

The national newsletter of the Australian Ophthalmic Nurses' Association

### Ophthalmic Clinicians Workshop Madang, Papua New Guinea (PNG) March 13-15, 2017

#### By Lynette Grubwinkler RN

I had the privilege of travelling to and presenting at the annual Ophthalmic Clinicians Association of PNG Workshop at Madang.

Thank you to the AONAQ committee for providing financial support via the Education Grant for my attendance.

Each year following the graduation of eye care nurses from Divine Word University's post graduate diploma in eye care, the Ophthalmic Clinicians Association (OCA) meet to encourage, strengthen and support each other through education and networking. This year nine students graduated.

Terese Mende, current secretary of the OCA said that this was the 9<sup>th</sup> annual workshop and it has continued to grow. Ms Gende said, that "the association started as the number of eye care graduates grew each year.

Its formation took place around 2011 having a representative structure and in 2012 during the workshop it was decided to formalise and create an executive based leadership team".

### Calendar of Events 2017

July

24th AONAVic Clinical Meeting South Australia

August

5th AONANSW Eye

TeleConference 09:30 EST

Eye Pain Management

19th AONA Qld Annual Conference

Gold Coast Convention Centre

September

16th AONANSW Clinical

Westmead Hospital

Focussing on the Paediatric

Patient

TBA AONAVic Clinical Meetings:

Tasmania and Bendigo

October

27- 28th AONA National Conference

Perth

28-1st Nov RANZCO Annual

Scientific Meeting

Perth

November

18th AONANSW Clincial

25th AONAVic Annual Conference

25th AONAQ Clinical Meeting

Royal Brisbane Hospital



(Photo: View from Madang Lodge Venue)

In 2013 the OCA made its first application to the government for members to be recognised as professional health clinicians. By 2015 this application was successful and followed with formal recognition and registration with the PNG Medical Board. The association has also been granted official recognition as a registered association by PNG's Investment Promotion Authority.

During this year's workshop it was exciting to see the official media launch of the association taking place. This is a well-earned reward for many who have contributed to the ongoing development of eye care in this nation. This may seem like any other ordinary process, but this is an important milestone in PNG eye care when you consider the following statistics.

In 2012 Dr John Farmer <a href="http://lfeyecare.-com.au/significant-steps-forward-eye-care-png/">http://lfeyecare.-com.au/significant-steps-forward-eye-care-png/</a> mentions that "in PNG there were only around 14 ophthalmologists and 30 ophthalmic Clinicians trying to serve a population of almost 7 million.

This is desperately inadequate given Australia with 3 times the population has over 700 ophthalmologists and over 3000 optometrists". These statistics still remain at a critical level in 2017.

There is still much to be done, especially in the area of building the ophthal-mologist workforce. However until that change occurs, there is an impressive level of skill these non-surgical eye care clinicians possess. They are attending to the population's ophthalmic conditions in some of the most remote and inaccessible areas, many with limited supplies and equipment. They diagnose, treat, refract and when required, refer on to an already limited eye care workforce.

There were many great presentations made by OCA members, a few highlights included fungal keratitis,



challenges in managing Corneal Ulcers, eye screening outreaches and a great interactive discussion on diabetic retinopathy.

Another interesting case presentation titled "a rare sucker for eyes" got my attention. This was a patient found to have foreign body that was in fact a leech. The incidence of Trachoma remains and results of its Mapping also presented. All were most passionate about their work and striving to help their communities.

My clinical presentation focused on refreshing knowledge on infection prevention and control. This included discussions on practices associated with sterile, aseptic and clean techniques and the 5 moments of hand hygiene.

Numbers attending the 3 day workshop ranged from 45 - 50 delegates. With sponsorship support from the Fred Hollows Foundation New Zealand, many clinicians were able to attend the workshop, travelling from as far as Rabaul and Kimbe on the West New Britain Island. Even getting to Madang from the Highlands on the mainland is a challenge made easier with this financial support.



(Photo: Delegates assembling for workshop)

The workshop also included both the OCA's and PNG National Prevent Blindness Group annual general meetings that I attended. The common ground of each group being the ongoing development of and improvement to the delivery of eye care services within all of PNG. Each group identifying that although there are still many hurdles to overcome, they will continue to do what they can to bring about a positive change.

#### Reference:

Dr John Farmer. 2012. Significant steps forward in eye care in PNG. [ONLINE] Available at: <a href="http://lfeyecare.com.au/significant-steps-forward-eye-care-png/">http://lfeyecare.com.au/significant-steps-forward-eye-care-png/</a>[Accessed 1 April 2017].



## **AONA Queensland President Report**

Welcome to winter everyone! It's been a great year so far. To date we've held two fantastic, yet very different Clinical Meetings.

Our February meeting was held at the Peninsula Eye Hospital in Redcliffe. The hospital sits in a picturesque spot, sitting on the Esplanade overlooking the water. Dr Graham Hay-Smith delivered a very interesting and informative talk on the advances in Glaucoma treatment.

This hospital is part of the Moreton Eye Group with clinics also in Caboolture and North Lakes. Thank you Lesley Henderson and staff for hosting our first meeting for 2017. We look forward to possibly visiting your new facility next year.

We enjoy visiting different workplaces and encourage our members to nominate hosting future clinical meetings. If you're interested please contact us through the website or at the conference in August.

Catherine Everett kindly hosted our May Clinical Meeting at the Lady Cilento Children's Hospital. Presentations were delivered by Catherine and two of our executive members Amanda Wylie and Sharon O'Toole on Retinoblastoma, Microphthalmia and Enucleation surgery. However for anyone present, our guest speaker Dwayne Collins, together with his wife Ashleigh, stole our hearts with his inspirational story of his young daughter born with microphthalmia and his journey to become an Ocularist. To learn more about their story, go to their Go Fund Me page on Facebook.

With the May meeting being held at a Queensland Health Facility, we were able to teleconference our morning to other hospitals in Queensland. Ghislaine Wharton, one of our much loved Ophthalmic Nurses, dialled in from Thursday Island. In the future, we hope to reach out to our members throughout regional Queensland.

Our 29<sup>th</sup> Annual Conference is fast approaching, this year being held on the gorgeous Gold Coast. Carmen Newman, our Conference Convenor, has been working hard to provide members with yet another fantastic, educational and enjoyable day. Please visit the website for further information about the day, to print out the flyer and how to pay. Registration is now open and early bird registration closes 30.7.17. Remember annual membership renewal is due by 30.6.17. You will need to renew your membership by this date to receive member's rates.

Finally, an association like ours cannot exist without the hard work of the executive committee who volunteer their time and expertise in providing education and support to our members. Sadly, our Treasurer Camilla Clem had to resign last month, as her family is moving up north. We would like to thank Camilla for the effort she put into fulfilling this role to its potential and wish her all the best with her new life in the Tropics. We will be looking for a member to fill this role and join our wonderful committee at our AGM in August. If you are interested in this position or know of someone, please contact us via the website.

We look forward to seeing you in August.

#### Pene Gill



## AONA Western Australia President Report

I would like to tell you about our last seminar, the next seminar and the National AONA Conference.

Our first seminar, "**Understanding Glaucoma**", was held on the 25th March and was a great success with 71 delegates attending. Dr Dru Daniels gave us an overview and understanding of the disease process with a presentation that had us all actively learning. Dr Josh Yuen covered the surgical treatments and to "partner with the community". Gaela Hilditch from the Glaucoma Support Group shared her experience of living with Glaucoma. Our website <a href="https://www.aonawa.org.au">www.aonawa.org.au</a> provides details for Perth Glaucoma Support Group educational meetings to be held in July and November which ophthalmic nurses are very welcome to attend. We thank our Seminar sponsor Glaukos, Rick Sargeant, gave a presentation on the I-Stent which is one of the latest surgical treatments being trialed.

Our recent seminar, "Red Eye, Dry Eye, What am I" was held on Saturday 24th June, at Wollaston Conference Centre. Once again well attended by 65 delegates. Dr Ross Littlewood presented on the very interesting topic of the Wet/Dry Eye its causes and treatments. Dr Geoff Chan spoke on the conditions of the Red Eye, the classification and causes, Dr Maria Franchina spoke on TASS, Bronwyn Rose Infection control nurse spoke on TASS and the investigations, education and follow up required. The AGM was held and all positions made vacant. A Vice Presidents role has been created (as yet to be filled) to transition into the Presidents role next year.

Our Association in WA is an active and committed group of volunteers who work hard to provide education and support to WA Opthalmic Nurses. If you are interested in joining the committee please contact us on the AonaWA website.

#### **SAVE THE DATE**

The National AONA Conference 2017 "From little things, big things grow" will be hosted in Perth from 27-28th October. The Conference is being held in conjunction with the RANZCO Annual Scientific Meeting. The committee is working hard to make this an amazing event.

The Conference program will commence on the evening of Friday 27th October with a welcome reception and tour of Perth Eye Hospital. The night will be packed with great food and a couple of interesting talks on staff development. This event will be sponsored by the Eye Surgery Foundation - Perth Eye Hospital.

Saturday the 28<sup>th</sup> October will be a full day academic program with local, interstate and international speakers. The program will be finalized in June and Registrations opened. RANZCO has also invited our delegates to attend their "trade exhibition" on the morning of Sunday 29<sup>th</sup>. This is usually only open to RANZCO delegates but at no extra cost is now open for AONA delegates to attend. This is a great opportunity to see some of the latest technology all in one area.

Well that is what I wanted to bring to your attention. Our committee is working hard to provide education sessions to advance your knowledge in ophthalmics so come along and have a great time.

Gina Storey

President AONA WA



# AONA NSW President Report June 2017

The 35<sup>th</sup> Annual NSW conference is on 24<sup>th</sup> June 2017, at the Sofitel Wentworth Hotel. Our theme is "**No Eye in Isolation**" highlighting the importance of understanding the relationship between systemic diseases and ophthalmic conditions. Often a patient will present with an eye disease (vision loss due to diabetic retinopathy) and are found to have an undiagnosed co-morbidities (Diabetes) on investigation. Nurses are pivotal in working to safeguard quality patient outcomes, we need to remember to think holistically, not just mange the ocular condition but manage the complexity of that patients care. This conference will provide nurses tools to meet those complex patient needs.

Friday 9<sup>th</sup> June the Ophthalmology Network for the ACI (Agency for Clinical Innovation) one of the pillars within NSW health, held its second interactive forum "Eyes on the Future". Seen as an opportunity for Health Professionals (Nurses/Ophthalmologists/Orthoptists/Optometrists), Consumer Groups (Glaucoma Australia, Macular Disease Foundation) and Consumers with an interest in the promotion of eye health in NSW; to network and discuss future challenges.

"Eyes for the Future "included information about the latest Eye Emergency Manual APP, available soon for download on your smart phones. Also the introduction of the Stroke Vision Defect tool; to assist staff with documenting vision changes and enabling triage for appropriate treatment. An update of the NSW vision screening program - StePs program (government funded vision check for all 4 year olds) is currently finding a greater uptake of their services via the day care centres. Rural and regional areas of NSW have a very collaborative system for eye care, ensuring cultural safety which has shown an increase in patient presentations in some rural areas.

The networking with other health professionals reminds us that we all have a vital role to play enabling patients to receive the best possible visual outcomes.

August 5<sup>th</sup> 2017 will be the next Eye TeleC – discussion around the challenge of managing ocular pain – different causations, questions we as nurses should be asking and the best ways to manage pain. If you have a topic of interest please let us know via "contact us" www.aonansw.org.au

Clinicals will be held at Westmead Hospital in September 16<sup>th</sup>, focusing on the Paediatric Patient and the end of year clinical, November 18<sup>th</sup> Chatswood Private Hospital, from 9am until 1pm.

We hope to see you at the conference or other clinical day.

Jenny Keller

# AONAVic Report

June 2017

# Hi to everyone



Kevin Yang, Alcon rep demonstrating the Verison system to delegates

I can't believe it's June already! AONAVic's year is in full swing now with clinical meetings held in three states in March, April and May; plans are afoot for July in South Australia, September in Bendigo and Tasmania; then our grand finale conference in Melbourne on the 25<sup>th</sup> of November. These meetings will ensure we achieve our commitment to provide "...consistency of member benefits..." to all of our members. Our South Australian stalwarts, Sharon Dennis and Anne Lentakis with their regular sponsor Bayer had a fine turnout for their clinical meeting in March, with local optometrist Lachlan Scott-Hoy presenting "Ocular Surface Health/Disease"

Whilst in Tasmania, Hobart Day Surgery provided a venue for almost 30 members to meet and discuss a wide range of ophthalmic topics including Anaesthetics and the Eye, Diabetic Eye, A Day in the life of an Orthoptist, Ocular Emergency Triage Pathway; we are very appreciative of the support of local ophthalmologists; Drs Kristen Bell, Richard Sheard and George Smith, orthoptist Katrin Schaefer-Alcock and Gerard Walsh RN from Victoria without whom these meetings would not be possible. In Victoria we met at the Victoria Parade Surgery Centre (VPSC) in East Melbourne, thanks to Tim Puyk, and our sponsors Alcon. Close to 40 members heard topics ranging from a cataract surgery update by Dr Georgia Cleary, Anaesthetics in Ophthalmic surgery by educator Grant Wallace RN, Femto-second laser from orthoptist Andrea Lea, IOL Lens technology by Alcon rep Michael Raward, followed by a tour of VPSC with demonstrations of the Femto-second work station by Andrea and Verison systems by Alcon rep Kevin Yang. Elise Chick NUM OTS at RVEEH, presented a notable OTS case study describing how a Rycroft cannula was squirted off the end of a syringe into the eye during a cataract operation. The force pushed the cannula through the vitreous causing catastrophic damage to the eye necessitating further surgery, with a very poor outcome; similar occurrences had occurred in the UK. UK weren't using leur lock syringes, in this case we believe the Rycroft wasn't screwed on tightly enough to the leur lock, a simple lapse with disastrous consequences, a valuable lesson with a simple solution; use a leur lock, double check it is secure.

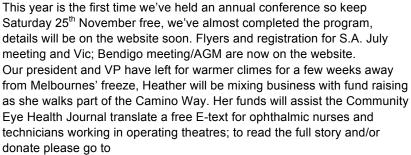


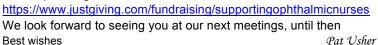
Andrea at the Femto-second

work station

Anyone can do it.....

A reminder to all members that renewal of your membership is due in July, if you wish to secure membership rates for the next round of meetings and the conference go to the website NOW and join up.







AONAVic

# **Toxic Anterior Segment Syndrome**

(TASS) is a rare but acute sterile postoperative inflammation involving the anterior segment structures which is usually diagnosed 12 to 48 hours after anterior segment surgery. It is principally associated with cataract surgery but has been reported with other anterior segment procedures including keratoplasty. It is believed to be due to the introduction of toxic materials into the eye at the time of surgery however there is a lack of good evidence regarding contributing factors. The condition causes corneal endothelial damage, disruption of the blood-aqueous barrier and varying degrees of damage to the iris and trabecular meshwork.

Cleaning and sterilisation of microsurgical instruments is especially important in the prevention of TASS, in particular the adequate flushing of phaco and I/A handpieces.

TASS usually presents within 12-24 hours after surgery where infectious endophthalmitis typically develops 2-7 days after surgery. Early diagnosis and treatment are effective in preventing permanent damage as TASS is responsive to topical steroids in most cases.

#### **Clinical Features**

- ◆ Pain
- ♦ Reduced Vision
- ◆ Diffuse limbus to limbus corneal oedema
- ◆ Anterior segment inflammation often with hypopyon
- ♦ Secondary glaucoma

#### Possible Long Term Sequelae

- ♦ Persistent corneal oedema requiring keratoplasty
- ◆ Dilation or distortion of the pupil with iris atrophy
- ♦ Peripheral anterior synechia
- → Glaucoma

#### **Contributory factors**

TASS is believed to be caused by the introduction of toxic materials into the eye at the time of surgery. Most cases of TASS are caused by inadequate cleaning and sterilization of microsurgical instruments particularly handpieces. There is a lack of good evidence in this area, however pertinent factors are believed to include:

- ◆ Inadequate time and staff to allow good cleaning and sterilisation practices
- Residual cleaning agents such as enzymic detergents following cleaning/sterilisation procedures
- ◆ Contamination of intraocular lenses (IOLs) and instruments with talc or other 'releasing substances' used in surgical glove manufacture

- Residual denatured viscoelastics
- ★ The use of lint containing towels during cleaning
- ♦ Reuse of single use items
- ◆ Use of re-usable cannulas
- Use of tap water for cleaning
- Heat stable bacterial endotoxins from ultrasonic cleaners, water baths or autoclave reservoirs.
- ◆ Poor maintenance of surgical tools and cleaning/sterilising equipment
- ◆ Inadequate drying of instruments after cleaning Heavy metals and their oxides e.g. degraded brass instruments
- ♦ Preservatives in intraocular solutions
- Irrigating solutions with inappropriate composition, osmolarity or pH.
- Intracameral anaesthetics of inappropriate concentration or containing preservative
- ♦ Intracameral antibiotics
- ◆ Inappropriate disinfectant for skin preparation
- ♦ Materials used in polishing and sterilising IOLs
- ♦ Mitomvcin-C
- ◆ Cortical lens material
- ◆ Use of Povidone Iodine at completion
- ◆ Ophthalmic ointment used at completion

#### **Recommended Sterilisation and Surgical Practices**

Some key sterilisation and surgical practices are listed below. More detailed recommendations are provided in the references section of RANZCO Guideline and will be part of eye hospital procedures.

- ◆ Ensure adequate time, staff and instrument sets available for cleaning as per manufacturer's instructions to avoid shortcuts in process
- ◆ Track use of instrument sets to assist in identifying TASS source
- ◆ Employ 'Multi-pulse' steriliser cycles which properly sterilise and dry lumen containing instruments, and avoid short 'Flash' cycles
- ◆ Avoid allowing instruments to dry before cleaning
- Dry instruments after cleaning and use compressed air for instruments with lumens
- ◆ Use lint free materials during instrument handling
- Do not re-use single use devices
- ◆ Avoid the use of re-usable cannulas
- ◆ Ensure no preservative containing solutions are used in surgery
- ◆ Use sterile distilled or sterile de-ionised water for cleaning
- ◆ Discard cleaning solutions after each use
- ◆ Copiously flush handpieces (e.g. by using an automated rinser)
- ◆ Replace fluid in ultrasonic baths daily
- ♦ Change water in steam autoclave reservoirs weekly
- ◆ Comply with 'shelf life' of all materials
- ◆ Ensure all solutions are properly prepared and concentrations are accurate
- ◆ Use BSS not sterile water to prepare intraocular solutions
- ◆ Ensure surgeon and scrub nurses handle IOL's with instruments only and avoid touching the IOL or tips of instruments used in the eye with surgical gloves

- ◆ Avoid glutaraldehyde and ethylene oxide
- Validate and maintain sterilisers appropriately
- ◆ Do not use ointments at completion

#### What can we do as Nurses to avoid TASS:

- ◆ Use of DISPOSABLE cannulas and I/A's only
- BSS solution ONLY on setup trolley including for cleaning of surgical instruments
- ♦ Only use the instrument wipe to clean instruments...NOT raytec
- ◆ Powder free gloves only
- Do not allow any raytec to come in contact with highly adhesive phaco silicone sleeve
- ◆ B-Braun Fluid dispensing connectors to be used to transfer Cefazolin to scrub nurse
- Avoid touching the tips of all instruments with gloved fingers
- ◆ Do not touch transplantable IOL with gloved fingers, always use forceps
- Ensure all Viscous solutions are rinsed from instruments at end of case before transfer to cleaning room
- Check that all intraocular medications used during surgery are preservative free preparations

#### Reference:

**Guidelines on Toxic Anterior Segment Syndrome (March 2015)** - The Royal Australian and New Zealand College of Ophthalmologists.

#### Contributed by AONA WA



Typical presentation of TASS; showing diffuse corneal oedema, redness, anterior segment inflammation with hypopyon



# 2017 National Australian Ophthalmic Nurses Association Conference

Hosted by AONA WA in Perth

# "FROM LITTLE THINGS, BIG THINGS GROW"

**Perth Convention and Exhibition Centre** 

Friday 27th October & Saturday 28th October 2017

Friday night 6 to 9pm Saturday 8 to 5pm Preliminary Programme

Keynote speaker: Dr Elissa MacDonald,

"The eye is small and should be 'pretty easy to learn' thought ELISSA McDONALD but, an ophthalmology PhD later, the now nursing school lecturer knows how wrong she was."

CAREER PATH: NURSING SCHOOL LECTURER AND RESEARCHER, August 2015 Vol 15(4)

Remote Area health: Prof Angus Turner, Sharon Brown RN, Indigenous Hip Hop.

The cornea and the latest treatments: Dr Steve Wiffen, Heather Machin RN and Dr Ian Chan

**The embryonic eye**: Dr Geoff Chan & Karen Shearer, Neonatal Ret Cam nurse **Ophthalmic conditions and research / development**: Dr Vicky Drury, Ros Johnston and many more nurses.

Registrations will open in July so save the date and plan to come along.

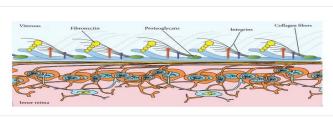
www.aonawa.org.au/seminars

for enquiries email: info@aonawa.org.au

#### Pharmacological Treatment of Vitreo-macular Interface Diseases.

#### Vitreous Gel

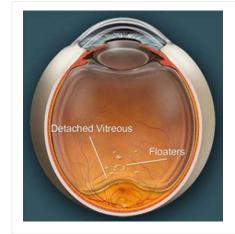
Vitreous is a transparent gel situated between the lens and the retina, ~4.4ml in volume, 99% of which is water, with collagen, proteins and salts. The vitreous and retina adhere tightly together at the Inner Limiting Membrane of the retina (ILM) via the Vitreo-retinal interface that is an



adhesive sheet which facilitates the connection of the posterior vitreous cortex to the ILM, composed of

laminin, fibronectin and collagen IV fibres.

PVD (posterior vitreous detachment) is a process that occurs with aging and for most people is not sight threatening.



The vitreous naturally liquefies and shrinks with aging (between 40 - 60 years of age) and separates totally from the ILM - some patients experience 'floaters' &/or photopsia (flashing lights) for a few weeks at this stage.

If the rate of liquification and separation from the ILM does not occur simultaneously, traction between the retina and vitreous occurs leading to Anomalous (partial or incomplete) PVD, these do not often resolve spontaneously. Consequences include retinal detachment, partial or full thickness

macular holes or pucker, also worsening of AMD and diabetic macula oedema. Highly myopic younger patients are also at increased risk of Vitreo-macular interface disease; other risk factors include chorioretinal atrophy, vitreoschisis, trauma, inflammation.

OCTs provide 3D imaging to enable accurate assessment and diagnosis.

<u>Ocriplasmin</u> is a recombinant truncated form of human plasmin. It is a proteolytic enzyme that primarily

targets fibronectin, laminin and type IV collagens. It is injected into the vitreous, causing liquification of the vitreous and vitreous detachment at the ILM, breaking the traction. Ocriplasmin was initially an adjunct to vitrectomy a few

days pre-op but after resolution of traction was observed further trials were undertaken to assess its

efficacy as a standalone treatment.

#### Indications:

# Focal vitreo-macular traction (VMT)

Vitreous adheres to the macular instead of detaching, causes distortion of macula and oedema (Cystoid Macula Oedema – CMO)

# Symptomatic Vitreo-Macular Adhesions (VMA)

Traction occurs at the macula causing metamorphopsia

(distorted vision) decreased VA, central visual field defects.

#### Non-full thickness macular hole

## Full thickness macular hole <400mcm

There is a poor prognosis without treatment. Currently treatment is Pars Plana Vitrectomy (PPV).

#### DOSE:

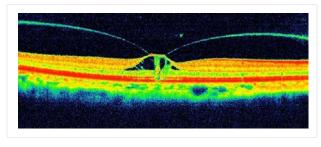
Single-use glass vial containing JETREA 0.5 mg in 0.2 ml solution for intra-vitreal injection Ampoule = 2.5mg per ml, = 0.5mg Ocriplasmin

Prep – remove from fridge and let warm to room temperature

Dilute – add 0.2ml of 0.9% Sodium

Chloride, mix solution, ensure clear and no particulate matter:

0.125mg 0.1ml. Withdraw all of solution into a 1ml syringe, expel air bubbles and excess drug to



0.1ml, it must be used immediately – no preservatives.

#### **Contraindications**

Previous vitrectomy, laser/surgery < 3 months, Intravitreal injections < 6 months, epiretinal membrane (ERM), proliferative vitreoretinopathy, full thickness macula hole >400mcg
Outcomes (resolution of traction, closure of macular hole and improved vision) vary widely between studies, varying from low teens to over 70%.

#### Adverse effects:

Transient decreased VA, photopsia, abnormal pupil, zonular dihesence, lens subluxation, sterile endophthalmitis (x 1), decreased retinal reflectivity lasting ~2 months, flat Electroretinogram (ERG) usually transient, worsening of macular holes – 5.2%, retinal detachment 0.4%, non resolution of VMT 1.1%

Ocriplasmin is a new, FDA approved therapy added to our arsenal of retinal treatments. Its use is still evolving, better targeting of suitable patients and pathologies is the next step.

Pat Usher RN

https://www.slideshare.net/TVRSchool/bandellopharmacological-treatment-of-vitreo-macular-traction https://www.slideshare.net/sssihmspg/vitreomaculartraction?next\_slideshow=2

https://www.hindawi.com/journals/joph/2012/876472/fig

https://www.slideshare.net/erandawannigama1/vitreoretinal-interface-disorders

https://www.dovepress.com/ocriplasmin-who-is-the-best-candidate-peer-reviewed-fulltext-article-OPTH http://www.touchophthalmology.com/articles/ocriplasmin-efficacy-analysis-real-world-results-2013-2015/page/1/0