Lim Lecture (APACRS 1)

10 June 2006, Saturday, 0900 – 0930 Hrs
Ballroom 1-2, Level 2

N01
MANAGEMENT OF MALPOSTIONED POSTERIOR CHAMBER IOLS
Samuel Masket, USA

Purpose: Posterior chamber IOLs have now been associated with late decentration as the capsule bag/IOL complex may exhibit late zonulysis; this phenomenon has been most typically associated with pseudoexfolaition, but may also be observed in patients who exhibit chronic inflammation, ROP, and other conditions that alter the blood/aqueous barrier. Furthermore, there are a variety of other causes that may induce IOL decentration either immediately or later following cataract surgery. The purpose of this presentation is to discuss the various causes for malpositioned PCLs and to consider the available alternative strategies to manage these case problems.
Methods: A certain set of skills is required in order to work surgically manage cases of this nature. Those skills include working with dim illumination, scleral and iris suturing methods, use of micro instrumentation, pars plana entry and vitrectomy, optic capture, etc.
Results: A number of case types will be presented and discussed. Individual evaluation and management are to be stressed.
Conclusions: Malpostioned posterior chamber IOLs are encountered with increasing frequency and a series of strategies are necessary for proper management. Closed chamber surgical techniques are presented and offer an opportunity for successful long term centration and fixation.

Susruta Lecture

11 June 2006, Sunday, 1030 – 1100 Hrs
Hall 603, Level 6

N02
A NEW PERSPECTIVE ON CATARACT SURGERY IN THE COMMUNITY
Sanduk Ruit, Nepal

Globally, around a little more than 15 million cataract operations are done per annum. A substantial proportion of these patients are not really blind when they are operated on. The magnitude of blindness due to cataract keeps on increasing, in spite of all the efforts taken by many.

The provision of high quality cataract surgery in the community is a big challenge, however a necessity. Developing innovative ideas of cost containment and efficient delivery of cataract surgery in the community have made this possible. Aggressive 'hands on' microsurgical training and re-training for cataract surgeons and the provision of appropriate equipment. Providing phacoemulsification surgery is becoming more realistic. However, it is going to take a few more years for all patients to receive this benefit. Good quality, small incision cataract surgery from a routine true temporal approach have been able to deliver consistently good visual outcomes - even long term.

The replication of models, for providing high quality surgery in the community, are now readily available. These models used with simple management and financial principals can become, not only financially sustainable, but also a source for income generation.

Suitable surgical techniques giving a consistently good visual outcome that could deliver cost effectively and efficiently. Achievable surgical centers run efficiently would change the scenario of cataract blindness, provided we address the proper composition of human resources and quality to address the same.

John Wilson Lecture

11 June 2006, Sunday, 1100 – 1130 Hrs
Hall 603, Level 6

N03
FROM CATARACT SURGERY TO DIABETIC BLINDNESS
Arthur Lim, Singapore

What greater honour than to deliver this special lecture named after Sir John Wilson who will always be remembered for his wonderful dedication to prevention of blindness throughout the world. In 1975 when the International Agency for the Prevention of Blindness (IAPB) was established by John Wilson, cataract emerged as a major global blinding problem. It was clear at that time that blindness from infections (onchocerciasis, trachoma, corneal ulcer) and malnutrition (xerophthalmia) will decline.

In the last 10 years glaucoma has emerged as a major cause of blindness of great importance because glaucoma destroys the optic nerve and blindness is irreversible. Today, we live in a fascinating world where everything is constantly changing and because of changing life styles – obesity and lack of exercise – diabetes mellitus has become more common each year and will be the major cause of world morbidity and mortality, affecting up to 50% in some populations. With this increase, diabetic retinopathy is poised to become the major cause of blindness in most countries.

Early diagnosis and treatment of diabetic retinopathy require early diagnosis of diabetes, good metabolic control, screening and the use of the LASER. As diabetes affects many other organs, ophthalmic surgeon has an obligation professionally not to ignore problems of the feet (gangrene and amputation), kidney failure (dialysis and renal transplant) and arterial sclerosis (coronary disease). It is now established that LASER in proliferative diabetic retinopathy

requiring 2,000 shots and diabetic maculopathy requiring grid treatment to the macula combined with good metabolic control and vitrectomy in severe retinopathy, 90% of eyes will retain good or satisfactory vision. Only 5% will have severe visual loss. It is clear that many eye surgeons will be involved in the management of diabetic retinopathy. It is essential that the eye surgeon must understand that his role in the management of diabetic retinopathy cannot be limited to the eye only. He must also address the other major problems of diabetes.

Ophthalmologists in the Asia-Pacific and the world will be kept busy with a disease which will soon become a crisis. As diabetes spread throughout Asia and the world, it will cause millions to suffer from its complications and early deaths and the costs of management and treating its complications have been estimated to bankrupt the medical budget of many countries. This is the new exciting worrying crisis in world blindness which will explode in most countries within 10 years – a challenge to all ophthalmologists.

De Ocampo Lecture

12 June 2006, Monday, 1015 – 1045 Hrs
Hall 603, Level 6

N04
SOME NEW DEFINITIONS IN HEREDITARY RETINAL DISEASES
Yozo Miyake, Japan

The development of electrophysiological techniques as well as molecular genetics has enabled us to detect some new clinical entities and/or new concept of hereditary retinal diseases. Our recent new discoveries are shown in this lecture.

Occult macular dystrophy is a newly identified macular dystrophy where the fundi and fluorescein angiography are normal. The key for diagnosis is the abnormal focal macular ERG in spite of normal full-field ERG. Clinical findings in our 46 patients include progressive decrease of bilateral visual acuity, color vision deficiency and autosomal dominant heredity. Most patients are misdiagnosed as having psychological eye problem, optic nerve disease, or problem of central nervous system.

Congenital stationary night blindness (CSNB) with normal fundi was termed "Schubert-Bornschein type" when it shows negative ERG configuration (a-wave larger than b-wave). Our analysis of 92 patients indicated that two different diseases are mixed, which we termed complete and incomplete CSNB. Our further analysis of phenotype as well as molecular genetics demonstrated that complete CSNB is a model disease of selective and complete dysfunction of ON-bipolar cell, while incomplete CSNB is a model of incomplete dysfunction of both ON- and OFF-bipolar cell.

Fundus albipunctatus (FA) is categorized as one of CSNB with unique fundus appearance. The clinical characteristic is the enormous delay of rod adaptation. RDH5 gene mutation was reported. We found that, in our 29 patients with FA, about 1/3 of patients are associated with cone dystrophy, sometimes showing bull's eye maculopathy, which is progressive. In addition to the delay of rod adaptation, their cone ERGs are essentially absent. However, they also showed RDH gene mutation. The concept that FA is a stationary disorder is to be corrected.

Zhang Xiao Lou Lecture

12 June 2006, Monday, 1345 – 1405 Hrs
Room 301-302, Level 3

N05
ALTERATIONS IN THE PATTERN OF EYE DISORDERS OVER TIME AND LOCATION
Wallace Foulds, UK

The pattern of eye disease varies from Country to Country and from one socio-economic Group to another.

The pattern also changes over time the prevalence of some conditions diminishing while that of others increases. Conditions that were common in the UK 100 years ago are uncommon now.

Major influences on the pattern of eye disease include:

- Genetic susceptibility
- Environmental factors including socio-economic factors
- Age and aging
- Undernutrition and overnutrition

An outline of how these factors interact to alter the pattern of eye disease in different locations and over time is presented with some comments on actions that could be taken to reduce visual loss and ocular morbidity from these various causes.

Nakajima Award/Lecture

13 June 2006, Tuesday, 1015 – 1045 Hrs
Hall 603, Level 6

N06
TREATMENT FOR CENTRAL SEROUS CHORIORETINOPATHY — THE ASIA EXPERIENCE
Wai-Man Chan, Hong Kong

Central serous chorioretinopathy (CSC) is a well-characterized disorder leading to serous detachment of neurosensory retina and retinal pigment epithelium of the central macula in young middle-aged individuals. Residual metamorphosia, color desaturation and relative scotoma are common complains despite a full recovery of visual acuity. Complications like diffuse retinal pigment epithelial

decompensation, subretinal fibrinous precipitates, descending atrophic tracts, dependent bullous retinal detachments, cystoid macular edema, secondary choroidal neovascularization, and fibrous scarring, however, may limit even the visual prognosis.

Initial studies on photodynamic therapy (PDT) with conventional dosage have been shown to be promising in stopping angiographic leakage and in hastening the absorption of subretinal fluid. Nevertheless, conventional PDT carries potential risks, including choroidal ischemia, transient or permanent visual loss and choroidal neovascularization development, and these might compromise the wide-spread application of PDT to treat all categories of CSC patients.

A disease-customized photodynamic therapy with a modified regimen has been formulated and demonstrated to be effective and safe in several clinical studies monitored by multifocal electroretinogram, optical coherence tomography and indocyanine-green angiography on patients with chronic, acute and steroid-induced CSC.

The results of a completed one-year follow-up study on chronic CSC and the 6-month randomized controlled study on acute CSC after receiving single modified regimen of PDT with verteporfin will be shared.

Holmes Lecture

13 June 2006, Tuesday, 1045 – 1115 Hrs
Hall 603, Level 6

N07
PRIMARY EYE CARE FOR UNDERSERVED POPULATION — LVPEI's VISION CENTRE MODEL

Gullapalli Rao, India

Primary Eye Care is perhaps the most neglected aspect of eye care, but a sound system at this level can have a significant impact on Prevention of Blindness. In most developing countries, the spread of eye care infrastructure and limited accessibility compound the problems of inadequate human resources and technology, and most attention tends to be focused on the development of high-tech, urban centers at the tertiary level. Primary eye care focuses mainly on prevention and early identification of vision threatening diseases and conditions, targeting eye health issues at a stage before they become major problems. Expending resources at this level is a definite step toward addressing issues of equity, reach and quality of eye care.

At L V Prasad Eye Institute, we have initiated a concept of Primary Eye Care through a system of basic eye clinics called "Vision Centres". Each centre serves a population of 50,000 and is staffed by one Vision Technician (trained for one year after high school), who is, in most cases, drawn from the same community. The center's functions include refraction and dispensing, detection of potentially blinding diseases, building linkages with other community services and screening in schools. The centers are linked to secondary care centers within a 50 km radius, and a referral system is in place for those who require tertiary level care. Twenty such centers have been set up thus far, and over the past two years, we have already been able to see an impact on care, quality, sustainability and awareness. These details will be discussed.