Lots of interesting ophthalmic case reports fill APAO 2016’s poster sessions. Take a sneak peak...

Preview some of the free papers on cataract. We summarized some of them...

Eye experts are exploring various ways of managing eye trauma. We highlighted some of them...

Since the inception of APAO in 1960, having delivered 30 highly successful conferences throughout the region, the 31st Asia-Pacific Academy of Ophthalmology Congress continues to put forward its progressive approach of providing numerous learning and knowledge sharing opportunities for delegates from across the globe.

Held in conjunction with the 57th Annual meeting of the Ophthalmological Society of Chinese Taipei, the comprehensive program of APAO 2016 consists of well-run meetings with an array of symposia, courses, and presentation of scientific papers. With the target to address excellent clinical and visual science research topics, APAO 2016 will carry forward the fine tradition of providing yet again an unparalleled overview in the field of innovative ophthalmology.

Precision in eye care

Congress President Prof. Lin-Chung Woung mentioned that APAO’s theme this year revolves around precision eye care as well as patient-centered prevention and treatment. With two plenary sessions focusing on the latest developments and advances in ophthalmology and visual sciences, eight named award lectures, four SOE symposiums, three sessions organized by the Academy of Asia-Pacific Professors of Ophthalmology (AAPPO), the ISRS Symposums, the ESCRS Symposium, YO Symposium, WIO Symposium and much more, APAO is all set to offer an array of learning and knowledge sharing opportunities to attendees.

Offering an innovative blend of eastern, western, traditional, and contemporary music, the Ju Percussion Group will put the spotlight on the Opening Ceremony that will take place from 4:00 to 5:00 pm on March 24 at Plenary Hall, 3/F, Taipei International Convention Center. Sandwiched between 2 plenary sessions, the opening ceremony is all set to add vibrancy to a splendid beginning of this 4-day event with loads of enthusiasm along with a promise of many delightful opportunities for international collaborations.

Congress highlights

Joining hands with the latest technology this year, APAO is all set to smooth delegate communication by providing them with freedom to share messages with each other on the improved congress app. The attendees just need to login with the APAO ID to stay connected.
Newly Released

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The future of brighter vision.
Imaging methods, such as fundus auto-fluorescence (FAF) and optical coherence tomography (OCT), represent pivotal milestones in the diagnosis and monitoring of retinal diseases, allowing objective and quantitative assessment of structural eye damage. The development of OCT technology has undergone major advancements in recent years, from time-domain OCT (TD-OCT) to spectral-domain OCT (SD-OCT), as well as the recent introduction of OCT angiography (OCT-A) and other modifications in OCT technology.\(^1\)

**Comprehensive diagnostic made easier**

OCT is a multimodality imaging technology that involves the utilization of more than one wavelength of light in the simultaneous imaging of the eye. Using this technique, a comprehensive diagnostic picture is created as each image offers unique data, facilitating disease diagnosis and monitoring.\(^2,3\)

The SPECTRALIS platform (Heidelberg Engineering, Heidelberg, Germany) incorporates several imaging modalities, such as the SD-OCT, the anterior segment module, infrared reflectance, BluePeak autofluorescence, MultiColor fundus imaging, fluorescein and ICG angiography and widefield and ultra-widefield imaging, making a variety of options needed to optimize diagnosis available to clinicians.\(^4\) SPECTRALIS provides cross-sectional imaging of eye tissue morphology in situ and in real time. Multimodal imaging allows for infrared retinal imaging, cross sections and auto-fluorescence, which is especially useful in examining layers of the eye such as the photoreceptors and retinal pigment epithelium which are strongly associated with visual function. OCT imaging is useful in the clinical diagnosis of commonly encountered eye conditions like glaucoma, diabetic macular edema, geographic atrophy, age-related macular degeneration and rare conditions.\(^5\)

**OCT2: next generation OCT**

OCT2 is a next generation OCT module specially developed for the SPECTRALIS platform, offering enhanced image quality and faster scan speeds of up to 85,000 Hz.\(^6\) A high scanning speed of this nature is important for advanced imaging technologies like the OCT angiography* and high-resolution imaging sequences in glaucoma. SPECTRALIS has optimized the functions of spectral domain OCT by incorporating confocal scanning laser ophthalmoscopy, with a specially developed, high speed TruTrack active eye tracking technology, to avoid motion-related artefacts. The AutoRescan feature places follow-up scans at the precise location for the initial scan, thereby facilitating accurate comparison between visits, and to detect changes as small as 1 micron.

**Cost effective, upgradeable platform approach**

A variety of options are available on the SPECTRALIS. It allows clinicians to make accurate diagnoses at the earliest time. It features a cost-effective modular design to meet the specific needs of every practice, while allowing for future inclusion of new modules and hence new clinical applications and technologies when needed.

**Enhanced diagnostic accuracy of glaucoma**

The glaucoma module on the SPECTRALIS includes a proprietary system known as the anatomic positioning system (APS). The system utilizes unique scans of the optic nerve head, retinal nerve fiber and ganglion cell layer, and compares the patient’s eye data with that of a reference database, and then flags even the smallest deviations of the eye structures. The proven 1-micron precision of the auto rescann function allows clinicians to accurately identify and monitor structural changes from visit to visit. This is immensely important in the establishment of individualized treatments for patients.\(^7\)

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**References:**


* Under development, not for sale yet.
Case Reports Abound at APAO 2016 Poster Sessions

by Gloria D. Gamat

From managing cataract backlog through mobile surgery clinics in developing countries, to evaluating the risk of macular edema after using different antiglaucoma drops, posters at the 31st Asia-Pacific Academy of Ophthalmology Congress (APAO 2016) present with interesting ophthalmic cases from across the globe. Make sure to check them all out...

Cataract operations in An Giang Province, Vietnam: What have we done to increase output and outcome?

Millions of people in developing countries lack access to basic surgical care for preventable blindness. “Medical surgery camps are low cost or free for poor patients and can benefit thousands of patients in the developing world with curable blindness”, said Duong Dieu, M.D., Ph.D., Chief of the Ophthalmic Department at An Giang Provincial Hospital, Longxuyen City, Vietnam. Dr. Dieu and team launched a mobile cataract surgery (MCS) camps from the provincial ophthalmic department in a southern province with a population of 2 million. Their efforts at the MCS camps at district hospitals in remote areas helped in reducing the cataract backlog of over 2 decades.

The team utilized community intervention trials by organizing the MCS camps with emphasis on the immediate society, patients and medical services. Furthermore, the team developed an approach utilizing Four S’s (steps) which includes Statement, Selection, Surgery and Sequelae. The outcomes compared by Dr. Dieu and colleagues were cataract surgical rate (CSR) during periods with MCS, cataract surgery cost and the sustainability considerations of MCS.

The team performed intracapsular and extracapsular cataract extraction, intraocular lens implantation and phacoemulsification surgery. Their efforts resulted in an increased number of cataract patients with restored vision as well as a raised community awareness about the magnitude of the problem.

Costs were kept low or free for poor patients regardless of services provided. Therefore, the authors recommended that “this could be applied to other situations in much of the developing world for the benefit of thousands with curable blindness due to cataract, while cataract surgeons are too few and instruments are too expensive”. He however advised that “for successful MCS, special training of technical and nontechnical groups is needed’.

Modulation of lens fibrosis and inflammatory response by fluoroquinolones

Lens fibrosis and inflammation play key roles in the pathogenesis of cataract. According to Dr. Tsan-chi Chen, “fluoroquinolones might be a potential inhibitor of lens fibrosis and inflammatory responses”. Dr. Chen and colleagues analyzed the effect of flouroquoniloes using the well-known human lens epithelial cells (HLE) B3. The cells were incubated in 20% FBS-contained Opti-MEM (Thermo Fisher Scientific, Waltham, MA, USA) with ciprofloxacin (CIP), levofloxacin (LEV), or moxifloxacin (MOX) in the absence or presence of TGF-β1. Furthermore, the authors assessed cell viability by WST-1. Expression and filaments of alpha smooth muscle action (α-SMA) were separately detected by immunoblotting and immunofluorescent staining. IL-8 expression was analyzed by enzyme-linked immunosorbent assay (ELISA). These in vitro results revealed that the survival rate of HLEs under 3-day incubation of MOX (56.4%) is more toxic than those under 3-day incubation of CIP (82.6%) or LEV (101.3%). These 3 fluoroquinolones alone induced endogenous α-SMA expression. However, they suppressed formation of the α-SMA filaments in TGF-β1-incubated HLEs. Furthermore, these fluoroquinolones noticeably suppressed the secretory IL-8 expression in HLEs. Taken together, the authors concluded that fluoroquinolones may play an important role in modulating less fibrosis and inflammation. This may potentially lead to new prophylactic and therapeutic options for patients with cataracts.

MustDo!

Since you’re in Taiwan for APAO, consider taking a day trip to the small town of Jiufen. Reachable within about two hours by public transport, Jiufen - within the Ruifang District of New Taipei City - and its hillside teahouses are an adorable way to take in the local culture.
Risk of macular edema after using different antiglaucoma eye drops

Theoretically, the use of prostaglandin analogs (PGs) have been implicated as factors associated with an increased risk of macular edema. Thus, Dr. Jehn-yu Huang investigated the risk of macular edema after the use of different antiglaucoma eye drops in glaucoma patients. Their study included data from the Longitudinal Health Insurance Database in Taiwan, with 7628 glaucoma patients treated with a single topical antiglaucoma agent (beta blockers, sympathomimetics, parasympathomimetics, carbonic anhydrase inhibitors (CAIs) or prostaglandin analogs (PGs)). Ten thousand two-hundred ninety three (10,293) patients with glaucoma-related diagnoses but without use of topical antiglaucoma agents were included as controls matched by age and sex.

Hazard ratio (HR) of macular edema after the use of different topical antiglaucoma agents was estimated by multivariate logistic regression. HR was 2.58, 3.22, 6.14, 5.62, and 2.90 for beta blockers, sympathomimetics, parasympathomimetics, CAIs, and PGs, respectively. The strength of drug exposure was 106.5 ± 254.5, 776 ± 159.3, 439 ± 98.8, 261 ± 108.4, and 278.9 ± 471.3 days for beta blockers, sympathomimetics, parasympathomimetics, CAIs, and PGs, respectively. After adjustment for age, sex, other comorbidities and recent cataract or retinal surgeries, HR of macular edema related to beta blockers, sympathomimetics, parasympathomimetics, CAIs, and PGs were 0.83, 1.21 and 1.01, respectively. Therefore, the authors concluded that the use of PGs does not increase the risk of macular edema.

Impact of socioeconomic status on the diagnosis of primary open-angle glaucoma and primary angle closure glaucoma in Taiwan

Does socioeconomic status (SES) have an impact on the diagnosis of primary open-angle (POAG) glaucoma and primary closed-angle glaucoma (PCAG)? To answer this question, Dr. Yu-chieh Ko and colleagues studied glaucoma subjects identified from the National Health Insurance Database (NHIRD) of 2006. Individuals who had ≥4 ambulatory visits within 1 year with a diagnosis code of POAG (ICD-9-CM 365.11 or 365.12) or PCAG (365.23) and concurrent prescription of antiglaucoma medication or surgery were selected. Individual SES was represented by monthly income calculated from insurance premiums. Neighborhood SES was based on neighborhood household income averages. Urbanization level of habitation was categorized into three levels. In total, 752 and 561 subjects with POAG and PCAG, respectively, were identified and assessed. The diagnosis of glaucoma was affected by age, sex, health care utilization, individual SES, and urbanization level of habitation. The data showed that subjects with more frequent health care utilization were more likely to be diagnosed with glaucoma. Dr. Ko and colleagues concluded that “socioeconomic status (SES) affected the diagnosis of POAG and PACG differently; subjects with lower SES were more likely to be diagnosed as having PACG, but less likely as POAG”. The team therefore proposed that glaucoma education and screening should be stratified according to SES to maximize the efficacy in identifying susceptible subjects.

SnapShot!

A performance inspired by Taiwanese aborigines delighted delegates during the APAO 2016 Welcome Reception yesterday.

Walking tours in Taipei are highly ranked on TripAdvisor.com. So get ready to do some city sauntering.
Cataract

by Olawale Salami

Cataract remains an important ophthalmic condition worldwide. According to published statistics, cataract is responsible for 50% of blindness and 33% of visual impairment globally. At the 31st Asia-Pacific Academy of Ophthalmology Congress (APAO 2016), cataract is one of the main categories covered throughout the various sessions, and we’ve highlighted some of them here...

High prevalence of cataract in Taiwanese patients with mental retardation

According to published literature, mental retardation is associated with a wide variety of ophthalmic features. In Taiwan, Dr. Yu-Wei Lin and colleagues studied the ocular findings in patients with mental retardation. In this study, the authors examined 75 patients aged between 8 months and 55 years. Ocular examinations including visual acuity assessment, slit lamp biomicroscopy, ocular motility, cycloplegic refraction, and ophthalmoscopy were performed. The investigators discovered that cataracts were the most commonly observed ocular abnormality in these patients (33.3%). A high prevalence of cataract within this population has also been reported by Schwartz et al, who documented a prevalence of 54% within their patient pool. Other observed findings include strabismus (29.3%), glaucoma (12%), nystagmus (12%) and myopia (9.3%). Based on these data, it is therefore important to constantly screen for cataracts among patients with mental retardation.

Decrease in postoperative endophthalmitis in Western Australia

Postoperative endophthalmitis is a known complication of cataract surgery and efforts aimed at reducing its occurrence have been the focus of research in recent years. In a retrospective study, Jonathon Ng and colleagues sought to determine the incidence of postoperative endophthalmitis in Western Australia by linking data of all cataract operations and endophthalmitis cases that occurred between 2002 and 2013. They found that the incidence of postoperative endophthalmitis in 2002 was 0.2% of all cataract surgeries. However, by 2013, a ten-fold reduction had been achieved, and incidence was at 0.03%. Furthermore, they found several risk factors for postoperative endophthalmitis such as male sex (odds ratio or OR = 1.5), age over 80 years (OR = 1.7) and operations before the ESCRs study publication in 2007 (OR = 3.3). The authors opined that the decrease in postoperative endophthalmitis may be related to widespread adoption of prophylactic intracameral antibiotics.

New insights into the genetics of Nance-Horan syndrome

According to Dr. Xiaoyan Ding and colleagues, Nance-Horan syndrome (NHS) is a rare X-linked disorder typified by dense congenital central cataracts, microcornea, anteverted and simplex pinnae, brachymetacarpalia and numerous dental anomalies due in most cases to a mutation in the NHS gene. Huajin Li and colleagues described the phenotypic features of a Chinese pedigree with Nance-Horan syndrome as well as identified a novel causative NHS gene mutation.

Dropless cataract removal: a revolution in cataract surgery

Postoperative prevention of infection and suppression of inflammation after cataract surgery has remained a challenge to ophthalmologists. In order to study the safety of transzonal intravitreal injection; and to study the acceptance of dropless cataract surgery among patients in a private set-up, Dr. Ajay Mehta and colleagues performed a prospective interventional study carried out on uncomplicated phacoemulsification cases in 200 eyes. The authors found no case of endophthalmitis and the procedure was highly accepted. The authors therefore concluded that postoperative dropless cataract surgery is a safe and effective method of endophthalmitis prophylaxis.
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Visual outcomes are critical in the management and treatment of corneal diseases. Here at the 31st Asia-Pacific Academy of Ophthalmology Congress (APAO 2016), ophthalmic experts scrutinize the means and other factors in order to ensure the best visual outcomes for their patients...

Patient outcomes are better with DALK

Recent advances in ocular surgery have formed a paradigm shift in the surgical treatment of corneal disease. In recent years, penetrating keratoplasty is now paving way for novel lamellar techniques that strive to replace damaged tissue only with minimal impact on surrounding tissue. Dr. Mano Das and colleagues assessed the safety and efficacy of deep anterior lamellar keratoplasty (DALK) in different scenarios, through a retrospective analysis of 95 patients who underwent DALK for various indications such as keratoconus, corneal dystrophy, corneal opacity and Terrien degeneration. Patients were followed up for a mean period of 21.2 months. At the latest follow-up, the BCVA of 6/9 or better was seen in 10.1% of eyes, 6/12 or better in 34.8%, and 6/36 or better in 92.1% of the eyes. Intra- and postoperative complications were microperforations (9.5%) and double anterior chamber (9.5%), respectively. Therefore according to the authors, a manual lamellar technique is predictable and safe and eliminates the need for conversion to penetrating keratoplasty, with impressive visual outcomes.

Low donor graft rejection rate in non-descemet stripping endothelial keratoplasty

Dr. Shaowei Li and colleagues investigated the impact of non-descemet stripping endothelial keratoplasty (non-DSEK) on graft rejection rate. They conducted a retrospective analysis on the outcomes of 65 patients, and recorded rejection episodes, failure and dislocation of grafts and the measured best corrected visual acuity (BCVA) and endothelial cell density (ECD). They found that 63 of 65 eyes (96%) recovered with excellent corneal clarity from previous bullous keratopathy. Furthermore, 2 eyes treated with penetrating keratoplasty underwent immunological graft rejection episodes. Postoperative graft dislocation occurred in 8 cases, and all of them were reattached using air reinjection. Mean BCVA improved from 1.70 logMAR (decimal visual acuity, 0.02) preoperatively to 0.54 logMAR after 3 months (decimal visual acuity, 0.29), 0.44 logMAR after 6 months (decimal visual acuity, 0.36), and 0.35 logMAR after 1 year (decimal visual acuity, 0.45). Postoperative donor ECD ranged from 637 to 3056 cells/mm2 (mean ± SD, 2074 ± 617 cells/mm2). The mean endothelial cell loss was 37.2%.

Therefore, the authors concluded that the occurrence of immunological graft rejection of the donor graft was rare when non-DSEK surgery was performed, demonstrating that non-DSEK procedures may be safe and effective alternatives to restore corneal decompensation when Descemet’s membrane is not diseased.

Safety and efficacy of collagen crosslinking with and without epithelial debridement in eyes with keratoconus

Over the past decade, corneal collagen crosslinking has become a common treatment option for individuals with progressive keratoconus. This is based on laboratory data reported by Keating, Pineda and Colby in 2010, suggesting that crosslinking using riboflavin and ultraviolet-A irradiation increases collagen diameter and the biomechanical strength of the treated cornea. On the other hand, longitudinal studies and data from a few randomized controlled trials support these findings with evidence demonstrating that crosslinking slows and possibly halts the progression of keratoconus, said Chan and Snibson in a 2013 paper. In their APAO 2016 paper, Dr. Jing Zhang and colleagues compared the safety and efficacy of corneal collagen crosslinking (CXL) with the epithelium off (epi-off) and with the epithelium on (epi-on) in patients with keratoconus. They performed collagen crosslinking on 61 eyes: 29 eyes in the epi-off group and 32 eyes in the epi-on group. Patients were evaluated for uncorrected distance visual acuity (UDVA), best corrected visual acuity (BCVA), corneal topography, endothelial cell count, and corneal biomechanics at baseline and after CXL at 1, 3, and 6 months. Their data showed that most of the patients in the epi-off group experienced pain, tears, and photophobia during the first 3 days, but not the epi-on group. The mean UDVA and BCVA significantly improved after CXL in both groups (P < 0.01). There was no significant difference in UDVA and BCVA 6 months after CXL between the 2 groups (P > 0.05). The mean of average keratometry value and astigmatism significantly decreased in both groups (P < 0.01), and the reduction in steep K was greater in the epi-off group (P = 0.003). No significant decrease was observed in mean endothelial count in both groups (P > 0.05). The changes of corneal hysteresis and corneal resistance factor were not significant in both groups (P > 0.05). Therefore, their study showed that the effect on visual acuity and K values of epi-on CXL are likely to be similar to that of epi-off CXL. Thus, transepithelial CXL might offer similar efficacy to epithelium-off CXL with more patient comfort.

MustDo!

Expect a truly golden evening at the APAO Gala Dinner. It will be held on March 25, from 7:30 pm to 10:30 pm, in the Golden Dragon Room, Grand Hotel Taipei. It is preceded by a cocktail reception at 7 p.m. Tickets are available for sale. Visit the APAO office for further information.
Factors affecting visual outcome in traumatic cataract surgery after blunt trauma

As reported by Bekibele and Fasina in 2008, a wide variety of factors affect the management and prognosis of patients with traumatic cataract. For their APAO 2016 free paper, Dr. Pratiwi and colleagues analyzed preoperative conditions and their effect on visual outcome after traumatic cataract surgery. They included data from 76 patients with traumatic cataract after blunt trauma from 2013 to 2015.

The investigators discovered that corneal tissue injuries and lens subluxation were the two most common associated injuries. Furthermore, the most common causative agent was metallic (20.3%), followed by ball (17.7%). Median time to surgery was four months.

Factors such as age, sex, causes, therapy, presence of vitreous hemorrhage, RD with B-scan USG examination, and ocular trauma zone were also collected. Their data revealed that the mean age of the 260 patients was 35 years (range, 1–72 years). Sixty-nine eyes were diagnosed with RD after open globe injury. Multivariable analyses were done for age, sex, orbital zone trauma, mechanism trauma, presence of vitreous hemorrhage, and time diagnosed with RD. Factors such as age, sex, [odds ratio (OR), 2.43; P = 0.039] and mechanism of trauma did not affect the development of RD (OR, 1.85; P = 0.255). Furthermore, older age (OR, 14.82; P = 0.002), higher zone trauma (OR, 3.55; P = 0.169), and vitreous hemorrhage were associated with RD development but not statistically significant. Average time to develop RD was within 4 weeks. The authors concluded that retinal detachment is common after open globe injury. Orbital zone trauma, age, sex, time diagnosed, presence of vitreous hemorrhage and mechanism of injury each could affect the development of RD and can result in poorer visual acuity. Early detection and treatment of RD could prevent visual loss or phthisis bulbi.

Marrow mesenchymal stem cells can differentiate into corneal epithelial-like cells

As early as 1994, Friedrich Eduard Kruse, M.D., Ph.D. of Augenklinik der Universität Heidelberg, Germany already reported that self-renewing tissues such as the corneal epithelium contain stem cells, which represent the proliferative reserve. In later years thereafter, efforts at identifying these stem cells have been the focus of extensive research. Dr. Guoling Chen and colleagues investigated whether human bone marrow mesenchymal stem cells (HMSCs) were able to differentiate, in vitro, into corneal epithelial-like cells. In this study, they utilized primary human corneal keratocytes (HCFs) obtained from the corneal stromal pieces by tissue culture, and the HMSCs were isolated by density gradient centrifugation. Data generated by Dr. Chen and colleagues revealed that majority of the adherent HCFs and HMSCs were in spindle-shape and perfectly aligned in a certain direction of the whirlpool-like shape, while cells were grown to near confluence. HMSCs positively stained for CD29 and HCFs expressed vimentin. HMSCs changed shape toward irregular polygon morphology after co-culture with HCFs over time, and the differentiating cells formed cell clusters, some of which resembled epithelial-like cells. The expression of CK12 was positive for immunocytochemistry staining in differentiated cells and further confirmed by RT-PCR. These results indicated that the differentiated cells acquired characteristics similar to those of corneal epithelial cells. Thus, they concluded that HMSCs isolated from human bone marrow were capable of differentiating into epithelial-like cells and possess the phenotypical characteristics of corneal epithelial cells.

Retinal detachment after open globe injury

In 2001, Kono Kono, Maier and Schmidt reported that retinal detachment after open globe injury has important prognostic and therapeutic implications. Presenting their paper at APAO 2016, Dr. Syam Suharyono and colleagues characterized the development of retinal detachment (RD) after open globe injury and determined those characteristics that could prevent RD. They collected data from medical records of open globe injury (OGI) patients from January 2011 to December 2014 at Sardjito General Hospital (Yogyakarta, Indonesia). Data regarding age, sex, causes, therapy, presence of vitreous hemorrhage, RD with B-scan USG examination, and ocular trauma zone were also collected. Their data revealed that the mean age of the 260 patients was 35 years (range, 1–72 years). Sixty-nine eyes were diagnosed with RD after open globe injury. Multivariable analyses were done for age, sex, orbital zone trauma, mechanism trauma, presence of vitreous hemorrhage, and time diagnosed with RD. Factors such as sex, [odds ratio (OR), 2.43; P = 0.039] and mechanism of trauma did not affect the development of RD (OR, 1.85; P = 0.255). Furthermore, older age (OR, 14.82; P = 0.002), higher zone trauma (OR, 3.55; P = 0.169), and vitreous hemorrhage were associated with RD development but not statistically significant. Average time to develop RD was within 4 weeks. The authors concluded that retinal detachment is common after open globe injury. Orbital zone trauma, age, sex, time diagnosed, presence of vitreous hemorrhage and mechanism of injury each could affect the development of RD and can result in poorer visual acuity. Early detection and treatment of RD could prevent visual loss or phthisis bulbi.

MustDo!

Run for Nepal, and return her to glory. Nepal was hit by a 7.8-magnitude earthquake last year, with additional traumatic aftershocks. This year, APAO has organized a run to assist in the ongoing relief efforts. Join a 5-km power run at Dadaocheng Wharf, and commit to raise at least US$100 for Nepal.
Delegates can also review their attendance at previous APAO congresses, their achievement award points, and can even generate a certificate of attendance!

Speaking about the attendees, Prof. Woung mentioned: “Over 5,000 delegates are expected to come from over 60 countries to be a part of this event. The congress will have more than 700 distinguished ophthalmologists and visual scientists from more than 60 countries all set to participate in invited programs.” The submission of 1,300 papers reflects the high academic interest vested in the congress. The different sessions will enable our participants to keep abreast of the latest developments in different spheres of ophthalmology,” Prof Woung further added.

The Presidential Dinner hosted on March 24, 7:30 pm to 9:00 pm, at Silks Palace, is all set to awe its invited guests with chances to eat replicas of the treasures exhibited at the National Palace Museum. Prof Hyung-Woo Kwak Memorial Symposium will take place on Mar 24, 11:00 a.m. – 12:30 p.m. in Banquet Hall, 3/F, Taiwan International Convention Center (TICC) to commemorate Prof Kwak.

What’s in store at APAO 2016 and beyond?

In an effort to cater to the growing needs for eye care, APAO again brings together highly respected and internationally renowned speakers for knowledge sharing about different aspects of clinical, basic, and academic ophthalmology subspecialties. APAO 2016 will address all the important areas of eye care in a diverse group of countries in Asia Pacific to impact the future of ophthalmology.

Shedding light on the progress of the congress in coming years, Prof. Woung revealed: “APAO 2017 will be held in Singapore on March 2 to 5, 2017, with the theme ‘Discovery, Innovation and Practice’; APAO 2018 will be take place in Hong Kong on February 8 to 11, 2018.”

With its unwavering commitment to quality scientific exchange, APAO has emerged as a premiere ophthalmology research and instructional meeting in the Asia-Pacific region as well as beyond. This world-class congress has risen above the level of a scientific educational event to become a unique platform of shared learning, knowledge, research and networking for delegates from across the globe.

APAO 2016 will open the doors of new collaborative opportunities and networking, besides welcoming its attendees with warm hospitality, delectable cuisine, multi-faceted culture, and so much more that Taipei has to offer.
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糖尿病黃斑部水腫(DME)所導致的視力損害。

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－糖尿病黃斑部水腫(DME)所導致的視力損害

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－Eylea開始治療時為第一個月每月注射1次，繼續注射3次，之後則為每2個月注射1次。患者於治療一年後，若病情需要，建議注射方式為每4-12週接受1次治療。

中央視網膜靜脈阻塞(CRVO)續發黃斑部水腫

－每個月注射1次；若需於治療，第6個月為每個月注射，大部分的進步出現在前3個月。治療必須持續並依據視力和/或解剖學結果延長治療時間，但目前沒有足夠的證據決定應延長多久的治療間隔。正常情況下，應於注射採訪時做監測。

－治療開始至完成治療期間，臨床治療醫師應依據病患個別的反應來決定監測時程。

－糖尿病黃斑部水腫(DME)所導致的視力損害

－Eylea治療開始時為每個月注射1劑，連續注射5劑，之後則為每2個月注射1劑。若視力與解剖結果顯示病患未因持續治療而受益，應停用Eylea。

禁忌

禁用於對活性物質aflibercept或本產品任何賦形劑過敏的病患。
活動性或疑點眼部或眼周感染。活動性重度眼內發炎。

醫護與注意事項

玻璃體內注射相關反應(眼內壓升高)、免疫原性及全身性反應(包括非眼球出血及動脈血栓塞事件)。

常見的不良反應(至少5%的EYLEA治療病患)為結膜出血(25.0%)、眼眶疼痛(10.2%)、白內障(7.9%)、眼內壓升高(7.5%)、玻璃體剝離(7.4%)與玻璃體漂浮物(6.5%)。