

CCLS Conference attracts large turnout

Rapid-fire presentations was the format used by the organisers of this year Cornea & Contact Lens Conference held at the Novotel in Rotorua last month. With a focus on world class education in the customary informal and fun-filled atmosphere, the new design of the programme format met with a positive response from delegates who found it stimulating and held their interest.

A world class line-up of speakers addressed over 200 delegates throughout the three days at this beautiful lakeside setting. The conference is highly regarded and is able to attract some of the most highly respected professionals as speakers in both ophthalmology and optometry related topics.

They shared their knowledge and wisdom to help practitioners keep up-to-date with all the latest developments in the contact lens and related fields. A conference like this would not be possible without the tremendous financial support from industry. Gold sponsors were Bausch & Lomb, CIBA Vision and Corneal Lens Corporation. Silver sponsors were Alcon and Ophthalmic Instrument Company.

The conference was well supported by a trade exhibition involving 14 companies. The report below by Keren Dravitzki and Hannah Kersten*, highlights some of the key points from the programme.

Lights, smoke, music, action! The CCLS Conference started with its trade-mark audiovisual extravaganza displaying photos and images from past events. Society President Greg Nel opened the programme by pointing out the high calibre of this year's speakers in both optometry and ophthalmology. The next few days then cemented this biennial conference as being a fantastic event in both educational and social terms.

NATHAN EFRON

Nathan covered a range of topics, and his famous bow-ties changed with every presentation. We have experienced ten years of the silicon hydrogel revolution and Nathan sung the praises of these lenses. Although the ten materials on the market have different Dk values he pointed out that there is no difference in oxygen flux to the eye. Improving contact lens comfort is in high demand and he outlined some lens factors that can help in that process. For example; design, modulus, lubricants.

Confocal microscopy allows views of the live cornea up to 680x magnification. Both silicone and conventional hydrogel lenses lead to reduced keratocyte count after six months of lens wear and also post cessation. This may be the result of mechanical stress leading to the production of inflammatory mediators



Deanne Graham, Sonia Swan, Shonit Jagmohan and Helen Gleave

and subsequent keratocyte apoptosis. Confocal microscopy has shown an increase in stromal microdots and endothelial blebs following contact lens wear, and useful in the diagnosis of acanthamoeba keratitis.

Nathan advocated that infiltrates found in contact lens associated keratitis is a disease continuum and disagreed with the Sweeny et al polynomial classification scheme. He pointed out that contact lens peripheral ulcers and microbial keratitis do not have to have peripheral and central infiltrates, respectively, but can occur in any location on the cornea.

A study looking at the fine plexus of nerves at the base of corneal epithelium using corneal confocal microscopy correlated well with the loss of nerves in diabetic peripheral neuropathy. Nathan raised the prospect of using this as a possible supplement of replacement of the invasive skin punch biopsy done on diabetics.



Kathryn Steeman of Precision Contact Lenses presenting her stand prize to Isla Hills of Mortimer Hirst Optometrists



Gerry Cairns, Manager of Medical Affairs for B&L Global Vision Care based in the US took time out of his holiday in NZ to visit the conference for a day. With him are from left Kelley Mirabello, Yvette Remeke and Michelle Jelley



The overseas ophthalmology guest speakers with Trevor Gray are from left: Steve Pflugfelder, Warren Hill and Perry Binder



Optometrists Gary Crowley, Pieter Du Plessis and Brian Gifford



Conference attendees checking out 4-in-1 TRK-1P from Topcon on the OHL EyeTech stand. From left: Brian Stewart, Diego Sonderegger (OHL EyeTech), Brian Naylor and Ross Gordon

STEPHEN PFLUGFELDER

Stephen was on the Delphi panel on Dry Eye in 2005 which recommended the term

discussed treatment options from lubricants, to contact lenses (particularly the Boston Ocular Surface Prosthesis), to

“I thought the conference was particularly well organised, with a good spread of topics of current interest. Also, I liked the ‘short sharp presentation’ format of 20 minute lectures, which helps to retain audience interest. And a great social programme, too. Well done CCLSNZ!”

Professor Nathan Efron

Dysfunctional Tear Syndrome (DTS). He outlined the severity and therapy of these levels; including pulse steroid therapy and cyclosporin-A.

When speaking on the anaesthetic cornea he outlined the causes and consequences of neurotrophic keratopathy. Then

autologous serum.

Corneal endothelium transplantation is an evolving new procedure to treat corneal endothelium disease that offers significant advantages over penetrating keratoplasty. Stephen discussed some of the pitfalls and approaches to deal with them.

ART EPSTEIN

Dry eye is a multifactorial disease of both the tears and the ocular surface, resulting in ocular discomfort and visual disturbance. Art discussed the many causes of dry eye, including systemic medications, blepharitis, sex steroid hormone imbalance and a neurotrophic cornea. Then the therapeutic strategies which range from palliative care to over-the-counter therapeutics including cellulose and HP-Guar based lubricants and prescription medications.

Seasonal allergic conjunctivitis and perennial allergic conjunctivitis are the most common forms of ocular allergy. Art explained that the allergic response is a three step process, beginning with sensitisation and followed by mast cell degranulation (early phase response) and a late phase response. The

late phase response is not typically found in the eye. He urged that when treating patients with ocular allergy, convenience is paramount and dosing frequency should be as low as possible. He outlined some studies that compared Olopatadine to Ketotifen, and mentioned steroids specifically targeted at allergy treatment.

to be conducted into the neuro-sensory factors that might cause this discomfort.

Eric was involved with a study that compared the objective and subjective clinical tests on the day of dispensing a multifocal contact lens to the results after four days of wear. Objective measurements were similar but the subjective

“What I really like about your society is the involvement of both international and local speakers. I learned a lot from local speakers.”

Perry Binder

Art discussed the risk factors for infections from contact lens and solutions. He encouraged the prescription of products that would disinfect properly, stop organism growth and prevent chemical keratitis (staining) due to preservative toxicity.

Contact lens complications are largely preventable and their causes are either primary or secondary. Primary causes are things the optometrist, patient or manufacturer does. Secondary causes include things the contact lens does to the eye, such as the disruption of normal ocular physiology.

responses were worse by day four. Again proving that fitting presbyopic patients can be a challenge!

TREVOR GRAY

Fuchs' endothelial dystrophy is the most common visually significant corneal dystrophy to be seen by optometrists and is usually asymptomatic in early stages. Trevor described the appearance and then outlined management options for symptomatic patients. These included hypertonic solutions (Muro-128 drops), a cool hair-dryer, high Dk bandage contact lenses, lubrication, and surgery as a

“What a delightful organisation this is! You guys got it right.”

Dr Warren Hill

ERIC PAPAS

Corneal infiltrates indicate the presence of inflammatory activity. Eric summarised the results of a study which showed risk factors for infiltrates were; tight contact lenses, extended wear, multipurpose solutions compared to hydrogen peroxide, and corneal staining.

Corneal staining with silicon hydrogel lenses has been a hot topic; especially the colour coded staining grids. Eric concluded that staining is a marker of corneal stress and we can reduce it by using daily disposables, hydrogen peroxide, and low risk combinations of solutions with contact lenses.

final resort.

Penetrating keratoplasty has been the traditional surgical management of the disease. However, more recently posterior lamellar keratoplasty (endothelial cell transplantation) has provided much faster vision recovery and ever-improving outcomes.

Trevor mentioned that optometrists play a significant role in recognition, monitoring and appropriate referral of patients with Fuchs' dystrophy.

PERRY BINDER

Dry eye is a major issue relating to LASIK surgery because of the severance of the superficial corneal nerves during flap creation. Perry

“This is a phenomenal meeting. The relationship between optometry and ophthalmology is a model for the rest of the world.”

Art Epstein

When he studied the visual performance of various contact lenses correcting for spherical aberration there was no difference between the brands on a variety of clinical tests. However, lens power can be different to that on the label so if you swap brands then check the new power on the eye.

While one third of new contact lens fits drop out of lens wear there is poor correlation between the symptoms of ocular discomfort and both corneal and conjunctival sensitivity. Therefore, more research needs

discussed results of a study conducted on unpreserved lubricants after surgery and found that they were effective in aiding visual acuity recovery and quality of vision.

JENNIFER CRAIG

We've all wondered whether spraying a liposomal spray like TearsAgain on the eyelids can help with evaporative dry eyes. Jennifer was cynical too and was surprised when her study showed positive results for up to 90 minutes after using the spray.

CONTINUED ON P14

RUSSELL LOWE

Russell dispelled many of the myths commonly associated with orthokeratology; including that it is painful, time consuming, complex, and that too many lenses are involved. He mentioned that 6/6 vision can often be achieved overnight if the patient's initial refractive error is less than -2.00 DS, and 90% of treatments are achieved in one to two weeks. Russell explained that the lenses affect the corneal epithelium and leave the corneal stroma unchanged. He advocated ortho-K as an alternative to laser refractive surgery for patients with less than 4 dioptres of myopia.

DEAN CORBETT

Dean outlined the five year outcome results of implantable contact lenses (ICL) in Auckland. The lens is additive to the eye, reversible, accurate and can include up to 6D of astigmatism.

SEAN EVERY

The Hudson Stahl line is caused by corneal ferritin distribution. In white light it can be difficult to see, but UV photography unmasks this line and shows its vortex pattern. Sean presented some interested photographs and discussed the changes with corneal surgery and disease.

SUE ORMONDE

The aetiology and presentation of corneal recurrent erosion syndrome (RES) was explained by Sue, who then went on to discuss its management. A useful tip was to use lubricants

at night for two months after corneal trauma to significantly lower the risk of getting RES.

MALCOM MCKELLAR

Malcom briefly outlined the numerous treatment options for posterior blepharitis. The one that created the most interest was expression of the inferior Meibomian glands using ciliary forceps. Warning: if trying this on yourself at home make sure to use a topical anaesthetic first!

WARREN HILL

There have been advances in corneal astigmatism correction with the newest generation of toric intraocular lenses (IOL). Warren outlined the preoperative measurements required, the use of an on-line calculator and where to place the surgical cut. He found that 97% of patients were spectacle free bilateral after having toric IOL surgery.

ROB ALLEN

Rob presented several case studies of RGP fitting in keratoconics and post-graft patients. He encouraged practitioners not to shy away from these more complex contact lens fits.

PETER WALKER

Peter gave a practical guide to fitting toric RGP lenses. This talk was predominantly aimed at optometrists with limited RGP experience.

NISHA JEYASEELAN

Nisha discussed the importance of obtaining accurate corneal topography in all areas of CL fittings, how to interpret it and some aspects of modern Ortho-K in the light

of currently emerging scientific evidence.

Workshops

A wonderful opportunity provided at the conference was the option for delegates to attend one of three workshops. They included: RoseK fitting for keratoconus, sorting ocular surface disorders, and fitting semi-scleral or reverse geometry contact lenses. These workshops were very popular and limited in size with some "live" patients that enabled delegates to observe the theory in practice.

Student Presentations

Jagrut Lallu and Shonit Jagmohan's research ventured into the previously uncharted territory of forensic optometry where they investigated the potential to use soft contact lenses in victim identification. Soft contact lenses were placed on pig eyes, with covered lids, and buried for three months with the lens parameters being re-measured following exhumation. It was found that, in closed eye burial, most soft contact lenses could be accurately identified by matching four of the five initial parameters. Jagrut and Shonit intend to further their research in this area.

In Jenny Wu's study they fitted neophyte subjects with second generation silicone hydrogel contact lenses and checked their adaptation time. Over an eight hour period the objective and subjective measures of ocular surface and corneal responses did not differ significantly. They concluded that the neophyte wearer may not need to gradually increase wearing time of silicone

hydrogel lenses.

Graft rejection is the leading cause of corneal graft failure in the first year post surgery. Endothelial rejection appears as circular hyper-reflective changes that are most likely inflammatory cells. Rachael Niederer's research showed that regardless of the initial site of rejection, alterations in all layers of the cornea can be seen with confocal microscopy of human corneal allograft rejection.

Charlotte Jordan's study aimed to analyse the characteristics of anterior segment maps in keratoconic patients presenting to a tertiary eye care centre. There was no statistically significant difference in severity between different ethnic groups and no statistical association between ethnicity, cone type and elevation. Keratoconus is a multifactorial disease with relatively asymmetric in its morphology.

Gala Dinner – Go Bush

The Saturday night of the conference was a great success, with many of the speakers, delegates and exhibitors attending the 'Go Bush' themed dinner, held in a marquee half-way down the scenic luge track nestled amongst towering Redwood trees. As has become the tradition, everyone dressed for the occasion. Costumes ranged from hunters with impressive moustaches to Tarzan and Jane to a Banana. George Bush himself even made an appearance! Prizes were presented for the optical pioneers vs. serial killers quiz with the range of answers being as varied as the

costumes. All in all a fabulous night was had, with plenty of good food, wine and some not so spectacular dancing.

* Keren Dravitzki and Hannah Kersten are optometrists at Black, Gates, Meek & Dong Optometrists in Lower Hutt

More stories and photos from the CCLS conference will appear in the June issue of NZ Optics



Prizewinners in the optical pioneers vs. serial killers quiz Grant Watters and Wilson Sue with Richard Johnson who was handing out the prizes



Richard Johnson, Debra So, Shonit Jagmohan and Jagrut Lallu at the Go Bush dinner



At the welcome function on the Lakeland Queen Paddle Steamer are from left: David Hooker, Nisha Jeyaseelan, Hunter Hill, Ian Russell and Jonelle Stobie



The overseas guest speakers were presented with gifts at the Go Bush dinner by out-going CCLS President Greg Nel (front right). From left are: Warren Hill, Eric Papas, Steve Pflugfelder, Art Epstein, Nathan Efron and Perry Binder



Catherine Yee, Sandhya Mathew, Suzanne Robertson, Sita Thakersi



Delegates from Auckland Eye Sue Ormonde and Dean Corbett



Delegates from Auckland Eye Sue Ormonde and Dean Corbett

Cleaner, safer, easier to use.

HOYA iSert™ PreLoaded IOL system


- 3 PIECE
- HYDROPHOBIC ACRYLIC
- ASPHERIC OPTIC
- BLUE BLOCKER
- PRE-LOADED
- SMALL INCISION

PY-60AD

HOYA DESIGNS FOR VISION

Toric & more!
Hydrophilic Acrylic injectable IOLs from Rayner

- WIDEST RANGE OF IOL SOLUTIONS
- NOW EVEN EASIER TO CALCULATE AND ORDER



- T-flex
- M-flex
- M-flex Toric
- Sulcoflex
- Sulcoflex Toric
- C-flex & Superflex

NEW! Raytrace™
On-line Ordering System.
Fast, easy calculation and ordering.

Rayner
www.rayner.com

Orders + Enquiries **0800 33 88 00**
Keith Procter Mob: **021 0270 0649**

OHL EYETECH

science in sight

First of its kind for assessing risk of developing Age-related Macular Degeneration (AMD).

Features and Benefits

- Early detection of potential sight loss allows for early intervention
- Cuts healthcare costs by detecting condition early
- Uses latest in electronics and LED flicker photometry
- Portable instrument with a small footprint
- Monocular – the most accurate method of detection
- Can be used by the general public – no detailed training required
- A 5 minute test which can help save one's sight
- Fast and accurate reporting of condition through Windows PC

Contact
for more information contact Robert Nyencamp
equipment@optical.co.nz
Freephone 0800 800 645

www.optical.co.nz