# Southern Ophthalmology

Newsletter One | March 2013

www.suresight.com.au

If you would like to receive our future newsletters by email, please email events@suresight.com.au

## Hawaiian Eye Conference Update 2013

Evan Soicher and Harry Leung attended the 2013 Hawaiian Eye Meeting at Waikokoa on the "Big Island". As usual the meeting was well attended and smoothly run. The format is short lectures on a specific topic by experts in the field. This ensured that a wide variety of topics in ophthalmology were covered. Below is part 1 of the highlights. Part 2 will appear in the next newsletter

#### **PART 1 - CATARACT SURGERY**

Femtosecond laser is being more widely used to remove cataracts. It is a hotly debated technique with cost and access being major issues. There is growing evidence that it causes less corneal endothelial cell loss and less energy is used to remove a cataract. At this stage there is no firm evidence that the visual results are better with laser assisted cataract surgery versus Phacoemulsification

Obtaining more accurate refractive outcomes will be enhanced by emerging technology such as continuous intraoperative wave front aberrometry and OCT. A real time image of the refractive outcome is obtained during surgery ensuring the adequate IOL power and position is chosen. We still cannot predict the final intra ocular lens position which limits this technology.

A number of new IOLs are being developed. An electro-active accommodative IOL appears exciting but is a long way off. The Fluid Vision IOL looks promising giving up to 5D of accommodation- clinical trials start this year. Previous meetings mentioned IOLs whose power could be adjusted post operatively and 'locked in' but these were not mentioned. The high tech presentations were tempered by excellent results with manual small incision cataract surgery in 3<sup>rd</sup> world countries.

#### **GLAUCOMA**

It is estimated that 80 million people worldwide will suffer from glaucoma by 2020 (75% with open angle glaucoma). It is important to identify patients who are at high risk of visual loss. Some of the risk factors are - female, Afro-Caribbean ,pseudo exfoliation, higher peak IOPs, disc hemorrhage, field loss in both hemifields, initial field loss, diabetics and age at diagnosis.

Variability in IOP is important and given the infrequency of measuring our patients IOPs we have inadequate information. The peak IOP is often outside office hours and may be related to the time of the day, activity, body position and profession. This can be addressed by phasing, sleep laboratories and home monitoring. The Proview tonometer (measures IOP via a closed eyelid) and ICare (rebound tonometry) are available for home IOP monitoring but have drawbacks. A number of devices are being developed to measure IOP at home. 'Triggerfish' is a contact lens with Bluetooth connection to a mobile device which looks promising. Various implantation devices eg) scleral or IOL may come to fruition.

Advances in imaging the optic disc include Quantative OCT Angiography. Swept source OCT (up to 100 000 scans/s) combined with 3d Doppler angiography provides an Optic Nerve Head Flow Index which correlates with glaucoma. This is being used experimentally at this stage. In contrast, less high tech techniques like finding and documenting disc hemorrhages are important. These usually occur super temporally or infer temporally. Patients with disc hemorrhages are more likely to lose vision and require more aggressive treatment and more frequent visits. Field loss often occurs 3 years or more after the haemorrhage is documented.

#### **PART 1 - CATARACT SURGERY cont**

An increasing number of glaucoma genes are being discovered which confirms- not surprisingly- that even sub types of glaucoma eg) open angle glaucoma is not 1 disease. The aim of gene testing is for screening, prognosis and gene therapy. There are now genetic tests for dominant and recessive forms of genetic glaucoma available. As more genes are found genetic testing for glaucoma will increase and change the way we manage our patients. Currently only families with congenital glaucoma, anterior segment dysgenesis as well as normal tension glaucoma and primary open angle glaucoma in young patients are undergoing genetic testing at the large glaucoma units in the USA.

### Southern Ophthalmology donates laser to Myanmar Eye Care Program



In December of 2012 Southern Ophthalmology donated a retinal laser to the Myanmar Eye Care Program (MECP). The second hand LUMENIS NOVUS SPECTRA laser (diode pumped solid state 532nm) was handed over to Dr Geoff Cohn who leads the MECP. The laser will be used to treat retinal diseases including diabetic retinopathy, retinal vein occlusions and retinal tears. We are delighted to contribute to this wonderful and worthwhile program. For more information on the MECP please visit the following website: <a href="http://www.eyefoundation.org.au/projects/sustainable-development/96-the-Myanmar-program">http://www.eyefoundation.org.au/projects/sustainable-development/96-the-Myanmar-program</a>



## Registration for the Optometrist and General Practitioner Symposium 2013 is now open

Where: Novotel - Brighton Beach Date: Saturday 15<sup>th</sup> June 2013

Time: 12 noon to 5pm (Lunch between 12 noon and 1pm)

Register at <u>www.suresight.com.au</u> and follow the Registration link or alternatively email to <u>events@suresight.com.au</u> or phone 9587 8585

Places are limited to 120 and filling fast, free parking on site available! Official Program will be available soon on our website

## Southern Ophthalmology

www.suresight.com.au

KOGARAH Suite 2A, Level 2, 4 Belgrave Street, Kogarah 2217 Tel: (02) 9587 8585 Fax (02) 9587 8279 MIRANDA Suite 1, Grnd Flr, 26-28 Gibbs St, Miranda 2228 Tel: (02) 9524 1449 Fax (02) 9524 1083 WOLLONGONG 441 Crown St, Wollongong 2500 Tel: (02) 4229 9772 Fax: (02) 4229 4773

