

The national newsletter of the Australian Ophthalmic Nurses' Association

New Developments in Glaucoma Monitoring

Detection of progression in glaucoma

patients is vital to ensure preservation of sight. Until now this has been achieved by regular snapshots of visual acuity (VA), intraocular pressure (IOP), visual field (VF) testing and more recently Optical Coherence Tomography (OCT) and comparing all of these parameters with previous results. Single readings don't account for the diurnal fluctuations of IOP nor the impact of age affecting reliability of VF testing; so we ask how accurate is this snapshot?

Firstly we need to gather sufficient data on which to base clinical decisions then we need accessibility to the data.

Research and technology are addressing both of these facets; firstly by continuous monitoring of IOP to provide more comprehensive data base, secondly with better management and accessibility of the data and statistical analysis of the data collected. Cont P2

Calendar of Events

October

	27 th - 28 th	AONA National Conference, Perth
	28 th - 1 st Nov	RANZCO Annual Scientific Meeting
	November	
	18 th	AONANSW Clinical
	25 th	AONAVIC Annual Conference
	25 th	AONAQ Clinical Meeting
		Royal Brisbane Hospital
December		
	9th	Tasmania Clinical
		The Eye Hospital Launceston

What are... Carbonic Anhydrase Inhibitors??

 ${f C}$ arbonic anhydrase inhibitors can be administered both systemically and topically

for treatment of ophthalmic conditions. One such drug called acetazolamide, or Diamox[™], is used commonly in ophthalmology and deserves more discussion. Diamox[™] is available in intravenous (IV) and oral preparations. Cont P6

Continuous IOP Monitoring Cont

Continuous monitoring involves either regular, intermittent measurements, intermittent 24 hour measurements or permanent 24 hour monitoring. Regular intermittent measurements involves teaching patients to use a home use iCare at set times which digitally records results, these are down loaded to the ophthalmologists computer.

External 24 hour technology.

Both intra-ocular and extraocular monitoring methods are being researched.

An example of an external devices is the SENSIMED Triggerfish, a soft contact lens with telemetric sensors that reads the IOP by measuring the circumference of corneoscleral junction, *(which*)



research has shown to increase and decrease consistently with varying IOP). Information is transferred via a thin cable connected to the antenna of a portable recorder

worn by the patient for twenty four hours. Again data is downloaded to the



computer for analysis. It is a still a snapshot but a much more comprehensive one. And as you can see the device is not appropriate for continuous wearing so is not viable as a

ophthalmologists

continuous device.

Another external concept is to place the device onto the sclera, again research has shown that scleral tissue responds consistently to variations of IOP.

Intraocular Devices

These require implantation into the Anterior Chamber, stand alone or in conjunction with cataract surgery or into the vitreous using wireless technology to collect data; human trials have begun with some devices but are at an early stage. All of the risks if intra-ocular surgery apply. To asses the viability of the device in the eye it has been soaked in normal saline for 4 years with no apparent loss of function or deterioration of components.

<u>Data Analysis</u>

Jun 15, 201

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Nov 29, 201

Analysis of the findings requires all of the relevant patient data be collated and compared to ascertain if progression has occurred, clinical decisions are based on these analyses. New data management programs are able to collate and analyse the raw data of VF and OCT, singularly or jointly, constructing reports from sequential VF &/or OCT, making all of the relevant information easily accessible and enabling the creation of trend analyses that demonstrate rates of progression over time. Interventions such as surgery, laser, medication alterations, can be notated into the data and reports constructed that demonstrate the efficacy of the intervention in comparison to non-intervention. These results can demonstrate the outcomes to the patient. We still don't understand the fundamental mechanisms of glaucoma but we do know that IOP plays an important role in progression. Increased data collection and better management and accessibility to the information will lead to

better management of the disease until we do. Pat Usher RN



www.eyeworld.org/ article-continuousmonitoring-of-iop http://swissmed.asia/ shop/diagnostics/ sensimedtriggerfish-24-houriop-monitoring/ https://

tspace.library.utoronto.ca/handle/1807/68992 Pict 1. https://static-content.springer.com/image/ art%3A10.1007%2Fs12325-016-0388-4/MediaObjects/ 12325_2016_388_Fig1_HTML.jpg

http://iovs.arvojournals.org/article.aspx?articleid=2585052 http://iovs.arvojournals.org/article.aspx?articleid=2585052 https://www.zeiss.com/meditec/int/products/ ophthalmology-optometry/forum-guiding-your-decisions/ forum-viewer-app.html

IONA Conference 2017-Vision of the Future

A Reflection

Cheryl Moore (MN- Nurse Education, PRNC-Ophthalmic Nursing, RN)





Despite the troubles seen in

London on the eve of my flight in June, I landed in a vibrant, friendly and exciting city. Happy to be back and delighted that the two (2) abstracts I submitted to the IONA council, had been accepted.

On a personal note I was excited to return to my home country to present at this international conference. It made me feel proud of my achievements in ophthalmic nursing that I had commenced some 25 years before.

On Saturday June 17th, 80 delegates from around the UK and overseas joined together on a hot summer day in London to celebrate all things ophthalmic. I was up at 4am due to extreme jet lag so had time to get to the venue! The conference was held at 30 Euston Square, home of the Royal College of General Practitioners.

Program Summary

There were 11 presentations given on the day.

Keynote address

Prof Joshua Silvers who flew from Paris presented the keynote address titled "Getting glasses to everyone who needs them" Goggle this Professor and you can read the trials and tribulations he has faced trying to make a pair of glasses that have variable focus lenses, with remarkable accuracy, for just one British pound.



Link to video:

https://youtu.be/SAUJYv5pOxQ



Nurse led clinics

There were 3 lectures presented by Nurses who conduct Nurse –led Clinics.

I was interested in the intravitreal nurse led clinic. It surprised me to learn that the presenter, who was conducting a clinic performing intravitreal injections, had limited ophthalmic knowledge regarding the disease processes occurring for whose conditions. I feel here in Australia we have less of these advance practice skilled ophthalmic nurses but a great deal of ophthalmic nurses with advance base knowledge and experience.

The other presentations highlighted the struggles to set up such nurse-led clinics but once running showed data that confirmed the reason they exist. One of these presentations by Lynne Hadley "Nurse-led Botulinum toxin Clinic" will be repeated on the Eye TeleC event for October.



Charles Bonnet Syndrome Important note:

Education of our nursing peers and other healthcare workers is crucial. Here in Australia **RANZCO** have endorsed a **position statement** urging ophthalmologists to openly discuss the possibility of CBS. I believe **Ophthalmic Nurses** are also in a prime position to make a difference in alleviating anxieties patients face.

My presentations:

Charles Bonnet Syndrome (CBS): What do you see?

The purpose of the presentation was to improve the awareness of CBS and to discuss some strategies on how to assist ophthalmic patients so that clinically significant negative outcomes are limited. With CBS an under-recognised condition affecting 10-40% of people who have significantly lost vision, awareness is essential so that misdiagnosis and treatment of non-existing psychiatric disease is prevented. This in turn will alleviate the anxieties patients face when seeing vivid hallucinations.

Some facts about CBS:

- CBS is **common** in low vision patients- 10-40%
- CBS- Characterised by vivid, simple to complex recurrent visual hallucinations
- CBS is reported to have a longer duration than previously suspected (up to and beyond 5 years)
- 1/3 of those affected have clinically relevant consequences. Therefore interventions are required

My 2nd presentation:

'Eye TeleC' Educating Ophthalmic Nurses Across NSW, Australia.

The main aim of the presentation was to show how this successful form of education is delivered to ophthalmic nurses across NSW, Australia.

Eye TeleC is education conducted via teleconference, this being a convenient mode of delivery.

Content looks at ophthalmic practice, research, issues of professional interest and policy development.





Eye TeleC Events 2017

The Eye TeleC events take place over 1 hour. They provide the opportunity to engage in ophthalmic issues/ practice. A guest speaker presents on the chosen topic for 30 minutes and then the phone lines are open for discussion amongst the participants.

Teleconferences are recorder so other members can review at a later date.

These education sessions via teleconference are a welcome addition to our educational opportunities we offer our members.

One of the surprises that have come from this program is the detailed discussion that takes place during the teleconference. I think this has been so because of the relaxed atmosphere that has been created. However I am please to report that 88% of members stated that they have spent more time researching after the teleconference had concluded. Therefore, the Eye TeleC events have met the aim.

Join us for the next event- check website and advertising-October 14, 2017. Contact me if you wish to participate.



IONA 2017 Venue- 30 Euston Square, London, UK.

Cheryl Moore Text- 0437898202 Email: cherylmelo@bigpond.com

Carbonic Anhydrase Inhibitors Cont

Acetazolamide inhibits the action of carbonic anhydrase thereby decreasing bicarbonate production, resulting in a decrease the amount of aqueous produced in the eye. Reduced aqueous production results in a decrease in intra-ocular pressure

(IOP). Acetazolamide is most commonly used in ophthalmology for the treatment of patients with raised IOP, or prophylactically to prevent a rise in IOP following intraocular surgery.

This process also increases

the amount of bicarbonate lost from the body through the kidneys. Higher levels of bicarbonate in the kidneys leads to a small increase in the water lost from the body as urine. Therefore, acetazolamide has a mild diuretic effect.



Acetazolamide should be used with caution in patients with airway, liver or kidney disease and the elderly. It should **not** be prescribed for patients with: •Allergy to medicines from the sulphonamide

group

- Chronic non-congestive glaucoma
- Failure of the adrenal glands High levels of chloride in the blood, resulting in high acid levels in the blood (hyperchloraemic acidosis)
- Low blood potassium levels (hypokalaemia)
- Low blood sodium levels (hyponatraemia)
- Severe kidney disease
- Severe liver disease
- Pregnancy or breastfeeding

There are several *side effects* associated with the use acetazolamide. The ophthalmic nurse has a responsibility to educate the patient prescribed this drug about the possible side effects of the medication. These include:

- Skin rashes, itching or peeling
- Headache
- Thirst
- Changes in mood
- Fatigue
- Decreased appetite and alteration in taste
- Pins and needles (paraesthesia)
- Dizziness
 - •Flushing

•Increased production of urine (polyuria)

(http://www.netdoctor.co.uk/medicines/ 100000752.html)

For more information on acetazolamide go to:

https://www.nps.org.au/medical-info/medicinefinder/diamox-tablets

https://www.nps.org.au/medical-info/medicine-finder/glaumox-powder-for-injection



AONA WA

President Report September 2017 Gina Storey

his year has flown by and the end of year

fast approaching. There is much to look forward to in the coming months.

Our midyear seminar in June was once again well attended by our enthusiastic members. The interesting Dry Eye explained by Dr Ross Littlewood had us all thinking about the dry eye in a very different way. The analogy of 'the little old lady in the bath of water' with dry legs, still had dry legs even though she was in the water, helped to explain the condition and its many causes.

The classification of the Red Eye, its causes and diagnosis, by Dr Geoff Chan was interesting and informative. Toxic Anterior Segment Syndrome (TASS) was presented by Dr Maria Francina and the management of TASS by Infection Control Nurse, Bronwyn Rose.

I would like to acknowledge the commitment and service from our longstanding committee member, Kris Jamieson. Kris has been on the AONA WA committee since 2008 and retired from the committee last month. Kris has been responsible for catering, raffles and organizing speakers for our seminars. Kris's enthusiasm and contribution has been much appreciated.

I would like to welcome Dr. Vicki Drury to the Aona WA Committee. Vicky has extensive academic and overseas ophthalmic nursing experience. We are very fortunate to have Vicki on board and look forward to her contributions.

National Conference.

The National Conference "From Little Things Big Things Grow". is to be held in Perth on **Friday 27th and Saturday 28th October,** at the Perth Convention Centre. Our Committee have been working hard to create an inspiring, interesting and exciting conference. An opportunity to meet and network with our interstate colleges from around Australia and have a great time.

Plans for 2018

Exciting times ahead technologically and visually for our website

The updating the of the website will take place early next year. We have had a few issues with our website this past year particularly with downloading items or connecting with links. This is due to old technology of our website template. We hope that all our data will be transferred with minimal inconvenience and will be user friendly.

We will be working on establishing a Facebook page with our own group. We would welcome our members thoughts on this matter. It will be another way of connecting.

AONA WA will become an incorporated association, which means we will be having "Inc" added to our name. This is due to new association rules passed in July 2016, it allows better protection for committee members and makes it fairer for small associations like ours to exist without some of the costly encumbrances.

We will be updating our logo to coincide with the incorporation, this will come out with the updated website.

We look forward to seeing you at the National Conference.

Gina Storey, President

AONAWA



AONANSW Presidents Report September 2017 Jenny Keller

The 35th Annual NSW conference "**No**

Eye in Isolation" was held on 24th June 2017, at the Sofitel Wentworth Hotel, the feedback from delegates was extremely positive. We also asked attendees around changing the venue. Feedback from the day encourages us to return to the Sofitel on Saturday 23 June 2018, and not go 'West".

The focus of the conference, was to link systemic disease to ocular conditions. There is no diabetic retinopathy; without a patient having poorly controlled diabetes. AONA NSW Patron, Dr Con Petsoglou, Corneal specialist, opened the meeting with a very amusing welcome video, he took the opportunity to build on an earlier Eye Tele C presentation on Antimicrobial Stewardship.

NSW Members are able to access most of the days presentations in the member download section of website. So for those members who are unable to attend, you can see view some of the conversations that went on. We finished the day with a nursing panel - Advanced practice and nurse led clinics (e.g. intravitreal injections), Amanda Wylie (Qld), Anna Huigen (NT), Bernie Hanratty (NSW) and Joanna McCulloch (NSW). Allowing an opportunity for discussion between the panel and attendees. Please use the "contact us" if you have particular topics or speakers you feel may be of benefit to members in 2018.

Unfortunately we had to cancel the "Eye Pain" Eye Tele C scheduled for August 5th

due to a lack of registered numbers. We will move this topic to February 2018 as it is an important topic for discussion. May we remind members that it is <u>essential</u> to register for Eye Tele C sessions and as well as the clinical days. Please check the website for registration for all upcoming events.

NSW's second last clinical of the year will be held on Saturday 16th September at 9am, at The Children's Hospital Westmead concentrating on the Paediatric Patient and related ocular conditions. Save the date - for end of year clinical Saturday November 18th Chatswood Private Hospital, from 9am until 1pm.

Jenny Keller

President NSW AONA



AONAVIC

Presidents Report September 2017 Heather Machin

L've had a pleasing 2017, having the

privilege to attend and present at ophthalmic events across the world. It's opened my eyes, and helped reaffirm to me the necessity of a robust and active ophthalmic nursing community here in Oz and our placement on the world stage as collaborators in advancing eye care.

I am particularly pleased that over the past 12-18 months there has been an increase in the connectivity and partnerships – in part, due to the formalisation of our National Council, but mostly because we as a community and as individuals are somehow awakened and ready to embrace a brighter future as a professional ophthalmic nursing alliance. The strength of that unity and solidarity cannot be underestimated.

While I particularly look forward to a future under the national council, I also pay homage to, and reaffirm, the ongoing role of the State-level-communities that provide locally relevant and tailored programs. Over the past months here at AONAVIC – and especially in both SA and TAS, we have seen a transition from a majority non-member drop-in attendance at our events to greater confirmed annual memberships. This has been a welcome change that has helped to expand and grow our community and knowledge sharing.

At the AGM, we not only passed in our revised Constitution but also welcomed new members to our Committee. We welcome in Debbie McQueen and Ben Roberts who will both be our TAS Representatives, and Colleen Flanders as a General Member. I am pleased to report they will be joined by continuing members Robyn Johnston, Pat Usher, Kris Spence, Anne Lentakis and Sharon Dennis. In turn, we thank our outgoing committee members Ron Hoppenbrouwer, Elise Chick, Tracy Ho and Deirdre Myers for their assistance and support over the past 12 months.

We now turn our focus to our AONAVIC Conference - scheduled for Saturday 25th November in Melbourne, and end-of-year clinical meetings in Adelaide - 29th November, and Launceston - 9th December. We look forward to welcoming members and nonmembers to these events.

> Thank you Heather

S.A. EducationReports

 ${f T}$ wo education events have been held by

AONA VIC SA Sub branch in recent months. On July 28th approximately 25 ophthalmic professionals attended a full day event that focussed on Diabetes and Indigenous Health in the ophthalmic setting. AONA VIC SA was very fortunate that the majority of the event was sponsored by Bayer who provided the venue, exceptional catering, Basic Life Support training and flights and accommodation for interstate speakers. AONA VIC committee also contributed towards costs of interstate speakers for the day.

Dr Meri Vukicevic presented new research on experiences and compliance in Diabetic patients undergoing laser and anti VEGF therapy. This was an interactive session with participants required to 'lock in' their answers to questions presented to diabetic patients in the study. It was very interesting to see the similarities or differences on what health care providers perceive patients experience and what the patients actually report. One of the take home messages was that patients undergoing anti VEGF therapy prefer consistency in the medical and nursing staff that take care of them and they feel anxious when they see someone different. Something to keep in mind for those in the private setting and an interesting challenge for those working in the public system.

Anna Huigen from Alice Springs presented twice on the day providing an insight into the challenges, joy and uniqueness of ophthalmic nursing in central Australia and the epidemic of trachoma and improvements that have been made in its management. We all certainly felt very grateful for our civilised clinics with adequate, well-functioning equipment.

Dr Stewart Lake presented on Diabetic Retinopathy focussing on the indigenous population and also spoke of his commitment to outback ophthalmology and his delight of sleeping in a swag under the stars on his expeditions.

Evaluation from the day was very positive with all attendees enjoying the content and the opportunity to network during meal breaks.

On September 20th Lachlan Scott-Hoy,

director and therapeutic Optometrist from Innovative Eye Care presented on Ocular Surface, encompassing Blepharitis,



Meibomian Gland dysfunction and the illustrious Dermodex Mite. The presentation was informative, entertaining and for some hair raising complete with clinical video footage of the mites as collected and filmed by Lachlan himself. Eyelid hygiene is now something all attendees will be ensuring is part of their daily routine, and hopefully their patients too.



Dermodex Mite

AONA SA VIC Chapter looks forward to their final session of the year to be held on Wednesday November 29th at 6.30pm at The Lion Hotel, North Adelaide. Johnson& Johnson are sponsoring dinner and the education session on IOLs in the making, IOL Optics- Refractive Error and High Precision Biometry by Karen Francis: Surgical Sales Specialist Johnson& Johnson.

Hoping to see many members there to wrap up 2017 and look forward to 2018 with many more educational opportunities including RANZCO and AONA conferences in Adelaide in November.

Kind Regards, SA representatives

Anne Lentakis & Sharon Dennis



AONA QLD

Presidents Report September 2017 Pene Gill

I'm sure that my fellow executive

committee members would agree that it has been nice having a well-deserved rest after another successful conference. Our annual August conference was held on the Gold Coast and was once again well attended and received. I have had plenty of positive feedback from colleagues thus far!

Thank you again to Carmen Newman, our conference Convenor and committee for all the effort put into producing such a fabulous day. Additional thanks to our fellow interstate AONA colleagues who presented on the day.

AONAQ has achieved quite a bit in the last year. At our last conference, we were so excited to launch our new website. I'm sure you would all agree that we have certainly moved forward! It has definitely modernised communication with members. Payments online have eliminated the handling of cash and helped us and the environment by reducing the generation of paper. Easing many of our preparations in the lead up to the conference!

Additionally this year we have set up an email system through the website. Amanda Wylie has done a wonderful job of creating and sending out professional looking emails to our members. These have included reminders and our quarterly National Newsletter, to name a few.

In 2018 we will hit a milestone - 30 YEARS. WOW! We have some exciting ideas planned for this wonderful event to be held 25th August next year back in Brisbane at the Brisbane Convention and Exhibition Centre. Stay tuned.

We welcome new executive committee members at our next meeting in a few weeks. We look forward to having some fresh faces and ideas! Exciting times!

Our next Clinical Meeting will be at The Royal Brisbane and Womens Hospital on Saturday, 25th November. This will be our Christmas meeting and the final clinical meeting for the year. Come along for a morning of education and networking.

Pene Gill (AONAQ President)