR KERATOPLASTY**

ALK/DALK: Recommended for keratoconus and corneal scars Two-day course: Registration fee: \$3,000 (Category 2 CME)

• July 23–24, 2013

#### PARS PLANA VITRECTOMY

Offers advantages over the anterior chamber approach for non-complicated vitrectomies

One-day course: Registration fee: \$2,000 (Category 2 CME)

• August 27, 2013

#### **TARGET AUDIENCE**

These educational activities are intended for practicing ophthalmologists, both general practice and subspecialty interest in corneal surgery. Nurses, surgical technicians, eye bank technicians, and other health professionals who support ophthalmologists are invited to register.

For registration forms and further details contact Ann Delehanty anndelehanty@pricevisiongroup.net 317-814-2823

## CorneaEd: Augment

he Cornea Society and the Asia
Cornea Society (ACS) have come
together for an initiative to
augment cornea education
around the world. CorneaEd is an
online registry of formal and informal
fellowship training programs available
in the U.S. and the Asia-Pacific region.

"The two cornea societies have a major educational mission," said **Donald Tan, MD**, president of both societies. Both the Cornea Society and ACS have been working closely over the last few years, launching cornea education programs at various international meetings.

CorneaEd thus seemed "the natural progression," he said.

"Until now, there really hasn't been a good all-encompassing resource or registry of all the various corneal training programs, attachments, and observerships around the world," he said. "CorneaEd was devised to offer a web-based registry for young physicians who would like to look at cornea training opportunities in the United States and in the Asia-Pacific region."

Many young ophthalmologists will be familiar with the formal six-month to one-year fellowship training programs available in their own countries, but the diversity of experience around the world means that doctors who enter these programs may be missing out on certain aspects of the field.

For instance, said Michael Belin, MD, vice president for international relations, Cornea Society, surgeons in Asia perform more anterior lamellar keratoplasty than surgeons in the U.S.; meanwhile, surgeons in the U.S. have performed more endothelial keratoplasties. "The Middle East has a predominance of keratoconus patients," he said. "In a week, they see the number of patients I see in a year.

"There are areas of expertise that someone in residency or someone just finishing their fellowship, even though they've had appropriate training, may not have been exposed to," he added.

### ing cornea education

"The goal is to allow someone in one area exposure to some level of expertise that may not be locally available."

The CorneaEd registry thus lists both formal fellowship programs and observerships and surgical training attachments that can be used to augment an ophthalmologist's existing training. Each listing will also include basic information such as whether or not a particular fellowship is a paid program, the duration of the fellowship/observership, and, where available, a link to the program institution's website.

In addition, Cornea Society and ACS members logging on to CorneaEd will soon be able to apply for a travel award. Each year, the two societies will be giving one travel award each to allow promising young ophthalmologists to obtain additional training that might otherwise not be available to them.

The awardees will be selected by a joint committee formed by the two societies. The societies hope to begin accepting applications in the first quarter of 2013, with the aim of travel within the year.

While the registry currently lists programs from the U.S. and the Asia-Pacific region, the goal is to expand. "Several supranational cornea societies have expressed keen interest in participating in CorneaEd, including societies from Europe and South America," said Dr. Tan.

CorneaEd went live at the recently concluded ACS 3rd Biennial Scientific Meeting, held in Manila, Philippines, from Nov. 28-29, 2012.

For more information and to access the registry, visit www.CorneaEd.org. **CN** 

#### Report from the journal

he hottest issue in submissions to the journal has been and remains endothelial keratoplasty. Interest in understanding outcomes and improving techniques has engendered extensive clinical and laboratory work. Descemet's stripping endothelial keratoplasty (DSAEK) remains the dominant procedure. Price et al have examined the role of DSAEK graft diameter on cell loss, and Terry et al the role of "ultrathin" donor tissue. In the laboratory, the Venice Eye Bank group has confirmed the viability of endothelium in precut DSAEK donor tissue stored for moderate periods; Kinoshita et al have explored the fate of recipient endothelium when endothelial grafts are done without Descemet's stripping. The Price group reports on the successful use of Descemet's stripping endothelial keratoplasty (DMEK) in eyes with failed penetrating grafts. All of these reports will appear in the January 2013 issue of Cornea.



Cornea Day is geared toward practicing ophthalmologists with an interest in comprehensive ophthalmology, anterior segment surgery, and corneal disease.

## 8:00 AM-4:30 PM Moscone Center

#### **Cornea Day Planning Committee**

Terry Kim, MD, Co-Chair Donald TH Tan, FRCS, Co-Chair Anthony J. Aldave, MD John A. Hovanesian, MD W. Barry Lee, MD, FACS Marian S. Macsai, MD Neda Shamie, MD Christopher E. Starr, MD David T. Vroman, MD Sonia H. Yoo, MD

**Program Outline** (subject to change; full program details online)

#### Managing the Atypical Cornea in Cataract Surgery

W. Barry Lee, MD David T. Vroman, MD

#### Refractive Deliverance, Dilemmas, and Disasters

John A. Hovanesian, MD Sonia H. Yoo, MD

## The Ocular Surface Unsurfaced

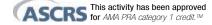
Marian S. Macsai, MD Christopher E. Starr, MD

#### Around the World and Back Again: A Global Perspective on Corneal Transplantation and Recurrent Corneal Disease

Anthony J. Aldave, MD Neda Shamie, MD

Register by March 1, 2013 For Early Bird Savings

www.CorneaDay.org



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Dr. Price has seen with DMEK are comparable to cell loss rates at other sites in the U.S. performing DSAEK. In addition, in some cases, it is possible that reported rates of cell loss were exaggerated by the method used for counting cells by eye banks.

Dr. Price believes that DMEK will continue to be the best option for most of the U.S. and Asia until viable methods for simply injecting endothelial cells or stimulating the regeneration of the patients' own endothelial cells are developed.

Editors' note: Prof. Tan helped develop the Tan EndoGlide, but has no financial interests in the device. Dr. Price has financial interests with Alcon (Fort Worth, Texas), Allergan (Irvine, Calif.), and other ophthalmic companies.

#### IKS massive undertaking for ACS

The Asia Cornea Society's Infectious Keratitis Study (ACSIKS) is set to be a major game changer for the region. "Corneal blindness is big in Asia," said **Donald Tan, MD**, Singapore, current president of the Cornea Society and the Asia Cornea Society.

It's a fair statement, summarizing the significance of the most important cause of blindness in the region second only to cataract, but it barely scratches the surface, given the full scope and many nuances of the problem.

Most corneal disease in the world occurs in Asia, said Prof. Tan. Here, he said, corneal ulceration is a "silent epidemic."

But the challenge of corneal blindness in Asia isn't confined to magnitude; unsurprisingly for the region, huge variations exist from country to country, such that the problem runs the gamut of the entire spectrum of corneal infections.

Epidemiological patterns, for one, differ significantly, said **Prashant Garg**, **MD**, Hyderabad, India. For instance, whereas studies have identified contact lens use and ocular surface disease as the major risk factors for microbial keratitis in a developed region like Hong Kong, trauma is the most prevalent cause of infection in India, affecting a correspondingly different age group: Most patients in India, said Dr. Garg, fall in the range of 20-50 years—the economically productive age group.

Wide variations also exist from country to country in terms of pathogen, environmental risk factors, the availability of drugs, antibiotic resistance patterns, access to treatment, and any number of other variables that have yet to be adequately quantified.

To this end, the ACS has embarked on the ACSIKS, a multicenter, prospective observational study in 11 study centers in eight major locations (China, India, Japan, Korea, Philippines, Taiwan, Thailand, and Singapore).

The study is intended to document the clinical management practices of doctors all over the region, while also collecting microbiological samples from recruited cases.

To date, said Prof. Tan, the study has recruited 2,118 cases, with preliminary data analysis of 1,544 of these cases. Preliminary analysis, he said, has identified fungal and bacterial pathogens to be the main causes of infectious keratitis in the region. **CN** 

Editors' note: ACSIKS is made possible by the support of Alcon (Fort Worth, Texas), Allergan (Irvine, Calif.), Bausch + Lomb (Rochester, N.Y.), and Santen (Napa, Calif.).

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is really nice," he said. There are also no major investments required for this technique, and it's feasible in virtually every clinical setting, Dr. Melles said. DMEK generally has very good visual outcomes, which was also a reason Dr. Melles stressed more widespread use of the procedure.

## Surgeons warn about being aware of conflicts of interest when receiving information

George O. Waring III, MD, Atlanta, and Samuel Packer, MD, Great Neck, N.Y., countered each other on a panel discussing professional development and ethics. Both dealt with potential conflicts of interest and how to evalu-

ate what you are hearing from those who may be presenting to an audience. Dr. Waring first addressed who should be at the podium. "The question is, how do we regard those people who are presenting to us?" he said. He said a presenter needs to have access to companies and know what's going on, and he stressed the importance of being suspicious. Another thing to consider is company and industry affiliation. Industries enable physicians, Dr. Waring said, and this is how there are devices and pharmacology to help physicians. However, he said it's a matter of how a presenter manages the relationship as a professional with company interests. He also said it's important to check a presenter's presentation slides for any sort of company logo or affiliation, as well as to see how the data is handled. Meanwhile, Dr. Packer discussed who should not be at the podium. He questioned who it is that should actually be deciding on a presenter. "Money isn't the only conflict of interest," Dr. Packer said. Industry can present a conflict of interest, too, he said. In addition, one thing to consider when listening to a presenter is whether or not there is new knowledge or knowledge to improve patient care being presented. Dr. Packer said it is important to know who a speaker represents because factors such as self-interest can cause bias. CN

The journal *Cornea* is dependent on the critical work of volunteer peer-reviewers. With their help, we have decreased the time from initial submission to first decision significantly. The role of reviewers is to evaluate the merit of submissions in regard to scientific validity, clinical importance, originality, and ethical conduct. The comments of reviewers improve the quality of accepted revisions. We encourage interested clinicians and scientists to volunteer to review papers, to accept invitations, and to promptly complete reviews. We will soon be offering continuing medical education (CME) credits for high-quality reviews.

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