

An Australian Government Initiativ

Eye Health Collaborative Care and Quality Improvement in General Practice

Wednesday 25 October 2023

The content in this session is valid at date of presentation

Acknowledgement of Country

North Western Melbourne Primary
Health Network would like to acknowledge the
Traditional Custodians of the land on which our
work takes place, The Wurundjeri Woi Wurrung
People, The Boon Wurrung People and The
Wathaurong People.

We pay respects to Elders past, present and emerging as well as pay respects to any Aboriginal and Torres Strait Islander people in the session with us today.

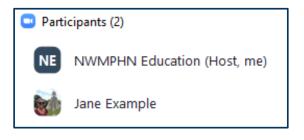


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Housekeeping – Zoom Webinar

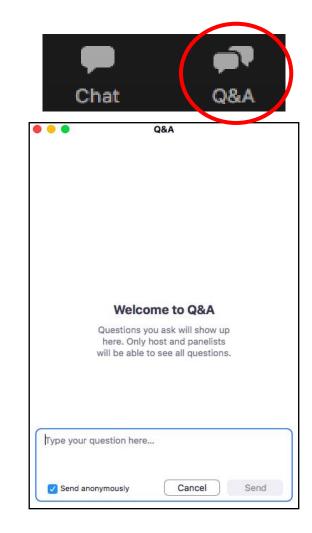
All attendees are muted

Please ask questions via the Q&A box only

Q&A will be at the end of the presentation

This session is being recorded, you will receive a link to this recording and copy of slides in post session correspondence.

Questions will be asked anonymously to protect your privacy



Speaker

Maria Bui, Melbourne Eyecare Clinic

- Maria grew up in Sydney and completed her Bachelor of Optometry at the University of NSW. She went on to complete the Graduate Certificate in Ocular Therapeutics and Master of Optometry with an interest in children's vision.
- Maria has had a long and varied career in optometry. She has volunteered in multidisciplinary health teams with Vietnam Vision Project and has worked with International Centre for Eyecare Education in teaching activities in Da Nang Vietnam.
- Maria has always been passionate about teaching. She previously worked at the UNSW Optometry Clinic and following a move to Melbourne, commenced working at Melbourne Eyecare Clinic in 2015 as a Senior Clinical Teaching Instructor. Over the last 12 months she has taken on an additional role at the Clinic to develop stronger relationships with external partners including local GPs, schools, pharmacies and local council.

Eye Health Collaborative Care

Maria Bui

MELBOURNE EYECARE CLINIC

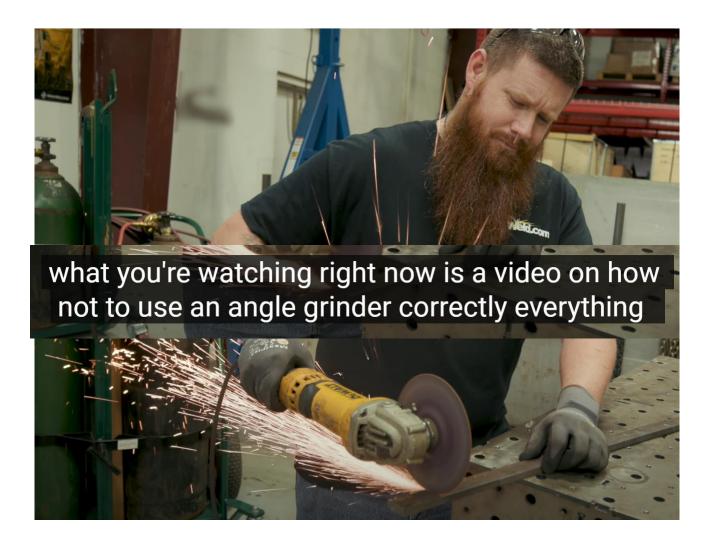




Learning Outcomes

- Describe the use of HealthPathways Melbourne in collaborative eye care
- Describe the role of various health care workers in collaborative eyecare in managing eye trauma, red eye conditions, and diabetic eye disease
- Review common eye lid lesions and identify signs and symptoms that indicate referral
- Review key risk factors for the diabetic eye disease to determine appropriate frequency of eye exams for individual patients.

Scenario: A young man walks in...



Before your start...





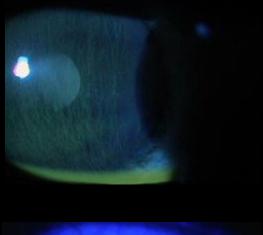


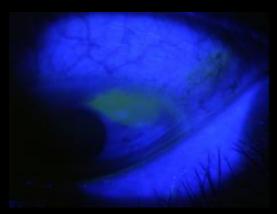




Tarsal foreign body removal













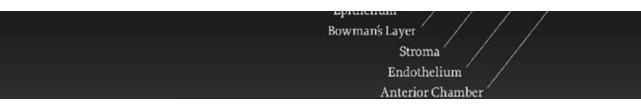


Corneal foreign body removal

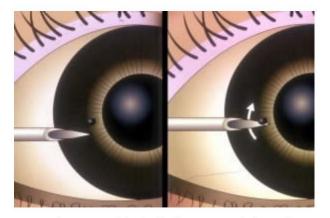
- Foreign Body in Eye Community HealthPathways Melbourne
- Use magnification and light from loupes or an ophthalmoscope.
- Remove the foreign body with a sterile saline-soaked cotton budusing a sweeping motion.
- If cotton bud fails:
 - o consider an 18 gauge or 20 gauge needle to carefully loosen the foreign body . Only attempt with a cooperative adult and only if you are confident.

Carefully loosen the foreign body

- Construct a spatula with 18 gauge or 20 gauge needle.
 - Two bends are required spatulate the bevelled area, then bend the shaft to 30° about halfway from the needle to the hub.
 - This allows object to be lifted using a scooping fashion. The bend ensures the needle is held parallel to the cornea.
- Use the side of the needle, **not** the tip.
- o consider a dental burr or motorised dental burr if available.



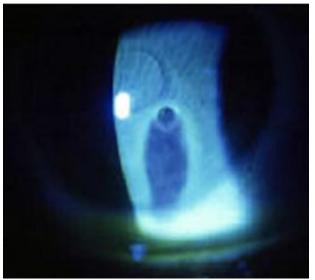




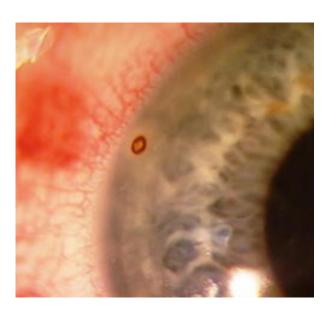
Removing a corneal foreign body. © Cactus design and illustration Ltd











After you're done...

- Pain relief
- Other ocular trauma?
- Risk of infection or inflammation
 - Organic vs non-organic material
 - Contact lens wearer?
- Eye padding?

Authors' conclusions

Trials included in this review suggest that treating simple corneal abrasions with a patch may not improve healing or reduce pain. It must be noted that, in these trials, participants who did not receive a patch were more likely to receive additional treatment, for example with antibiotics. Overall we judged the certainty of evidence to be moderate to low. Further research should focus on



designing and implementing better quality trials and examining the effectiveness of patching for large abrasions.

Staged Care: Foreign Body Removal



Tarsal FB removal
Superficial corneal FB removal

Therapeutic management (infection, surface damage, pair management)

Screen for penetrating injury or other anterior ocular trauma

Triage care of other related trauma



Embedded corneal FB removal
Rust ring removal
Bandage contact lens
Check for iritis
Screen for retinal trauma

Ongoing monitor for recurrent corneal disease



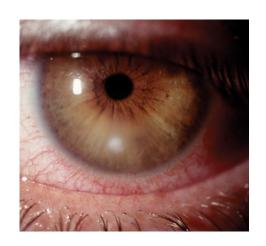
Penetrating FB (emergency)
Other ocular trauma tx
(hyphema, retinal, lid etc)
Infection not responsive to
first line treatment



Red eye: self limiting or sight threatening?

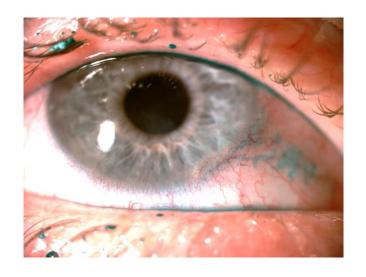






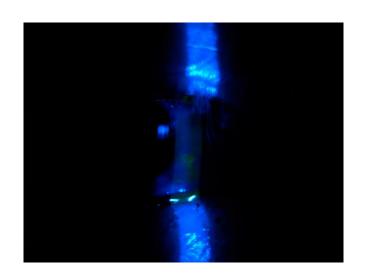
Monitor?
Topical antibiotic?
Topical steroid?
Topical antihistamine/oral antihistamine?

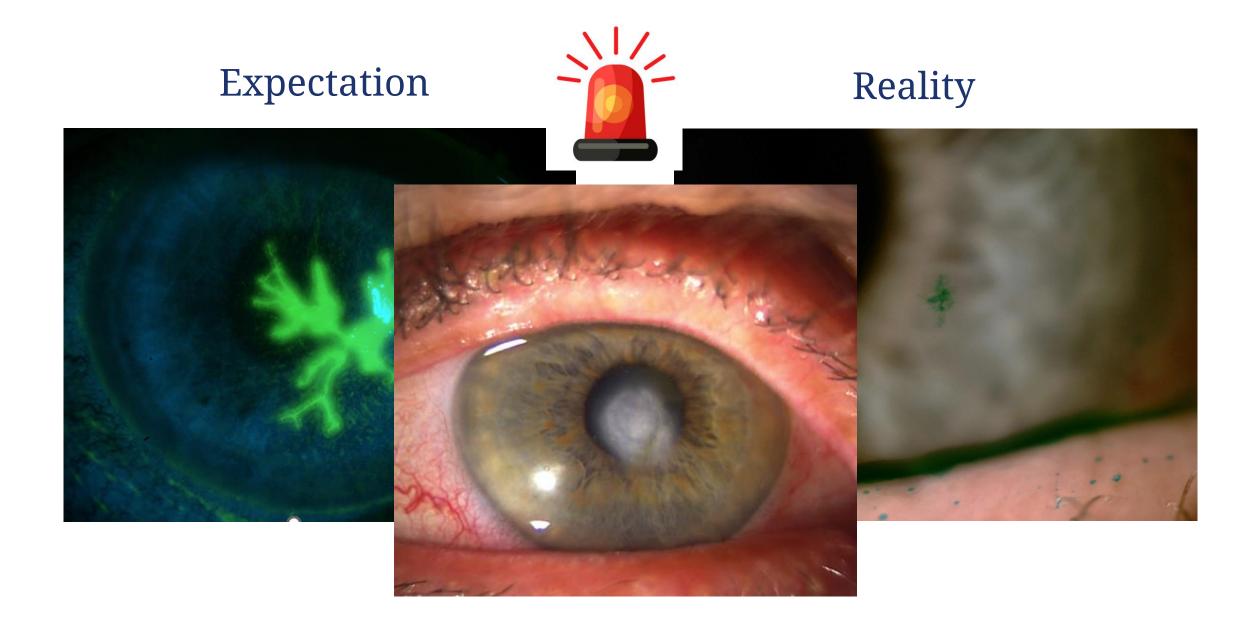
Scenario











Collaborative Care: <u>Herpetic Keratitis</u> & <u>Herpes Zoster Ophthalmicus</u>



Tx of herpetic disease (w or w/o ocular involvement)

PCR swab

Initiate tx for HSV epithelial keratitis (oral & topical)

Neuralgia management



Diagnosis of ocular involvement

Differentiate HSV stromal vs epithelial disease

Dx assoc iritis + IOP

Initiate tx (topical only)

Debridement?

Monitor for recurrence



Tx for severe or cases involving posterior segment

Initiate oral tx for recurrent cases

Surgery for corneal scarring?

Can the optometrist diagnose and manage....?

| Condition | Dx | Management | |
|-----------------------------------|----------|--|--|
| Bacterial conjunctivitis | ✓ | | |
| Viral conjunctivits | ✓ | | |
| Infective keratitis | ✓ | first line treatments referral for severe or non-responsive cases | |
| Corneal erosion | ✓ | most px can be managed with first line treatment | |
| Iritis | ✓ | First line treatment of typical, monitor for recurrent collaboration for systemic investigation referral for severe, atypical, chronic, recurrent or complications | |
| Allergic eye disease | ✓ | first line treatments | |
| Contact lens related infection | √ | first line treatments referral for severe or non-responsive cases | |
| Contact lens related inflammation | ✓ | | |

Scenario: A young child walks in...









Clinical Pearls: swollen lid

| | STYE (HORDEOLUM) | PRE-SEPTAL CELLULITIS | ORBITAL CELLULITIS |
|---------------------|--|---|---|
| | Acute bacterial infection of the glands of the eyelid (external or internal) | Infection of the tissues localized anterior to the orbital septum (eyelid and skin around the eye). | Infection of the soft tissues of the eye socket behind the orbital septum. |
| Cause | Staphylococcus aureus | Staphylococcus Insect bite, sinusitis, hordeolum, URTI | Gram positive Strep and Staph species. Paranasal sinusitis, URTI |
| Eyelid swelling | Eyelid swelling (mild to mod) | Eyelid swelling (mild tomod) | Eyelid swelling +++ spreading to face |
| Pain with palpation | Tenderness/pain + (only in location of lesion) | Tenderness/pain ++ (entire lid(s)) | Pain ++ (deep eye pain) |
| Eye movements | Unaffected | Unaffected | Painful, restricted |
| Proptosis | No | No | Yes |
| Diplopia | No | No | Yes |
| Vision | Unaffected | Unaffected | May be reduced |
| symptoms | Watery eye Ocular surface unaffected | Mild fever? Ocular surface unaffected | Rapid afferent pupil defect Generally unwell, fever |
| Complications | Chalazia: chronic granulation leading to painless eye nodule | | Neurological signs High risk of complications (intracavernous sinus thrombosis, me nerve, retina damage) |
| Treatment | Conservative +- oral monotherapy AB | Conservative +- oral monotherapy AB | Urgent/Emergency: Blood culture, multiple AB (IV), ophthalmology consult, surgery |

Common eye lid lesions





Cysts arising from eyelid glands or epidermis: epidermal inclusion cyst, xanthelasma





Benign tumors: papilloma, seborrheic keratitis

Viral: molluscum





American Academy of Ophthalmology. Molluscum Contagiosum.

American Academy of Ophthalmology. Epidermal Inclusion Cyst

American Academy of Ophthalmology. Seborrheic Keratosis

American Academy of Ophthalmology. Xanthelasma. https://eyewiki.aao.org

Toyer J. The University of Eye Rounds. Molluscum Contagiosum. https://eyerounds.org

Wills Eye Hospital. Eyelid Papilloma. https://www.willseye.org

https://www.aao.org/eye-health/diseases/what-is-xanthelasma

Malignant lid lesions



Gradual, painless enlargement (photography)

Ulceration (non-healing)

Bleeding

Destruction of eyelid margin

Loss of lashes

Telangiectasia

Thickening/hardening

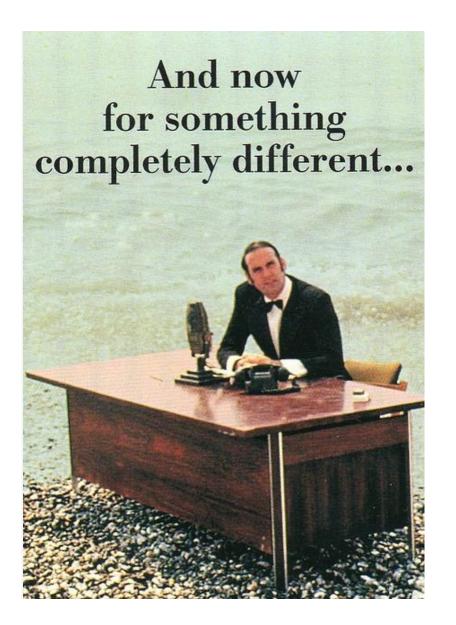
Chronic unilateral eye infection

Hx: other skin malignancy, immunosuppressed



Figure 4. Malignant eyelid tumours: A basal cell carcinoma presenting as an isolated nodule with associated telangiectasia and loss of lashes (upper left), keratoacanthoma (upper right), actinic keratosis (lower left) and invasive squamous cell carcinoma with central ulceration (lower right)

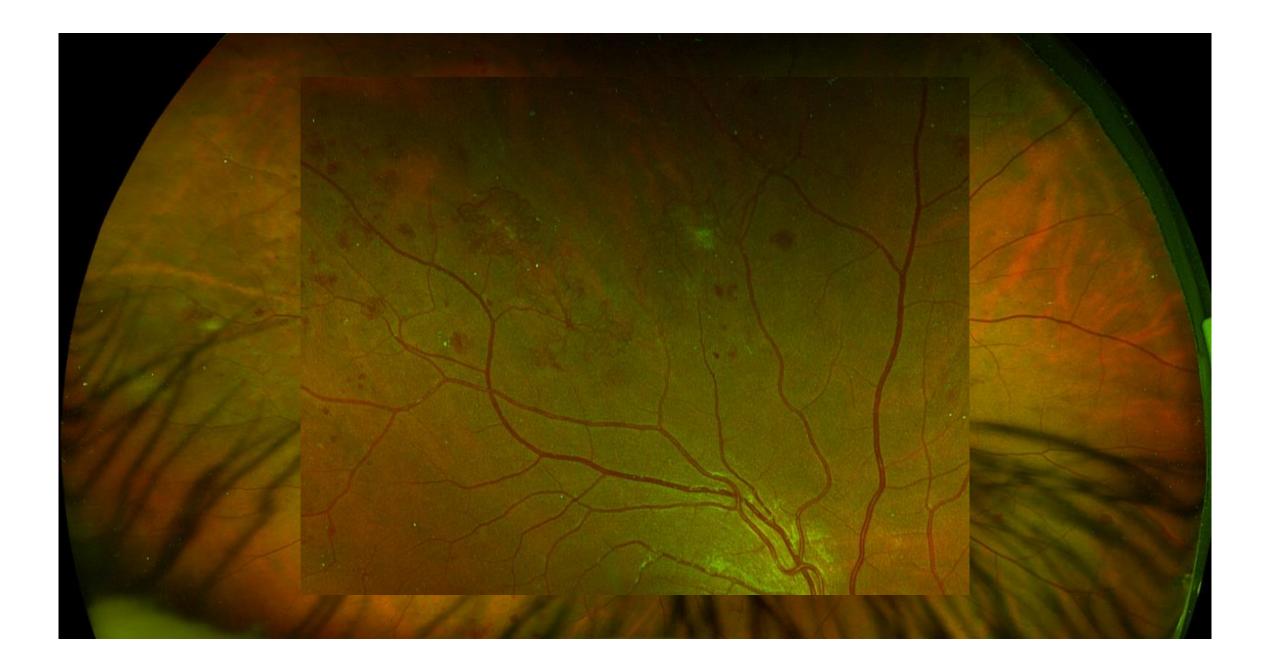
Eyelid Lesions - Community HealthPathways Melbourne



Scenario: 30yo walks in

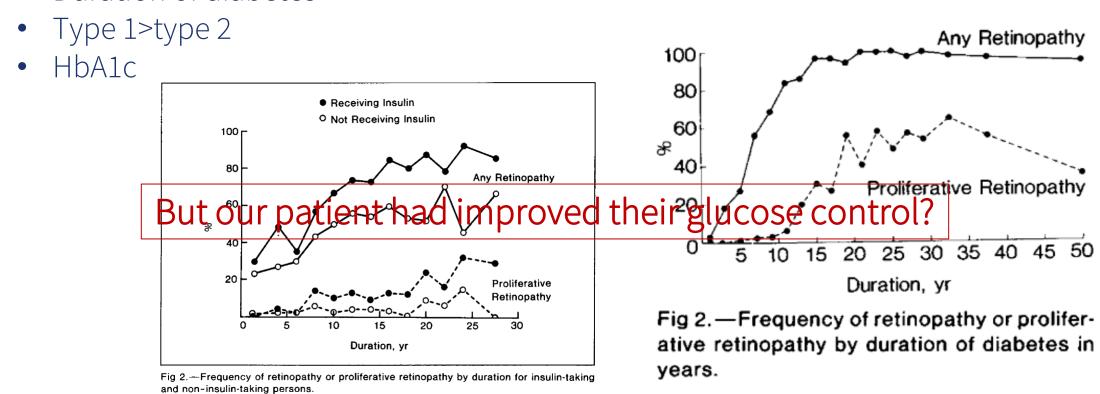
- Dx with IDDM in 1996 (24years ago)
- HbA1c 7.4% 3 month prior (1 ya 8.1% 6months ago 7.6%)
- Hypothyroidism Levothyroxine sodium tablet does not take this as much
- No HTN, cholesterol OK
- Vision R 6/7.5 L 6/6-2
- No vision complaints

How often should this person have an eye exam? Health Pathways Melbourne: Diabetic Retinopathy



Clinical Pearls for Diabetic Eye Disease

- Risk factors for development of diabetic retinopathy
 - Duration of diabetes



Klein R, Klein BEK, Moss SE, Davis MD, DeMets DL. The Wisconsin Epidemiologic Study of Diabetic Retinopathy: II. Prevalence and Risk of Diabetic Retinopathy When Age at Diagnosis Is Less Than 30 Years. *Arch Ophthalmol.* 1984;102(4):520–526.

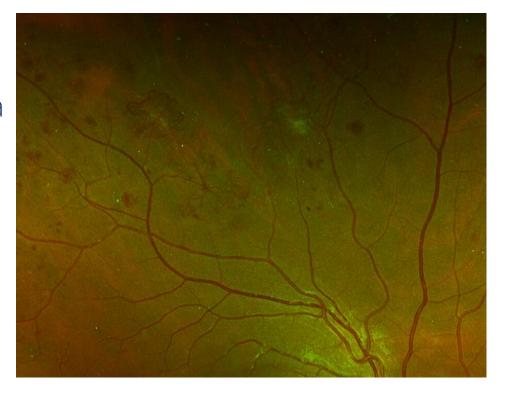
Klein R, Klein BE, Moss SE, Davis MD, DeMets DL. The Wisconsin epidemiologic study of diabetic retinopathy. III. Prevalence and risk of diabetic retinopathy when age at diagnosis is 30 or more years. Arch Ophthalmol. 1984 Apr;102(4):527-32

Clinical Pearls For Diabetic Eye Disease



Other risk factors

- Co morbidities: hypertension, dyslipidemia
- Pregnancy
- Intensive diabetic management
- Cataract surgery



Klein R, Klein BEK, Moss SE, Davis MD, DeMets DL. The Wisconsin Epidemiologic Study of Diabetic Retinopathy: II. Prevalence and Risk of Diabetic Retinopathy When Age at Diagnosis Is Less Than 30 Years. *Arch Ophthalmol.* 1984;102(4):520–526.

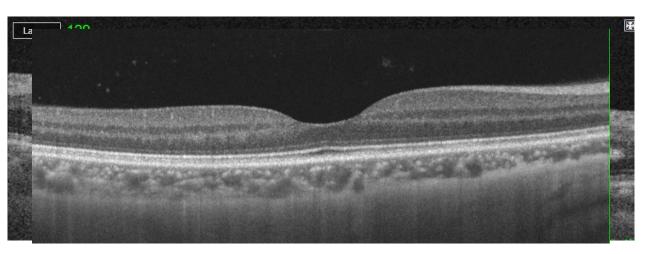
Klein R, Klein BE, Moss SE, Davis MD, DeMets DL. The Wisconsin epidemiologic study of diabetic retinopathy. III. Prevalence and risk of diabetic retinopathy when age at diagnosis is 30 or more years. Arch Ophthalmol. 1984 Apr;102(4):527-32

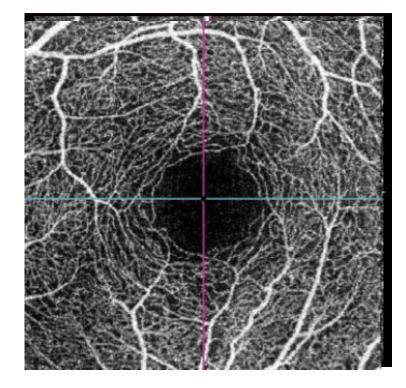
Case: Phuong 34yo

- Dx with IDDM in 2004 (19years ago)
- HbA1c unknown
- Recent hypertension diagnosis?
- Visual acuity R 6/19 L 6/19
 6/6 in each eye last year









Clinical Pearls For Diabetic Eye Disease

Diabetic retinopathy is the leading cause of irreversible vision loss in working age population.

Diabetic macular oedema

- OCT imaging + anti-VEGF injection → DMO can be diagnosed sooner and treated effectively
- Patients with centre involving DMO with good visual acuity may not need injections



Clinical Pearls For Diabetic Eye Disease

Fenofibrate (LIPIDIL)

- Lipid modifying drug: treat Hypertriglyceridemia, primary hypercholesterolemia, mixed dyslipidemia.
- Evidence from 2 large studies (FIELD & ACCORD) that fenofibrate slows the progression of diabetic retinopathy and the need for more invasive treatment modalities in patients with <u>type 2 diabetes</u>, <u>especially those with pre-existing retinopathy</u>. It also protects against diabetic kidney and nerve damage.
 - Inhibition of inflammation, angiogenesis, apoptosis, and oxidative stress?
- Does not replace the need to maintain serum glucose and blood pressure
- Type 1 diabetes? <u>FAME 1 Study</u>

Clinical Pearls: Diabetic eye disease

- Cataract occurs sooner and progresses to surgery more quickly in people with diabetes
 - Increased risk of worsening diabetic retinopathy and development of macula oedema immediately after cataract surgery
- Significant change in vision and refraction may be the first sign of diabetes
 - Optometrist may refer for diabetic testing for significant unexpected refractive change
 - Advise patients to delay getting new glasses immediately after starting diabetic

medication

Collaborative Care: Diabetic Eye Disease



Management of diabetes and co-morbidities

Other medical primary care

Co-ordinate with other health professionals



Routine screening for diabetic eye disease
Address visual needs
Routine screening for other eye disease

Time sensitive referral for PDR & DMO



Routine screening for diabetic eye disease?

PRP & Anti-VEGF injection
Other surgery



What is HealthPathways?

patient has or may have ARF or RHD must notify the Vic

Perioperative Care



Pathways are written by GP clinical editors with support from local GPs, hospital-based specialists and other subject matter experts



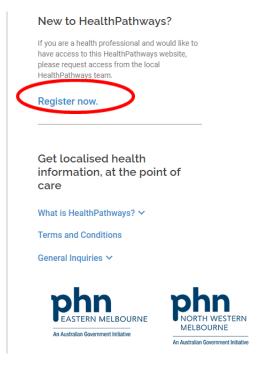
- clear and concise, evidence-based medical advice
- Reduce variation in care
- how to refer to the most appropriate hospital, community health service or allied health provider.
- what services are available to my patients

Accessing HealthPathways: Go to melbourne.healthpathways.org.au



Melbourne

Welcome Sign in to HealthPathways Username Password Forgot password? Remember me Sign In





Register via QR code



info@healthpathwaysmelbourne.org.au

Relevant and related pathways

Ophthalmology

- Cataracts
- Children's Eye Problems
- Corneal Problems
- Corneal Ulcers and Abrasions
- Herpes
 - Herpes Simplex Keratitis / Dendritic Ulcer
 - Herpes Zoster Ophthalmicus
- Keratitis
- <u>Pterygium</u>
- <u>Diabetic Retinopathy</u>
- Irritated and Dry Eyes

•Trauma in Eyes

Foreign Body in Eye

Vision Loss

- Glaucoma
- Macular Degeneration
- Sudden or Recent Vision Loss

Referral to Ophthalmology Department

- Acute Ophthalmology Referral or Admission (Same-day)
- Non-acute Ophthalmology Referral (> 24 hours)

In Summary

- GPs, optometrists, ophthalmologists & other healthcare workers have clear and interlinked roles in improving eye health outcomes
 - o Optometrists provide accessible primary eye care: Optometry Australia: Find An Optometrist
 - o Interprofessional communication is key
- Health Pathways Melbourne is a key resource in assessing and initiate management for eye conditions
- Foreign body removal: Are you prepared for the "before, during and after"?
- Red eyes can be self limiting or sight threatening; incorrect treatment can quickly worsen outcomes
- Eyelid lesions: growing, bleeding, not healing, recurrent, lash changes → biopsy
- Diabetic eye disease: Early and accurate diagnosis allows patients to access effective treatments. Assess risk factors and work with optometrist to ensure regular screening occurs: Keep Sight







Contact Maria Bui

maria.bui@unimelb.edu.au
Melbourne Eyecare Clinic
200 Berkeley St
Carlton
03 9035 6666

MELBOURNE EYECARE CLINIC



Speakers: Premier Health Partners



Areas of Interest:

Assessing and treating a variety of aches and pain, educating his patients so they can develop the necessary skills to be able to address the specific cause of the problem



Nurse/practice manager

Belinda is a dedicated nurse with a profound commitment to enhancing healthcare quality in general practice.

Premier Health Partners have been involved with the 'Enhancing Preventative Eye Health in Primary Care' Quality Improvement Project this year and have developed 4 PDSA cycles they would like to share with you today (Plan, Do, Study, Act Cycles (PDSA), a quality improvement methodological framework).



Eye Health Quality Improvement Activities

Newsletter/Blog

- Posting blurbs in the newsletter
- POSITIVE: we know that it reached over 2500 of our patients
- NEGATIVE: hard to track in terms of referrals and outcomes

Opportunistic Screening

- GP would ask patients about their eye health at the end of a consultation
- POSITIVE: reached a lot of patients
- NEGATIVE: struggled getting a GP on board which meant it significantly impacted our reach/data

PENCAT Eligible Patients

- Utilised the PENCAT tool to generate a list of patients eligible for a reminder to get an eye check
- POSITIVE: able to reach a lot of patients
- NEGATIVE: time consuming and hard to track

Speaker: Sarah Zerbib, Manager, Education & Development, Vision 2020 Australia

Sarah is responsible for Education and Development activities at Vision 2020 Australia, the peak body for eye health and vision care in Australia.

Sarah has been working in the not-for-profit sector in Australia and the UK for over 18 years, she has experience in project management, health promotion and professional education.

Sarah is a mother of two who enjoys spending time with her family and travelling. Born and raised in France, she is a committee member of the French Bilingual Association of Melbourne.



Eye health and vision care Online learning and resources

Eye Health Collaborative Care and Quality Improvement in General Practice 25 October 2023

Presentation by Sarah Zerbib, Education & Development

Vision 2020 Australia



Established in October 2000.

The sole, national eye health peak industry body.

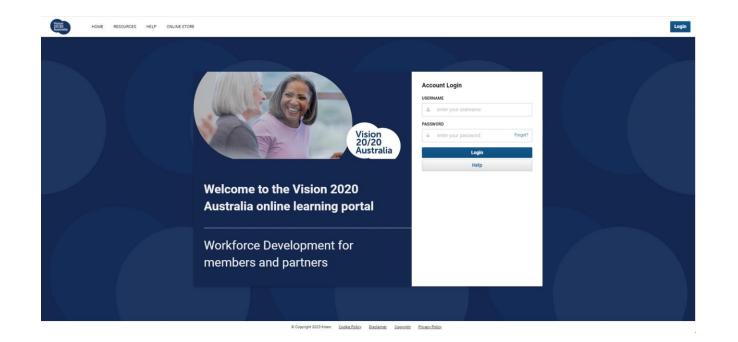
50 members across the spectrum of research, prevention, diagnosis, treatment, rehabilitation, representation of or service provision for people who are blind or have low vision, and also in all major areas of participation including employment and education.

Purpose and vision: the elimination of preventable blindness and vision loss and the full participation of people who are blind or have low vision in the community.

Online learning portal

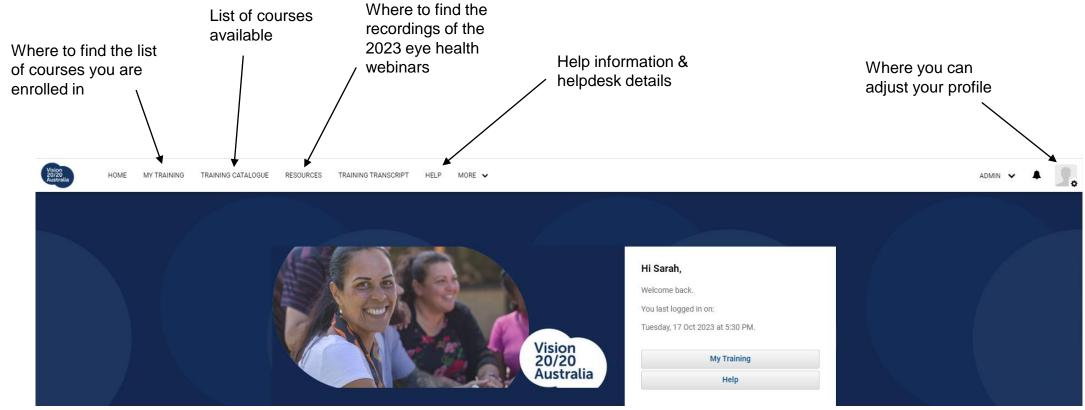
Vision 20/20 Australia

Contact: education@vision2020australia.org.au
Include workplace postcode



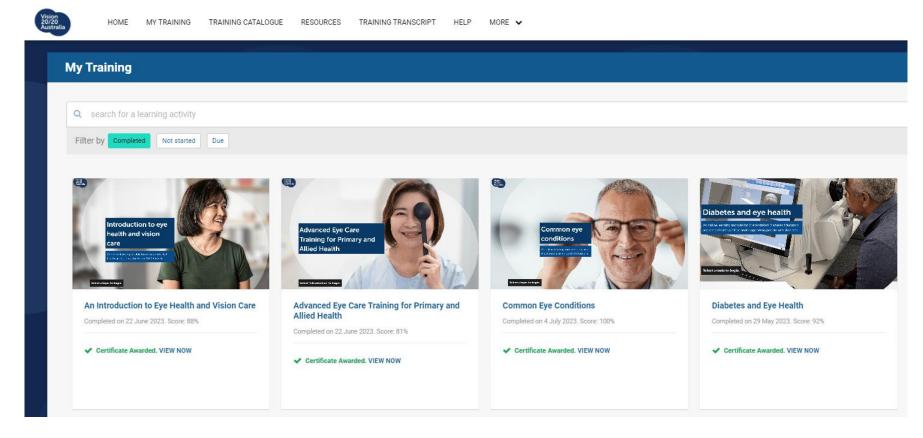
Your homepage





'My Training' = Your courses dashboard

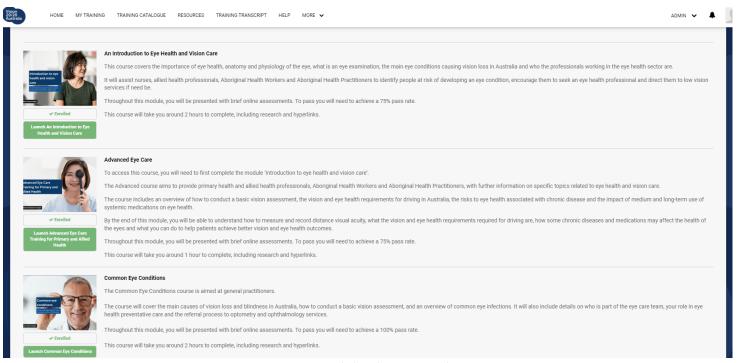




Training catalogue & online store



Free access for health professionals working in Victoria



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Recordings of live webinars hosted in 2023 available in Resources.

Topics:

- Glaucoma
- Age-related macular degeneration
- Diabetes and eye health
- Children's vision
- Ocular emergencies (access on request, contact us: education@vision2020australia.org.au
- Cataracts

Other resources



Range of information sheets and videos

English + 10 languages: Arabic, Greek, Cantonese, Mandarin, Italian, Vietnamese, Burmese, Dari, Hazaragi and Tamil

Other sources of information



Optometry Australia www.optometry.org.au

The Royal Australian and New-Zealand College of Ophthalmology www.ranzco.edu

The Australian College of Optometry www.aco.org.au

The Royal Victorian Eye and Ear Hospital www.eyeandear.org.au





Victorian Aboriginal Community Controlled Health Organisation www.vaccho.org.au

Indigenous Eye Health Unit (University of Melbourne)
https://mspgh.unimelb.edu.au/centres-institutes/centre-for-health-equity/research-group/ieh

Good Vision for Life www.goodvisionforlife.com.au



THANK YOU



Questions?

Discussion Panel:

- Maria Bui
- Sarah Zerbib
- Belinda Bradfield
- Dr Paul O'Keefe

Eye Health QI Activities

Our quality improvement templates are available for general practices to improve patient outcomes and deliver best practice care.

QI Activity



QI Activity



Increase the number of people living with diabetes who have been referred to an optometrist.

The following Plan-Do-Study-Act (PDSA) cycles can contribute to your CPD hours for the 2023 – 2025 triennium. Instructions to self-report your CPD hours for this activity are included under 'Next Steps' on page 5 of this template.

First steps

- Nominate a lead person or leadership team including clinical and non-clinical representatives for this activity.
- Decide how you will communicate with your practice team and patients about the improvement you're working on.
- 3. Meet with your practice team to discuss how you will implement this activity.
- Refer to our <u>quick guide</u> for more ideas to increase the success of your improvement activity.
- Check the relevant <u>HealthPathway</u> for this condition to ensure your team is up to date with best practice management guidelines.

Increase the number of patients who have had

preventative eye care screening.

This quality improvement activity guide was developed using findings from the Embedding eye health preventative care into primary care pilot program in partnership with the Victorian and Tasmanian PHN Alliance.

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Session Conclusion

We value your feedback, let us know your thoughts.

Scan this QR code



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Attendance certificate will be received within 4-6 weeks.

RACGP CPD hours will be uploaded within 30 days.

To attend further education sessions, visit, https://nwmphn.org.au/resources-events/events/

This session was recorded, and you will be able to view the recording at this link within the next week.

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