Science, Art and Friendship
All at the APAO 2019 in Bangkok

by Hazlin Hassan

The 34th Congress of the Asia-Pacific Academy of Ophthalmology (APAO 2019), held in conjunction with the 43rd Annual Meeting of the Royal College of Ophthalmologists of Thailand, is bound to be a spectacular event, with this year’s theme being The Sciences and Arts of Ophthalmology.

Nearly 6,000 delegates from 86 countries have registered to attend this year’s congress, which will be held at the Queen Sirikit National Convention Centre (QNCC), Bangkok.

“As the region’s preeminent meeting for ophthalmologists and visual scientists, APAO 2019 will feature more than 600 internationally renowned speakers presenting the latest discoveries and ideas in all the major ophthalmic subspecialties,” said Dr. Charles McGhee, President of the Asia-Pacific Academy of Ophthalmology.

The last time the APAO Congress was held in Bangkok was in 2003. Many things in science, art, culture, technology and so on, have changed considerably since.

Back then, APAO Congresses were held only once every two years.

Cont. on Next Page >>
Abbreviation of Eylea Product Information:

Presentation: 1 ml. solution for intravitreal injection contains 40 mg aflibercept.

Indication: For treatment of neovascular (wet) age-related macular degeneration (wet AMD), macular edema secondary to central retinal vein occlusion (CRVO), diabetic macular edema (DME), macular edema secondary to branch retinal vein occlusion (BRVO), myopic choroidal neovascularization (myopic CNV).

Dosage and method of administration:
For Neovascular (wet) age-related macular degeneration (wet AMD), the recommended dose for EYLEA is 2 mg (equivalent to 50 microliters) intravitreal injection. EYLEA treatment is initiated with one injection every 2 months, followed by one injection every 2 months. For Macular edema secondary to central retinal vein occlusion (CRVO), the recommended dose for EYLEA is 2 mg intravitreal injection monthly for the first 3 consecutive doses, followed by one injection every 2 months. For Macular edema secondary to branch retinal vein occlusion (BRVO), the recommended dose for EYLEA is 2 mg. After the initial injection, treatment is given monthly. For Diabetic macular edema (DME), the recommended dose for EYLEA is 2 mg administered by intravitreal injection monthly for the first 5 consecutive doses, followed by one injection every 2 months. For Macular edema secondary to branch retinal vein occlusion (BRVO), the recommended dose for EYLEA is 2 mg. After the initial injection, treatment is given monthly. For Myopic choroidal neovascularization (myopic CNV), the recommended dose for EYLEA is 2 mg administered by intravitreal injection monthly for the first 5 consecutive doses, followed by one injection every 2 months. For Macular edema secondary to branch retinal vein occlusion (BRVO), the recommended dose for EYLEA is 2 mg. After the initial injection, treatment is given monthly.

Contraindications: Ocular or periocular infection, Active severe intraocular inflammation, Known hypersensitivity to aflibercept or to any of the excipients.

Special warnings and precautions for use:
Intravitreal injections including those with EYLEA, have been associated with endophthalmitis. Increase in intraocular pressure have been seen within 60 minutes of an intravitreal injection. Women of childbearing potential should use effective contraception during treatment. Adverse reactions: Very common (≥1/10 patients): Conjunctival hemorrhage, Eye pain. Adverse reactions: Selected adverse reactions may be potentially related to systemic VEGF inhibition. There is a theoretical risk of ATEs following intravitreal use of VEGF inhibitors. Immunogenicity—As with all therapeutic proteins, there is a potential for immunogenicity with EYLEA. Incompatibilities: EYLEA must not be mixed with other medicinal products.

Additional information:
For more information, please see the full Prescribing Information.
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Symposia and Posters

The scientific program is of course, the backbone of the Congress. “Our Scientific Program Committee strives to engineer a first-class scientific program, covering all major areas of ophthalmology and visual sciences,” said Dr. Dennis Lam, chairman of the APAO 2019 Scientific Program Committee.

As a highlight of the scientific program, the plenary session “In Search of Excellence” will feature some of the world’s leading experts who will present the latest developments in their respective fields.

Some of the speakers include Professor Tien-Yin Wong, MPH, PhD, of the Singapore National Eye Centre (SNEC) who will speak on ‘The Seven Myths of Artificial Intelligence in Ophthalmology’, Dr. Charles McGhee who will present on ‘The Rapid Transformation of Transplantation for Corneal Endothelial Disease: An Evolution from Penetrating to Lamellar to Cellular Transplants’, and Dr. Dennis Lam who will talk about ‘Surgical Advancements in Treating Refractory Macular Hole.’

Some of the symposia held during APAO 2019 include the following:

AI in Ophthalmology Symposium: AI in the Future [March 6, 11:00 - 12:30H, Venue: Ballroom]

Keratoconus and post-refractive ectasia have undergone a revolution over the last decade, both in diagnostics and therapeutics. The symposium will address both changes and advances in imaging, and both surgical and non-surgical treatments, with specific emphasis on corneal collagen crosslinking and when to intervene in the pediatric keratoconic patient.

Besides enlightening sessions and symposiums, there will also be free papers and posters/e-posters from the regions’ leading retina experts.

This year, more than 1,500 abstracts were submitted for free paper and poster consideration.

Dr. Ya-Chi Huang presents an e-poster titled A Relationship Between Attention Deficit With Hyperactivity Disorder and Amblyopia which seeks to evaluate whether the attention deficit with...
hyperactivity disorder is associated with refraction problems. Attention-deficit/hyperactivity disorder (ADHD) is considered one of the most common psychiatric disorders in children and adolescents. A cross-sectional study was conducted from Jan. 2014 to Jan. 2017, and cases with a diagnosed attention deficit with hyperactivity disorder and amblyopia were included. The intersection of these two groups was analyzed.

For children enrolled in groups the following data were recorded: uncorrected visual acuity, cycloplegic refraction, ocular motility, and binocular function. The study included 83 patients from 3 to 15 years old in this study.

The results of the study showed that the prevalence of attention deficit with hyperactivity disorder was greater among children with vision problems, which included amblyopia, strabismus, convergence insufficiency, and nystagmus. Amblyopia was the most related.

As such, ophthalmologists should be aware that “patients with amblyopia are at increased risk of having attention deficit with hyperactivity disorder than children in the general population.”

The author and his colleagues concluded that their analyses suggest that “children with vision impairment may be more likely to be diagnosed with attention deficit with hyperactivity disorder than children in the general population.”

In an e-poster called Deep Learning Distinguishes Pathological Images of Mucosa-Associated Lymphoid Tissue Lymphoma From IgG4-Related Disease, Dr. Masato Akiyama and colleagues investigate the use of deep learning system for the pathological diagnosis of intra-orbital tumors.

For the training set, the authors used 1,450 pathological images of the orbital mass regions which were surgically obtained from 11 patients with IgG4-related disease (574 images) and 19 patients who were diagnosed as mucosa-associated lymphoid tissue (MALT) lymphoma (876 images).

For the validation set, they randomly selected 10 images from each of five patients with MALT lymphoma and five patients with IgG4-related disease who were not included in the training set.

All pathological images were obtained as high-resolution JPEG format files using at ×20 objective lens. We conducted a deep learning by applying fine-tuning of the pre-trained model (VGG16) by Keras (ver. 2.1.5) on TensorFlow (ver. 1.6.0) backend. The predictive accuracy was evaluated by area under the curve (AUC) of receiver operating characteristics (ROC) curve in the validation set.

In the validation set, the AUC of ROC was 0.884. The overall concordance between clinical and predicted diagnoses was 87.8%. We observed 90.0% sensitivity and 72.0% specificity for detecting MALT lymphoma. Among the five individuals with MALT lymphoma, two individuals (40%) were correctly diagnosed in all the 10 images as MALT lymphoma.

The authors concluded that although further improvement of predictive accuracy is warranted for the clinical use, the results suggest that a deep learning system may contribute to the pathological diagnosis of intra-orbital tumors.

Award Lectures

Delegates should also plan to attend some of the prestigious award lectures. Among them is the Jose Rizal Medal, awarded to Singapore’s Professor Tien-Yin Wong.

The Jose Rizal Medal recognizes an outstanding ophthalmologist annually for his or her excellence in ophthalmology in the Asia-Pacific region. It was instituted to commemorate Dr. Jose Rizal, an ophthalmologist who became a national hero of the Philippines.

Professor Wong will be delivering his talk on ‘The War on Diabetic Retinopathy: Where are We Now?’

It will touch on major developments in tackling diabetic retinopathy (DR), with new approaches to prevention, screening and management. Artificial intelligence has substantial potential for DR screening. However the “war” is still not yet won, and there continue to be challenges.

APAO also awards the ICO Mark Tso Golden Apple Award for the Best Clinical Teacher in Ophthalmology in the Asia-Pacific region to Professor Ke Yao, MD, from China. Initiated by the International Council of Ophthalmology (ICO), the award honors the most dedicated teacher of clinical ophthalmology in the region and is named after Professor Mark OM Tso, the past ICO Director of Education.

He will present on ‘Cataract Surgery in China: Femtosecond Laser-Assisted Cataract Surgery (FLACS) and how the procedure has become popular, offering numerous advantages over current surgical techniques and achieving better visual outcomes.’

Social Program

At the end of the day, once all is said and done on retinas, cataracts and corneas, all work and no play makes Jack a dull boy. But thankfully, there are ample opportunities at APAO 2019 to play after a hard day’s work at the congress. The congress’ social program includes cultural tours, cooking and handicraft classes as well as a tour of the Jim Thompson House, where visitors can view the elegant garden-enclosed home of businessman and architect Jim Thompson. The former American intelligence officer turned textile tycoon went for a walk in the Malaysian jungles 50 years ago and never returned, in a mystery that has never been solved.

The busy city of Bangkok entices its guests with all that it has to offer, with a plethora of feasting, shopping, sights and spas.

“In addition to acquiring new knowledge and skills the annual Congress also provides delegates with an excellent opportunity to network and collaborate with peers and friends. Furthermore, Congress attendees can enjoy magnificent and historic palaces and temples, along with delicious cuisine and exciting nightlife, in Bangkok, one of Asia’s most-loved cities,” said Charles McGhee.

To all APAO delegates, may you have a fruitful and beneficial time at this year’s congress!
Dr. David Lubeck joins Ellex as Chief Medical Officer

Ellex Medical Lasers Ltd has appointed world-renowned cataract, corneal and refractive surgeon Dr. David Lubeck as Chief Medical Officer (CMO).

In this role, Dr. Lubeck is instrumental in driving the clinical and commercial development of the company’s portfolio of interventional and restorative treatment technologies. With more than 30 years of ophthalmic experience, Dr. Lubeck’s primary focus is to “make current surgical principles, techniques, and instrumentation accessible to physicians at all levels of experience and practices of all sizes”.

“As CMO at Ellex, I will have the opportunity to act as the voice of both patient and physician within the company as it develops and advances treatment technologies,” said Dr. Lubeck. He will also continue his work at Arbor Centers for EyeCare (Chicago, Illinois, USA) while acting as CMO.

At the recent American Academy of Ophthalmology (AAO) meeting in Chicago, Dr. Lubeck chaired a roundtable discussion addressing Ellex’s Reflex Technology™ in the treatment of symptomatic floaters patients. He also shared information with key stakeholders regarding the company’s breakthrough 2RT® Retinal Rejuvenation Therapy for the treatment of early stage age-related macular degeneration (AMD).

Ellex is a world leader in medical technologies for diagnosis and treatment of eye disease. In its portfolio, the company has lasers and devices that treat glaucoma, retinal disease (primarily caused by diabetes), secondary cataract, vitreous opacities and AMD. Ellex is based in Adelaide, Australia. For more information about the company and its products, visit www.ellex.com.

Introducing the VITRA 810 for SubCyclo from Quantel Medical

Quantel Medical (France), a global ophthalmic medical device company dedicated to developing leading technologies to improve the diagnosis and treatment of ocular diseases, launched the VITRA 810 TM laser and its SubCyclo probe at the recent American Academy of Ophthalmology (AAO) 2018 meeting in Chicago (USA).

The Vitra 810 is a compact and versatile 810nm laser with two clinical applications. Its clinically oriented software interface allows glaucoma and retina procedures to be performed through four guided treatment procedures: thermal cyclodestruction, SubCyclo, photocoagulation and TTT. According to Jean-Marc Gendre, CEO of Quantel Medical, the Vitra 810 laser is the successor to the Supra 810 laser, which successfully introduced the SubCyclo glaucoma treatment procedure 18 months ago.

“SubCyclo is a subthreshold cyclophotocoagulation procedure generating more and more interest among glaucoma doctors,” he said. “It improves the uveoscleral outflow and limits the aqueous flow production while preserving the ciliary body structures.”

Alongside the laser, Quantel has also introduced its new cyclophotocoagulation probe. Its design allows for both thermal and subthreshold cyclophotocoagulation procedures with a single probe, while the removable footplate ensures accurate positioning for both treatment procedures (which can be enhanced with transilluminator or IBM techniques).

“The introduction of Vitra 810 will sustain the position of Quantel Medical in glaucoma treatment,” added Mr. Gendre.

Quantel Medical’s products are available through direct sales operations in the U.S., France and Poland, and through 80 independent distributors in over 110 countries. For more information, visit www.quantel-medical.com.

Access the Far Periphery with the Navilas® 577s Laser System’s New Widefield Objective

O-OS has launched a new widefield objective – which brings non-contact panretinal photocoagulation with access to the far periphery – to the Navilas® 577s Laser System. The non-contact widefield objective will become available to Navilas® 577s users at the end of this year (regional availability may vary).

This addition makes Navilas the only retinal laser that allows for navigated focal and peripheral treatments (single spots and pattern) without a contact lens, the company said. The system supports digital pre-planning and computer-assisted delivery of laser spots thanks to its integrated eye tracking technology.

In addition, this new option for peripheral treatments can further enhance compliance of sensitive patients and therefore allow for more comfortable PRP sessions.

Several doctors have found the new laser system to be beneficial. Dr. Gregor Eberlein from the University Clinic Augsburg (Germany) said that his experience of extending comfortable non-contact treatment to the periphery was very good: “It can be a great option for retinopexy and PRP treatments of patients averse to the contact lens.”

According to Dr. Jean-Christophe Ramel (France), the field of view of the non-contact widefield objective gave him the perfect view of a retinal tear in the far periphery. Dr. Stephan Deichelbohrer, St. Vinzentius-Kliniken Karlsruhe (Germany) also praised the non-contact widefield objective: “It allows me to apply more spots in a single session as the cornea remains clear throughout the whole procedure – also by letting the patient lean back and blink for a moment,” he said. “When using a standard contact lens the image quality may degrade due to superficial staining of the cornea.”

“This is a result from a successful collaboration with our Navilas® customers at CHI de Créteil in France that our development team has now turned into another treatment option for our Navilas® 577s Laser,” said Ulrike Rahn, Clinical Project Manager at OD-OS, a privately-held medical device company with offices in Teltow, Germany, and Irvine, CA (USA).

To learn more, visit www.od-os.com.
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As soft as a . . . cataract

In the world of cataract, dense hard nuclei often get more attention than softer ones. However, soft cataracts present their own set of challenges: Their soft nuclei are difficult to rotate, grip and crack—therefore, current chopping and cracking techniques are often ineffective. For example, the high-vacuum and power settings used to hold the nucleus for chopping, often result in the soft lens material aspirating into the phaco probe, causing loss of suction. In addition, there is also a risk of the phaco tip going through the soft lens material and capsular bag, resulting in posterior capsule rupture.

In an effort to make the procedure safer, Dr. Rajendra Prasad presents her findings in an e-poster called T-Soft: New Technique for Soft Cataract. According to Dr. Prasad, T-Soft utilizes a unique mechanical force, with the help of a specially designed chopper (named ‘terminator’) to break and split the soft nuclei into two complete segments—resulting in a procedure with more ease, and less manipulation.

The author found that T-Soft “is highly successful in dealing with soft cataract with some brittleness.” Nuclear division was possible in 100 percent of cases attempted, and then emulsified without much manipulation or use of energy.

These results led Dr. Prasad to conclude that “T-Soft represents a simple, safe and easy strategy for controlled nuclear division, mobilization and emulsification, within the capsular bag in cases of soft cataract—especially for beginning surgeons.” Additionally, the procedure can be used successfully for removal of adult soft cataract with good reproducibility.

Modifying MSICS for ‘lefties’

In a world designed for right-handed people, ‘lefties’ don’t always have it the easiest. Some things can be simply modified for left-handers—like scissors. But certain tasks, like performing left-handed cataract surgery, can be more difficult to adapt.

In an e-poster titled Modification of Technique for Performing Manual Small Incision Cataract Surgery by Left-Handed Surgeons: It’s Different, Dr. Charudutt Kalamkar and colleague present modifications in manual small incision cataract surgery (MSICS) for left-handed surgeons (LHS). They also highlight differences from the standard procedure performed by right-handed surgeons (RHS).

In the study, 215 adult eyes underwent MSCIS by LHS. There were some major modifications made to suit the dominant left hand, these included: scleral tunnel (starting left and extending to the right); capsulorhexis (initial nick: opposite direction; flap rotation: clockwise rather than traditional anti-clockwise); irrigation-aspiration; and intraocular lens (IOL) holding and dialing (instead of starting from 12 o’clock, bring trailing haptic to 6 o’clock and then dialing into bag).

The investigators reported no major intraoperative complications, and all 215 eyes gained a best corrected visual acuity (BCVA) of 20/40 or more. And while these modifications reduced surgical time, the authors noted increased difficulty in performing tunnel in the right eye.

Overall, they concluded that the “use of modified technique by LHS would improve ease of doing surgeries,” and that “the modifications, customized for LHS, were done to make steps easier and reduce risk of intra-op complications.”

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Could frequent flying contribute to glaucoma progression?

Friendly skies less friendly to some eyes

Can frequent flying be detrimental to eye health? This e-poster by Dr. Keith Ong and colleagues details the case of a 58-year-old male patient with advanced normal tension glaucoma. His work required weekly travel on domestic flights, as well as monthly international travel, and had noticed a progression in visual field loss, despite good intraocular pressure (IOP) control. In an e-poster called Glaucoma and Frequent Flying, the authors investigated whether oxygen saturation (SpO2) could be a factor in his glaucoma progression.

A Fingertip Pulse Oximeter was used to measure his oxygen saturation. On the ground, SpO2 was between 96 and 99% and it dropped to 93 to 95% at cruising altitude. It fell below 93% while he was sleeping.

The author also evaluated himself on an international flight and found SpO2 was the same (96 to 99 percent) on the ground and dropped between 89 and 95% in-flight. Several other volunteers reported similar findings. In addition, the author measured IOP during flight with the iCare PRO tonometer and found that IOP was about 12mmHg at ground level and increased to 14-15mmHg at cruising altitude.

These changes would not be significant for healthy patients or on short flights – but could cause problems for advanced glaucoma patients on long haul flights. The authors concluded that “prolonged suboptimal oxygen saturation can contribute to optic nerve ischemia and glaucoma progression” and that “hypoxia may be exacerbated if the subject has sleep apnea and falls asleep during an overnight flight”.

Implanting better outcomes

In any patient treatment plan, the goal is to improve functional and anatomical outcomes. In an e-poster called Functional and Anatomical Effect of Intraocular Dexamethasone Implant in Treatment of Refractory Cystoid Macular Edema Secondary to Retinal Vein Occlusion, Dr. Dilara Khatun and colleagues present their findings on this therapy.

This prospective interventional case series included 10 eyes of patients (mean age 64 ± 2 years) with diabetes and hypertension (for more than 10 years). All were diagnosed with retinal vein occlusion (RVO). Patients received a minimum five injections of intraocular bevacizumab for cystoid macular edema (CME) secondary to RVO and a single dose of 0.7 mg intraocular dexamethasone implant (Ozurdex, Allergan, Dublin, Ireland) for refractory CME.

The authors measured BCVA and CMT (using OCT) preoperatively and postoperatively at months one and six, respectively. Preoperatively, the average LogMAR BCVA was 1 ± 0.2 (6/60) in affected eyes and 0 (6/9) in normal eyes. At month one, the affected group’s BCVA improved to 0.48 ± 0.2 (6/18), and at six months was 0.30 ± 0.2 (6/12). At baseline, the average preoperative CMT was 515.5 ± 160.05μm: this decreased to 460.77 ± 144.28 at one month, and further decreased to 322.16 ± 107.78μm at month six.

This led the authors to conclude that “the functional and anatomical efficacy of single dose dexamethasone implant is significant in patients with refractory CME secondary to RVO as the final BCVA in improved and CMT is reduced significantly.”

To peel or to flap . . . that is the ILM question

It’s common knowledge that large macular holes are a surgical challenge with a guarded success rate – therefore, it’s critical to compare techniques to determine which could produce the better outcome. In an e-poster called Conventional ILM Peeling vs Inverted ILM Flap for Macular Hole Surgery, Dr. Manabijyoti Barman compares anatomical and functional outcomes between these two different surgical techniques.

The author conducted a retrospective analysis of macular hole surgery performed by single surgeon on treatment-naive patients with stage IV macular hole (diameter > 400μm). Forty-one patients were randomized into two groups: Group A (n=23) with conventional ILM peeling and Group B (n=18) with an inverted ILM flap. The author measured pre- and postoperative BCVA and morphology of the hole (with ED-OCT).

Between groups, the mean follow-up time was 8.3 months and visual acuity improvement was comparable in both groups, (though the inverted flap technique induced a faster recovery). The hole closure rate 91.3% in Group A and 94.4% in Group B, and the morphology of hole was documented in detail in both the groups. Dr. Barman did not note any vision threatening complications.

These results led the author to conclude that the inverted-flap technique is not only an alternative to conventional peeling – it may improve chances of a better outcome: “Though both techniques displayed a trend toward anatomical and functional success, the inverted-flap technique may have an edge over the conventional technique in terms of slightly higher closure rate and faster visual recovery.”
EX-PRESS provides better surgical outcomes for neovascular glaucoma

Good news for patients with neovascular glaucoma. The condition is a refractory glaucoma where new blood vessels are formed in the angle region. It is difficult to control intraocular pressure after surgery; bleeding during and after surgery also leads to deterioration in visual acuity.

Dr. Taku Imamura and colleagues presented an e-poster titled 12-Month Results of Filtration Surgery With Ex-press for Neovascular Glaucoma Due to Proliferative Diabetic Retinopathy.

The EX-PRESS Glaucoma Filtration Device is intended to reduce IOP in glaucoma patients when medication and conventional surgical treatments have failed. The paper noted that with the use of EX-PRESS, no trabecular meshwork or iris resection is needed in filtration surgery. Therefore vitreous prolapse and intraocular hemorrhage can be effectively prevented during surgery.

This study included 11 eyes of 10 cases, 8 men and women, who were followed for 12 months or longer after filtering surgery with EX-PRESS for neovascular glaucoma in eyes with proliferative diabetic retinopathy. Visual acuity, intraocular pressure and complications were evaluated.

The results showed that mean IOP declined. Survival rate in Kaplan-Meier survival analysis was 64% at 12 months after surgery because of decline in 4 eyes, and additional surgery in one eye, among other reasons.

The authors concluded that IOP control was well controlled for 12 months in 64% of the cases after filtering surgery with EX-PRESS for neovascular glaucoma in eyes with proliferative diabetic retinopathy. The use of EX-PRESS in filtration surgery for neovascular glaucoma is safe and efficiently decreases intraocular pressure throughout the 12 months after the surgery.

Glueless and sutureless pterygium autograft could change the future

An e-poster written by Dr. Piyush Bajaj and colleagues titled Glueless and Sutureless Pterygium Autograft introduces a new technique which aids adhesion of conjunctival autograft in pterygium surgery.

Fifty-six eyes of fifty six patients with primary pterygium were graded, and excision was performed by the single surgeon. To prevent recurrence, free conjunctival autograft was taken from superotemporal or inferior quadrant from the same eye and bleeding was induced in episcleral vessels of bare sclera and CAG was moved over it without the use of sutures or fibrin glue, allowing natural autologous coagulum of the recipient bed to act as a bioadhesive.

The eye was patched for 24 hours. Postoperatively, patients were put on topical antibiotic and steroid eye drops for 6 weeks. The outcomes were assessed in terms of post-op foreign body sensation, any recurrence, complication(s), and operative time at each follow-up visit on day 1, 21, 45 and 240 days.

There were 41 females (73.2%) and 15 males (26.7%). The mean age of all the patients was 46 ± 13.2 years, range 22–70 years. Results showed that in 8 months documented follow up none of eyes had recurrence with few graft malposition. Resurgery was advised but patient was happy with removal itself. No other complication was noted. An average surgical time was 22 ± 2 min.

In conclusion, this technique is noted to be cheap, easy, patient and doctor-friendly with minimum post op symptoms. The recurrence, complication rate, and the operative time of glue/suture fixated autograft are said to be comparable with the current techniques in practice, without adding possible potential hazard of the surgical adjunct.

For more e-posters at APAO 2019, check this link: http://e-poster.apaophth.org/
POWER WITHOUT PRESERVATIVES

- Proven IOP lowering efficacy (32% IOP reduction in naive patients)
- Fewer side effects when switched from preserved prostaglandin analogues
- Increase patient satisfaction and drop comfort

TAFLOTAN-S (Prescribing Information)
C: Tafluprost. I: Glaucoma & ocular HTN. D: 1 drop in affected eye(s) once daily. CI: Hypersensitivity. SP: Aphakic or pseudophakic patient. Patients w/ history of bronchial asthma. Endophthalmitis. Eyelid & iris pigmentation. Eye hypertrichosis. Corneal epithelium disorder. Closed angle glaucoma. May affect ability to drive or operate machine. Pregnancy & lactation. Low birth wt infants, neonates, infants or childn. Elderly. AR: Conjunctival inj, abnormal eyelashes, itching, irritation, foreign body sensation, blepharal pigmentation, corneal epithelial disorder including superficial punctate keratitis, abnormal eye sensation. P/P: Ophthalmic solution (preservative-free) 0.0015% x 0.3 mL x 3 x 10's.

The last time the congress of the Asia-Pacific Academy of Ophthalmology (APAO) was held in Bangkok, it was in 2003. Since then, it has grown in leaps and bounds, from a biennial event to a yearly affair. It is indeed great that APAO has finally returned to Bangkok 17 years later.

Besides the presentations on remarkable scientific breakthroughs, advancements in eye care, diagnosis and treatment, use of technology, inventions, innovations, etc., APAO also has some additional interesting events to add some spice and flavor to the mix this year.

Women in Ophthalmology (WIO) Lunch

The APAO Women in Ophthalmology (WIO) Standing Committee will be organizing its second lunch event at the APAO 2019 Congress in Bangkok, on 6 March 2019. It will be held from 1.00pm to 2.00pm, at C-Ground, near the Young Ophthalmologists’ Lounge.

All delegates are welcome to attend, regardless of gender. Take this opportunity to mingle with fellow delegates and enjoy the talks by highly respected speakers.

Prof. Namrata Sharma, the Honorary Secretary of All India Ophthalmological Society (AIOS), will be speaking on ‘Women in Leadership Roles’, while Dr. Lynn Gordon, the Past President of WIO (US), will be speaking on ‘How to Advocate for Yourself’.

No prior registration is necessary, but places will be available on a first-come, first-served basis.

Young Ophthalmologists Activities

The 34th APAO Congress is dedicated to further the education and training for young ophthalmologists. To achieve this, APAO 2019 has partnered with international societies to offer the following sessions:

- APAO-ICO Sessions for Educators: How do Trainees Become Competent Surgeons? How It’s Done in Different Countries
- ICO Education Symposium
- APAO-ICO Sessions for Educators: Voice of Residents
- APAO-AAO-SOE Joint Session: Young Ophthalmologists Forum
- APAO Leadership Development Program 2018-19 Graduating Class 1
- APAO Leadership Development Program 2018-19 Graduating Class 2

In addition to the above, there will be wet-lab courses, where young ophthalmologists can obtain hands-on learning:

- APGS-MIGS Interest Group Wetlab Course: XEN Gel Implant
- APGS-MIGS Interest Group Wetlab Course: iStent Wetlab
- APGS-MIGS Interest Group Wetlab Course: Hydrus Microstent
- Ellex Sponsored Wetlab

The courses will feature renowned experts as instructors. So, don’t miss this opportunity. As seats are limited, please reserve your place soon.

Besides sessions and courses, there are opportunities for young ophthalmologists to mingle and network at the YO Lounge at C-Ground. APAO’s international partners and member societies will be promoting their YO programs here, so come check them out.

If you are looking for some fun, you can join the YO Social Muay Thai and Thai Dessert Cooking Class on 8 March 2019, at 6.00pm to 7.00pm. It will be followed by a YO networking event. Reservations are required, so book your spot now to avoid disappointment.

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APA Charity Fun Run

If you don’t mind putting on your running shoes for a good cause, be at the Benchakitti Park on the morning of 8 March 2019, for the 4th APAO Charity Run.

Located adjacent to the meeting venue, the scenic Benchakitti Park covers a 5.4 km (3 rounds of 1.8 km) route around a beautiful lake. All participants will receive a limited edition T-shirt prior to the event, as well as complimentary breakfast after the run.

Not a running enthusiast? Not to worry. You can walk or run. As long as you finish the run within the official time limit, you will be awarded a specially designed medal at the finish line.

The 1st APAO Photo Contest

All delegates of the APAO congress are invited to take part in the first APAO Photo Contest. In order to participate, delegates have to submit photos according to any of the three categories - Anterior Segment Photography (A), Posterior Segment Photography (P), or General Photography (G).

The Anterior Segment Photograph (A) can be taken with any device or technique (e.g. external eye, slit lamp, gonioscopy, optical coherence tomography).

Meanwhile, the Posterior Segment Photograph (P) can also be taken with any device or technique (e.g. fundus photography, including color and monochromatic, angiography, optical coherence tomography).

Lastly, photos submitted for the General Photography (G) category should innovate the meaning of ophthalmology.

The winners will receive their prizes at the APAO Congress Party on the evening of Thursday, March 7, 2019. The Champion will be chosen across all categories and entries and will win a digital camera Nikon Z6 and a certificate. First and Second Runner-ups will also be selected and receive prizes. The distinguished judges for the contest include Mr. Visarute Angkatavanich, the Thai photographer whose photos of Siamese Fighting Fish were used as the wallpaper on the screen of iPhone 6.

Cultural Party cum APAO Award Ceremony

All delegates are invited for the cultural party and award ceremony on 7 March 2019, from 6.30pm to 9.30pm. It will be held at Sook Siam.

The awards to be conferred include the following:
- Jose Rizal Medal, which recognizes an outstanding ophthalmologist annually for his/her excellence in ophthalmology in the Asia-Pacific region.
- APAO ICO Mark Tso Golden Apple Award for the best clinical teacher in ophthalmology in the Asia-Pacific region.
- Nakajima Award, which encourages young ophthalmologists to play a more active role in ophthalmological development.
- Distinguished Service Awards
- Outstanding Service In Prevention of Blindness Awards
- Achievement Awards
- Best Scientific Paper Awards

All-in-all, APAO is set to be an outstanding and memorable congress, which not only features the latest in scientific research, product development and surgical procedures, but also networking and fun events to cater to everybody’s interests and tastes.
The excellent optics and the superior mechanics make a Haag-Streit slit lamp one of the best investments you can ever make for your practice.

Visit us at the APAO 2019 on our Booth no. G13
Say *Sawasdee* to the City of Angels:

**Exploring Places of Interest**

*by Joanna Lee*

You are in one of the most exciting cities in the world for APAO 2019! It’s hard not to love what the 8.2 million-strong local populace fondly refer to as “Krung Thep” or the City of Angels (short for Krung Thep Maha Nakhon or the “great city of angels”, also a short form for its official name which is the longest in the world!) for its everything – its famed, tantalising food choices to tranquil temples, lively local markets, the exhilarating shopping which sees some shoppers rolling in empty luggage bags to malls, its vibrant, colourful and bustling night life. With the conference happening now in this city also comes your chance to discover its fascinating facets.

**A Word on the Weather**

Bangkok is the world’s hottest city (on an average mean), according to the World Meteorological Organization. The current temperature hovers around 35˚C along with the smog. Do choose indoor activities as much as you can. However, it’s also a great opportunity to enjoy Thailand’s freshly cut coconut water in abundance or the famous street coconut ice-cream as a tasty way to beat the heat.

Now, back to the path of discoveries – if this is your first time, or even your umpteenth time in Bangkok, there are always plenty of places and activities to explore. Even if it’s just for one day or over the weekend, you would be spoilt for choice.

**Looking at Landmarks**

If you haven’t ticked this off the list of Bangkok’s must-see places, then visit the **Grand Palace**. Constructed in 1782, its beautiful architecture command a steady stream of visitors from around the world admiring its intricate details. Within its vicinity is **Wat Pra Keaw**, a temple which houses the eminent Emerald Buddha carved from one single piece of the precious stone.

Just ten minutes from the Grand Palace is **Wat Pho** or Temple of the Reclining Buddha rests. Besides the 46-meter statue, visitors may relax within its vast compound with traditional Thai massage as Wat Pho is famous for leading in the training of Thai masseuses. You may also find intricate murals and stupas around its courtyard.

There’s also **Wat Arun**, or “The Temple of Dawn”, another one of Bangkok’s distinctive landmarks. Offering an impressive view from afar, especially juxtaposed against a colourful sunset, the building’s details are equally as impressive up close.

Another gem in Bangkok is the **Jim Thompson House** and museum, home to the man who had revived Thailand’s silk industry post-WWII before mysteriously disappearing in the Malaysian jungles. It comprises six teakwood buildings with displays of Thai antiques and art reflecting his rich legacy.

Some say no trip is complete without a visit to the lively Bangkok Chinatown or **Yaowarat**. It is the enclave for over one million Thais of Chinese ethnicity and also where hot, steaming dim sum, sweet, cooling Thai Chinese desserts and a plethora of must-try street delicacies beckon. Tourists may not realize that the vibrant and non-touristy Ramkamhaeng Night Market behind the main Chinatown street is a great place to get bargains for clothes. Get a Grab car or taxi to Ramkamhaeng Mall as your starting point.

**See You Down the River**

The Chao Phraya River forms an artery of transport waterways with river buses, boats and ferries as public transportation and for commerce. If you’re feeling adventurous and have a full day to spare, you could do a self-guided Chao Phraya river tour (tip: take the Orange Flag boat). This flexible hop on and hop off boat reveals several places of interest along its stops including museums, markets, wat (temples) and even a unique Portuguese heritage spot and bakery. Get off the Saphan Taksin BTS station, Exit 2, and head to Sathorn Pier for your starting point. A complimentary and helpful one-day tour itinerary can be found here: [www.bangkokfoodtours.com/do-it-yourself-chao-phraya-river-sightseeing-trip/](http://www.bangkokfoodtours.com/do-it-yourself-chao-phraya-river-sightseeing-trip/).

Floating markets are a must-see, although if you’re wary of the touristy Damnoen Saduak floating market,
you could opt to visit the pleasant and lively Amphawa floating market for an overnight stay or day-trip. This relaxing and charming spot 1.5 hours away from Bangkok offers noodles and other street food sold from boats, grilled seafood and traditional massages to top it all off. You could also feast your eyes and refresh your olfactory with bouquets of scents at the 24-hour Pak Khlong Talad Flower Market which also sells fruits and vegetables.

**Shopping Paradise**

Heady and exciting, shopping in Bangkok is one of the most fun activities for its price, variety and up-to-date appeal. The Pratunam area is a good place to start. Visit sprawling cosmopolitan malls like Siam Paragon, Siam Discovery or where locals go – MBK Center. The weekend is when the massive Chatujak market opens where they have available maps to help you navigate the maze of shops selling anything from souvenirs, trinkets, t-shirts to plants, pets and other treasures. Bargaining is still practiced but more and more markets are encouraging better prices through group purchases. Take the BTS to Mo Chit station, Exit 1.

If you’re wary of Chatujak there’s also the night market at the accessible Talad Rot Fai Train Market at Ratchada (take the MRT Metro to the Thai Cultural Center station) which features a vintage atmosphere and barbeque grilled meats, seafood, hot pots, street bars, barber shops. This is different from the Talad Rot Fai Train Market at Srinakarin which locals prefer to go to.

**Places of Interest near Queen Sirikit Convention Center**

Lumpini Park (Silom MRT station) and Benchasiri Park (Phrom Pong BTS station) offer respite from the heat with their lush trees and garden foliage. If you’re game to explore markets, the bustling Khlong Toei Market is where most locals and restaurants come here to get their ingredients. It is quite an experience. You could also go on a shopping spree at Terminal 21 Bangkok, Emporium and Em Quartier or let go at Flow House, a water park. There’s Soi Cowboy for drinks and night life or the Brewski rooftop bar on top of the Radisson Blu Hotel Bangkok.

Speaking of bars, you may be curious about speakeasy bars like Maggie Choo (underground of Hotel Bangkok Fenix Silom). Let your hair down with lively performances from local bands and enjoy reasonably priced food and drinks amidst the lush, retro vibe. There’s also the theatrically themed Backstage Bar at Sukhumvit Soi 55 at Thonglor.

**Suit Yourself**

If you’re thinking of getting something new for the next conference, you can get a custom-made suit, shirt, coat or dress within days. Bangkok is well-known for its textiles and reputable tailors like Signature’s Collection Custom Tailor (besttailorbangkok.com) or Vogue Fashions (www.voguebkk.com).

**Relaxing Your Retinas (Zzz)**

What better way to cap your stay in Bangkok after a conference than to relax.
and indulge yourself in an elegant spa at the established Healthland Spa and Massage. Found at several outlets in Bangkok like Asoke, Ekkamai, Sathorn and Srinakarin (near Suvarnabhumi airport), rejuvenation is only a touch away with aromatherapy, hot stone massages or the traditional Thai or Swedish massages, body scrubs, sauna, and other pampering treats to ease your knots away at reasonable prices.

If your feet is already too tired from standing or walking, you might also find decent foot massage shops along the streets which offer a cool, and relaxing atmosphere. Here, snooze away if you must, away from the sweltering heat.

Get Your Just Desserts in Bangkok

The Thais love their desserts. Here, you’ll get a taste of how Thais celebrate the sweetness of life through its renderings of desserts with uninhibited passion. The Instagram-worthy creations might induce sweet envy especially after you’ve tried the desserts at After You Dessert Café at Siam Paragon mall with the likes of Thai Tea Kakigori, Strawberry Cheesecake Kakigori or Chocolate Lava and many more. It’s quite over the top, but it’s an experience not to be missed. If you find the crowd unbearable, there’s also Café of Dessert Enthusiasts (C.O.D.E.) at Terminal 21 with croissants oozing with sweet, Thai-flavored “lava”.

Alternatively, you could also get out of Bangkok if time permits for day tours. Explore the ancient ruins of Ayutthaya where the previous capital of Thailand was built along with the old splendors of the royal Bang Pa In Summer Palace where time seemed to have stopped in a different world. Or check out the famed River Kwai Bridge and amazing WWII relics at JEATH Museum and learn the history of the era at Hellfire Pass Museum at Kanchanaburi.

Getting around and booking tours

It’s best to get a Grab car to avoid taxi meter hassles or take the BTS or Metro. For tours, there’s the handy Klook website which offers hassle-free online bookings for guided trips and tours within and outside Bangkok, and even unique experiences like Bangkok cycling tours or cooking classes, suitable for individuals or small groups.

May your taste of Bangkok complement your gained insights at APAO 2019 and recharge your mind, body and soul!

“Bangkok is a rejuvenating tonic; the people seem to have found the magic elixir. Life, a visitor feels, has not been wasted on the Thais.” – Bernard Kalb, a visitor to Thailand.

1. It is illegal to use a durian fruit as a weapon. The fine is determined by how many thorns strike the victim.
2. It is illegal to leave the house without wearing underwear.
3. It is illegal to drive a vehicle while bare-chested.

Bangkok Fun Facts

Symposium APAO 2019

SubLiminal Laser Therapy, from glaucoma to retina treatment

Moderator: Dr. Kenneth Fong

Introduction to SubLiminal laser therapy - Dr. Kenneth Fong

SubCyclo: A new treatment alternative for glaucoma - Dr Nassima Benhatchi

SubLiminal laser for retinal disorders:
- Diabetic macular edema - Dr. Kenneth Fong
- Central serous chorioretinopathy - Dr. Liu XiaoLing

Wednesday March 06th 2019
01:00 to 02:00 pm
Meeting Room 4
QUEEN SIRIKIT NATIONAL CONVENTION CENTER

PRE-REGISTRATION
via symposium@quantel-medical.fr

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# ALCON CATARACT LUNCH SYMPOSIUM

6 March 2019 (Wednesday)  
13:00 – 14:00hrs  
Plenary Hall 1

Moderators:  
- John CHANG, MD  
  Hong Kong  
- Dandapani RAMAMURTHY, MD  
  India

## A New Paradigm of Cataract Refractive Surgery

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![Speakers](Images)