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Highlights

4 The SOE symposium emphasized that early discovery of visual abnormalities like strabismus is critical in getting best prognostic outcomes.

6 A panel of experts discussed the latest updates in the on-going trials on DME and anti-VEGF agents.

10 The Jose Rizal International Medal lecture and subsequent talks honed in on childhood eye tumors and recommended ways of best managing the conditions.

Arthur Lim Lecture Awardee

Prof. Ava Hossain Continues Legacy in Blindness Prevention

by Gloria D. Gamat

Recognizing the contribution

and legacy of Professor Arthur Lim Siew Ming, 'father of ophthalmology' in the Asia-Pacific Region and founder of the Asia-Pacific Association of Cataract and Refractive Surgeons (APACRS), the Arthur Lim Lecture Award at the 31st Asia-Pacific Academy of Ophthalmology Congress (APAO 2016) was given to Professor Ava Hossain, M.D., Ph.D., respected ophthalmologist not just in Bangladesh, but in the Southeast Asian region as well.

During the symposium session on challenges and opportunities of blindness prevention in the Asia-Pacific region, Prof. Hossain talked about the blindness prevention scenario under the National Eye Care Program of Bangladesh.

The said program, which Prof. Hossain helped developed herself, was established by the Government of Bangladesh as a participant in Vision 2020 – the global campaign for elimination of avoidable blindness by 2020.

Bangladesh's national eye care plan focuses on effective public health policy and practice and has contributed to decreasing the huge backlog in treatable blindness due to cataract. Further, three major areas of disease control have been prioritized in this eye care plan: cataract surgery, childhood blindness prevention, correction of refractive errors and low vision while at the same time recognizing the need to pay attention to subspecialty services such as those for cornea, retina, glaucoma, etc. as emerging priorities.

Prof. Hossain's contribution to this program is truly noteworthy. Along with her team, they have organized screening programs in rural areas covering about 100 million people and conducted IOL implantation on about 168,200 eyes in the last 33 years.

Also working in the field of ocular trauma, Prof. Hossain and her team have developed an innovative manual that highlights awareness and behavioral change as key factors in the prevention of ocular trauma and eye protection. Today, the manual is widely used by the primary eye care providers in Bangladesh.

Indeed, Prof. Hossain is following the examples of Prof. Arthur Lim as evident in his famous words: "If you operate on one man, you restore vision to one man, but if you teach your colleagues how to perform quality cataract surgery, they will solve the problem of cataract blindness in the world."

SnapShot!

Delegates experienced world-class entertainment yesterday at the APAO Gala Dinner.

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EYLEA® 采視明®
已核准3項適應症

103 8 1

( )

(CRVO)

(DME)

Eylea適應症
- 適用於治療血管新生型 (溼性) 年齡相關性黃斑部退化病變。
- 中央視網膜靜脈阻塞(CRVO)續發黃斑部水腫所導致的視力損害。
- 糖尿病黃斑部水腫(DME)所導致的視力損傷

劑量與投藥方式

Eylea 2 mg aflibercept (50)

血管新生型(溼性)年齡相關性黃斑部退化病變(wAMD)
- Eylea開始治療時為前三個月每個月注射1次，連續注射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；樞紐試驗中，前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間隔，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，應於注射探訪時做監測。治療間隔延長至完成治療期間，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。

活動性或疑似眼部或眼周感染。活動性重度眼內發炎。

警語與注意事項

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

最常見的不良反應(至少5%的EYLEA治療病患)為結膜出血(25.0%)、眼睛疼痛(10.2%)、白內障(7.6%)、眼內壓升高(7.5%)、玻璃體剝離(7.4%)與玻璃體漂浮物(6.9%)。

詳細產品資訊請參考衛生署核准之產品說明書
Version: EU Apr2015/ TW05
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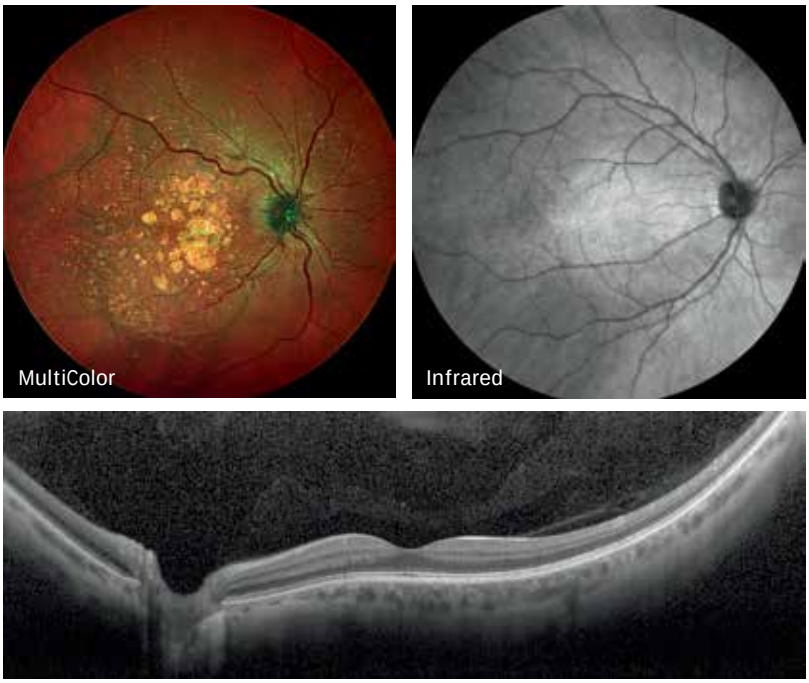
SPECIAL REPORT on Widefield Imaging

Conventional methods of screening and assessment of peripheral retinal diseases, such as diabetic retinopathy, retinal vein occlusions, choroidal masses and vasculitis, have relied upon the use of images obtained from normal angle fundus cameras.[1] However, with recent methods incorporating widefield and ultra-widefield (UWF) fundus and OCT imaging, a wider area of the retina can be imaged with fewer images, and with less dependence on a photographer's experience and skills. Widefield images can detect peripheral pathology not typically seen in standard photographs, which could certainly broaden our understanding of disease severity and guide new indications for treatment.

The epidemiology of diabetes mellitus is rapidly changing, and consequent upon the increasing prevalence of diabetes mellitus, the demand for diabetic retinopathy (DR) screening platforms has risen sharply in recent years. Early detection and treatment of DR are key public health interventions that have the potential to greatly reduce the likelihood of preventable loss of vision.

Widefield Imaging Module

Widefield fundus and OCT
The Widefield Imaging Module provides the standard field of view of a mydriatic fundus camera for all SPECTRALIS fundus and OCT imaging modalities, simplifying diagnostic protocols and facilitating detection of peripheral pathology.



How SPECTRALIS OCT fits in the retinal imaging picture

Currently, hospital based DR screening programs typically employ retinal fundus photography, which relies on skilled and experienced readers for manual DR screening. However, this is labor-intensive and suffers from inconsistency across sites. Hence, there has been a recent proliferation of retinal image analysis platforms, such as the SPECTRALIS (Heidelberg Engineering, Heidelberg, Germany), that may potentially alleviate this burden in a cost-effective manner. Furthermore, conventional screening programs that rely on 2-dimensional fundus photography do not effectively screen for diabetic macular edema (DME). Optical coherence tomography (OCT) is becoming increasingly recognized as the reference standard for DME assessment and can potentially provide a cost-effective solution for improving DME detection in large-scale DR screening programs. Current screening techniques also are unable to image the peripheral retina, and require pharmacological pupil dilation; ultra-widefield imaging and confocal scanning laser ophthalmoscopy, which address these important drawbacks, are urgently needed as effective screening and diagnostic tools.

The Widefield Imaging Module available on the SPECTRALIS multimodal platform provides the standard field of view of a mydriatic fundus camera for all SPECTRALIS fundus and OCT imaging modalities, thereby simplifying diagnostic protocols and facilitating detection of peripheral pathology.

The SPECTRALIS Ultra-Widefield Angiography Module captures an extremely wide field-of-view in one shot. It delivers evenly illuminated, undistorted, high-contrast images even in the periphery. The Module is compatible with SPECTRALIS® high-speed video angiography, ultra-widefield fluorescein and ICG angiography and can be performed as single procedures or simultaneously. The non-contact design makes peripheral imaging with the Ultra-Widefield Angiography Module convenient for both patient and operator. This easy-to-use module further extends the broad range of the SPECTRALIS imaging platform.

References:
1. Saine PJ. Focusing The Fundus Camera: A Clinical Approach. J Ophthalmic Photogr. 1992;14(1): 7-24.

Symposium in Focus: Walking Along the Silk Route – **Where East Meets West**

by Helin Räägel

Strabismus is a condition where binocular vision is hindered due to failure in directing both eyes simultaneously towards the same fixation point. This condition may affect up to 4% of people, and can manifest either from birth or can be induced by age. Ophthalmologists can choose to treat it with surgical or non-surgical intervention.

In their lecture presentations, Dr. Yair Morad (Tel Aviv University, Israel), Dr. Miho Sato (Hamamatsu University School of Medicine, Japan), and Dr. Takashi Negishi (Juntendo University Faculty of Medicine, Japan) all described different possible ways to surgically interfere with and treat patients affected with strabismus.

Shortly, during the procedure, an incision is made to the eye to expose the ocular muscles responsible for eye fixation, and the muscles are surgically tied together to correct for the ocular positioning. Dr. Sato suggested in her talk the utilization of simultaneous two-muscle surgery to acquire best results during the operation. However, the number of cases used in her study is too small to make detailed data comparison between the optimum outcomes of either a single or a combinatorial muscle surgery.

Dr. Negishi, on the other hand, emphasized the importance of performing a radial incision during surgery to prevent excess damage and distress to the eye. This issue was also brought up by Dr. Bing-Herng Shen (Ophthalmological Society of Chinese Taipei), who highlighted the different causes of trauma possibly leading to myotoxic effects either by damaging a nerve in the process or creating toxic conditions through anesthesia, exposure to toxins during surgery, among others. He stressed that every ophthalmologist, no matter where they are from, whether from the east or the west, from the past or present, will have to face the issue of complications of undesired toxicity during the procedure. We can only hope that progress made in techniques can minimize this in the future.

As a complementary analysis, Dr. Giovanni Marcon (Dr. Giovanni Battista Marcon Eye Care Center, Italy) proposed the application of magnetic resonance imaging (MRI) analysis to assess and diagnose the size and features of the specific intraocular muscles before any steps of surgery are taken. Preliminary data from his studies indicate that MRI is an important tool in characterizing the pre- and post-operative state of these muscles, and could provide a valuable guideline for determining whether surgery should or should not be utilized.

Dr. Boon Long Quah (SNEC, Singapore) presented the importance of non-surgical intervention, especially in children younger than 10 years of age. He showed data demonstrating that non-surgical approaches like part-time occlusion or partial patching, and the use of special eyewear can have a significant impact on the outcome of the treatment for children between ages of 3 and 10 years. Nevertheless, the condition may return later on, and 50% of the children affected will eventually need to undergo surgical intervention. Based on his findings, he proposed a decision tree for clinical use for evaluating and determining whether a patient needs surgery, and if yes, a chart to help to identify the appropriate surgery for the condition.


Dr. Boon Long Quah


Dr. Giovanni Marcon

As vision is a key component to perceiving the world around us, all speakers of this session agreed that early discovery of any abnormalities in vision can lead to the best outcomes for prognosis. Therefore, they encouraged the patients to pay close attention to their own and their children's vision and turn to their doctor as soon as signs of aberration occur.

Symposium in Focus:

Therapy Options and Healthcare Cost of Uveitis

by Helin Räägel

The main goal in uveitis treatment today is finding durable corticosteroid-free replacement therapies for patients affected by this disease. Although there are regional differences in the first-order therapeutics used to treat it, corticosteroids are still currently the most commonly used treatment strategy for uveitis, especially in Europe. During the course of treatment patients receive continuing doses either topically, regionally or systemically.

Dr. Timothy Lai (The Chinese University of Hong Kong) addressed this issue and stated that due to the potential for local or systemic side effects, including an increase in intraocular pressure and cataract formation, corticosteroids should only be administered for acute management of active uveitis. For all other cases, alternative methods or drugs (i.e. immunosuppressive agents or biologics) should be utilized.

Dr. Nobuyoshi Kitaichi (Hokkaido University, Japan) demonstrated the different strategies used in different countries and highlighted that even though Asian region uses less corticosteroids, and more colchicine as the primary choice for treatment, patient data indicates that the latter might not be strong enough on its own to eliminate the effects of uveitis since patients went blind after 3 years despite receiving treatment.

Due to this, they carried out a research study in Japan, using infliximab (IFX), a chimeric monoclonal antibody biologic drug that works against tumor necrosis factor alpha (TNF-α), and suppresses the immune reaction. A large portion of patients receiving this treatment displayed improved outcomes, especially the ones with severe ocular

Dr. Nobuyoshi Kitaichi

attacks. They also reported that the interval between IFX injections should be decreased for optimal outcomes, and proposed a new guideline for treatment of uveitis: the first-line drug should be colchicine/corticorsteroids/azathioprine. If the patient is non-responsive, then cyclosporine should be used in conjunction. Finally, IFX should be used as a third line of treatment, especially in severe active cases, where the cyclosporine step should be omitted entirely.

The choice of treatment does not, unfortunately, only lie in the development of optimal protocols. A number of issues arise from the availability and also the cost of these therapeutic agents. This is especially true for biologic drugs such as IFX. Thus, studies showing the increased cost-efficacy relationships need to be performed to critically review current treatment plans and policy. To accomplish this, large cohort studies on the incidence of the disease regionally as well as the proper analysis of the total costs of alternative treatment plans need to be carried out. Dr. Chang-ping Lin (National Taiwan University Hospital, Taiwan) and Dr. De-Kuang Hwang (Taichung Veterans General Hospital, Taiwan) described the population studies carried out in Taiwan to assess the risk factors of causes of uveitis and the prognosis in order to, in the future, set up specific guidelines for biopsy characterization and laboratory procedures to create a uniform system to identifying the severity of the disease in patients. Moreover, Dr. David Chu (Metropolitan Eye Research & Surgery Institute, New York, USA) charted the results of a study carried out in United States with data from commercial insurance companies to compare patient costs for alternative uveitis treatments (corticosteroid versus immunosuppressive agents versus biologic agents). Results clearly demonstrate that despite the fact that biologic agents are more costly, the total cost of patient treatment excluding the cost of drugs themselves significantly decreased, translating to a better care for the patients in the long run.

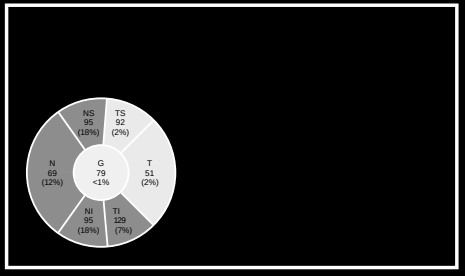
All in all, ophthalmologists need to realize that uveitis is a long-term life-altering illness that has been shown to have a similar financial and economic burden on society as diabetes or cancer. Therefore, to conquer the effects of this disease, clinicians and clinical researchers and all stakeholders in the ophthalmic world need to work together to develop optimal and affordable care options for the patients.

Dr. Chang-ping Lin

Retina and Glaucoma Imaging Platform

design. This platform allows clinicians to configure each SPECTRALIS to the specific diagnostic workflow in the practice or clinic.

Options include: OCT, multiple laser fundus imaging modalities, widefield and ultra-widfield modules, scanning laser angiography and OCT angiography*.



*Currently under development, not for sale yet.

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