New Zealand Ophthalmology well represented at Asia-ARVO

BY PROFESSOR CHARLES MCGHEE

This year the Asia-ARVO international meeting on Research in Vision and Ophthalmology was held in Hyderabad, India, from the 15th to 18th January and attracted more than 2,000 delegates from around the world. Despite raised tensions over the recent events in Mumbai there were large contingents from the USA and Europe and a smaller group from New Zealand and Australia. A delegation from Auckland included Dr Peter and Alison Ring and Jasha Morarji from Eye Institute and Professor Charles and Jane McGhee, Dr Monika Pradhan and Stuti Misra from the New Zealand National Eye Centre, University of Auckland. Between them the Auckland team chaired three sessions, provided nine presentations and displayed six scientific posters – a credible representation of New Zealand ophthalmology and visual sciences.

Dr Ring was an invited speaker and symposium chair on cataract and refractive surgery. He presented two major papers completed with co-investigators Jasha Morarji and Dr Rasha Altaie (corneal fellow, University of Auckland): one on research upon "visual outcomes and higher order aberration differences between spherical and aspheric Restor multifocal IOLs", and the second on "Femtosecond versus microkeratome LASIK". Peter's extensive experience with both "all laser" and microkeratome-based LASIK and his review of two large groups of patients treated by himself at Eye Institute appealed to both conference delegates and the scientific judges. Indeed, Peter and his co-authors were awarded the prize for the best scientific paper in the Innovations in Refractive Surgery section!

At the Asia-ARVO conference dinner are from left: Stuti Misra, Charles McGhee, Monika Pradhan, Jane McGhee, Peter and Alison Ring and Jasha Morarji

Dr Ring and Jasha Morarji with the prize for the best Best Scientific Paper Award

Jasha also presented a unique poster on "Multifocal vision following phacoemulsification – a professional perspective" which generated further interest in the related papers and posters presented by the Eye Institute team. She displayed a further two posters in conjunction with Dr Altaie - the first on outcomes for a series of presbyopic patients undergoing surgery with insertion of multifocal IOLs and another on scleral sutured IOLs following trauma.

Dr Pradhan, a genetics fellow with Dr Andrea Vincent in the Department of Ophthalmology, presented a poster on an unusual case of TB drug induced optic neuropathy in a young man predisposed to toxicity by a genetic mutation. She also presented a key podium paper on genetic testing for retinal disorder in the public hospital system in New Zealand. Ms Stuti Misra, an optometrist who has recently commenced her PhD studies with Dr Jennifer Craig in the Department of Ophthalmology, presented a poster highlighting the role of heat goggles in enhancing the pre-ocular tear film lipid volume.

Professor McGhee, a familiar speaker in India, and who was on the International Scientific Advisory Committee for this Asia-ARVO conference, chaired two sessions and presented six lectures and free papers. His topics covered the wide range of research being conducted in the Department of Ophthalmology and the New Zealand National Eye Centre on; keratoconus, in vivo confocal microscopy, higher order aberration, new intra-ocular lens design, cataract, ocular response analysis, corneal topography and anterior segment reconstruction.

Following the conference the Rings and McGhees accompanied by Jasha, undertook an exotic journey through Southern India stopping at numerous palaces, temples and ancient cities from Bangalore to Goa while being fed and pampered on the 'Golden Chariot' train. Their unforgettable experience included a major birthday celebration for Charles and a final sojourn on a beautiful beach-side resort on the Arabian Sea.

The team on board the Golden Chariot Train

Skin Moles May Indicate Higher Eye Melanoma Risk

People with light skin and numerous moles and freckles that put them at higher risk of skin cancer may also have an increased chance of developing melanoma of the eye.

This is according to a new Canadian study, published in the March issue of *Ophthalmology*, that found links between people with atypical moles (which appear different in shape or colour from common moles) are 2.8 times more likely to develop uveal melanoma than people with no such moles. This study suggests that doctors need to be extra vigilant when patients have numerous moles or freckles and that further research into the role of UV light in susceptible populations is required.

The research team led by Ezekiel Weis, MD, MPH, Department of Ophthalmology, University of Alberta, Canada, performed a meta-analysis that adjusted for factors that might have skewed results of earlier studies.

"We want to confirm risk factors that people will be able to modify, so we'll have a better chance of preventing uveal cancer, and we want to know which patients are most susceptible so we can begin treatment, when needed, as early as possible," said Dr Weis. "Our study points to an interaction of genetic susceptibility and an environmental insult in the form of UV exposure."

Each year, 6 people per million develop uveal melanoma, the most common non-skin melanoma in the United States. It most often strikes people 70 or older who have light skin and eye colour and a tendency to sunburn; these risk factors were identified by Dr Weis and colleagues in earlier research. Caucasians are most susceptible, and risk levels decline as skin pigmentation increases across ethnic groups. Uveal melanoma may also result when melanoma from another site metastasizes. In the early stages the disease usually has no symptoms.

Although treatment is available, the mortality rate remains high, especially when the ciliary body or choroid is involved.

Infection Rates Low with New Cataract Surgery Techniques

A large study by Canadian researchers has found that endophthalmitis continues to be rare following cataract surgery. The study, published in the March issue of *Ophthalmology*, the journal of the American Academy of Ophthalmology, provides reassurance on infection risks following cataract surgery.

Because surgical techniques and patient selection criteria have evolved rapidly in the past several years, the researchers wanted to learn whether infection risks were changing as a result. The largest previous study, completed in 2001 using records of half-million United States Medicare cataract patients, had documented very low infection rates.

Chaim M. Bell, MD, PhD, and Wendy Hatch OD, MSc, University of Toronto, Canada, and their colleagues reviewed records for more than 440,000 consecutive cataract surgeries performed in surgical facilities in Ontario, Canada, between April 2002 and March 2006. To estimate infection rates, the study tracked post-operative procedures to treat suspected infections that occurred within 14 days of cataract surgery.

The overall rate of suspected acute endophthalmitis was very low; 1.4 per 1,000 surgeries. Patients who required procedures to correct ruptures of their lens capsule, the structure that contains the eye's lens, during their cataract surgery were about 10 times more likely to develop suspected infection, but fewer than 1 in 200 sustained such a rupture. The highest rate of suspected endophthalmitis occurred in patients over age 85 (2.18 per 1,000). Men were at somewhat higher risk than women (1.7 vs. 1.19 per 1,000). No differences in rates were found between patients living in rural vs. non-rural settings, nor were differences noted among socioeconomic groups. No upward or downward trend in suspected endophthalmitis related to cataract surgery was evident during the study period.

100 Day Action Plan on Health underway

Three Auckland District Health Boards have presented Health Minister Tony Ryall with their proposal to build the first of the Government's new dedicated Elective Surgery Super Centres – the first cluster of the 20 promised elective surgery operating theatres.

"The Auckland DHBs have taken up the challenge to urgently submit a proposal to build the first Super Centre complex as a regional project. The new proposal is the result of strong clinical input and regional teamwork," said Mr Ryall. "A formal business case will now be prepared.

"We have inherited a crisis in health, particularly in elective surgery, and this announcement ticks off the Government's 100 Day pledge to start tackling hospital waiting lists."

The Government's 20 new elective surgery operating theatres and 800 extra trained staff are essential if access to elective surgery is to be improved for NZ patients into the future.

Ministry reports confirm that access to specialist appointments has declined in real terms even more seriously than elective surgery. The population grew by 9.6% but the people getting to see specialists increased by only 0.7%.

It is clear that the failure to maintain access to elective surgery, let alone improve, has placed great pressure on district health boards who are struggling to address many other vulnerable services in their regions as well.

The National government has pledged to spend around $180 million over five years building new dedicated elective surgery theatres. International and domestic experience shows that separating elective care from the pressures of acute (or emergency care) reduces waiting times and cancellations, achieves better workflow, improves training opportunities, enhances patient care, and improves productivity. This will help those on waiting lists and those culled from them to have the operations they need.

"We intend to work with the best people across the health service to reverse the decline in access to services," said Mr Ryall. "This will take strong clinical leadership across the regions as well as district health boards working together."