

Prof Minas Coroneo

Pterygium surgery, Ocular Surface Squamous Neoplasia (OSSN) management and advanced cataract surgery techniques

- In pterygium surgery, auto-conjunctival grafting is considered the gold standard
- Pterygia are associated with OSSN, endothelial cell loss and skin malignancy
- OSSN management is shifting from surgical to medical, including the use of topical interferon in initial treatment
- Main risk factor for IOL subluxation/dislocation post-cataract surgery is the presence of pseudoexfoliation syndrome

Invention in ophthalmology

- IOL-associated dysphotopsia is caused by light refracting to the retina instead of the ciliary body
- Topical brimonidine can be used to treat dysphotopsia following cataract surgery



Dr Uday Bhatt

Five corneal challenges in cataract surgery

- **Unhealthy ocular surface**
 - Consider underlying issue and postpone measurements until treated
- **Previous refractive surgery**
 - Can cause error in corneal power and skew effective lens position prediction
- **Forme fruste keratoconus**
 - Check for signs of progression and consider CXL
 - For IOL calculations, stop contact lens use, repeat A-scans and use manifest refraction
- **Endothelial disease**
 - Patient <40, deep AC (>3 mm) and clear lens
 - Cataract surgery before DSEK: aim for -1.00 to -1.25, use dispersive viscoelastic and consider FLACS
 - Patient must be on board and choose a surgeon with corneal expertise
- **Herpes infection**
 - Suspect when VA is disproportionate to amount and type of cataract
 - Perioperative care includes oral antivirals, topical antivirals and steroids



Dr Alex Ioannidis

Demystifying dysphotopsia – a practical approach

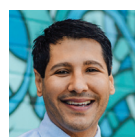
- Take a very detailed history
- Exclude other causes of visual phenomena
- Exclude any retinal disease (fundus exam)
- Reassure the patient – in most cases it settles
- Explain the adaptive response to the new IOL
- You cannot map 'shadows' on the Humphrey/Goldmann
- Early-stage options are sunglasses/broad-brimmed hats
- Consider least invasive options first (e.g. miotics)
- Consider reverse optic capture
- Final option is IOL exchange with different lens design/ piggyback IOL/sulcus placement



Dr Lewis Levitz

Bumps you SHOULD avoid

- Beware of a non-resolving chalazion
- Beware of any painless, chronic, ulcerating lesion
- Beware of any bright yellow, vascularised conjunctival mass
- Beware of any lump that looks like 'salmon flesh' in an elderly person
- If it doesn't behave like a chalazion, it's not a chalazion
- Benign, yellow orbital lumps are not an emergency (usually fat or lacrimal gland prolapse) – monitor and refer if enlarging
- Refer lacrimal fossa tenderness or lesions to exclude a mass



Dr Nima Pakrou

Clinical OCT cases

- Dense structures reflect/scatter incident light and are brighter
- Retinal pigment epithelium and Bruch's membrane are bright structures
- Haemorrhages appear brighter
- Dense structures shadow structures below them (e.g. choroidal nevus)
- Fluid or empty space is 'dark space' as there is no signal scatter
- ELM – external limiting membrane
- IS/OS (ellipsoid zone) – 'photoreceptor integrity line'
- Attenuation, discontinuity or disruption of these reported to correspond to photoreceptor dysfunction/damage, which carries poorer prognosis

EYE 360

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Dr Christolyn Raj

Seeing spots... should I be worried?

- **Light spots:** pattern recognition, recognise the retinal layer involved
- **Dark spots:** often longstanding, well circumscribed (often inactive, can change over time, darker/deeper/extensive)
- Refer if any other associated pathology co-exists
- **S:** Confirm the **SPOT**
- **P:** Look for a **PATTERN**
- **O:** Is it involving the **OUTER** retina?
- **T:** Determine the **TIMEFRAME** – acute or chronic?



Dr Joe Reich

Dispelling myths

- Spectacle use causes vision to deteriorate (**MYTH**)
- Myopia is caused by reading/screen use (**MYTH**), lack of sunshine (**FACT**)
- Rubbing a sty with a gold ring cures it (**MYTH**)
- Raw steak cures a black eye (**MYTH**)
- Pirates wore a patch to have one dark-adapted eye to see during combat below deck (**MYTH**)
- The US Federal Aviation Authority recommends pilots close one eye when using a cabin light to preserve some degree of night vision (**FACT**)
- Eating carrots improves your night vision (**MYTH**)
- The AREDS 1 and 2 studies recommended supplements to prevent ARMD when there is a family history (**MYTH**)
- Many antioxidants are marketed for eye health (**MYTH**)
- Aspirin increases the risk of a macular haemorrhage (**MYTH**)



Prof Rasik Vajpayee

One deed for two needs

Special considerations for cataract surgery:

- Super hard cataract
- White cataract
- Posterior polar cataract
- Small pupil
- Subluxated lens
- Co-existing corneal pathology (e.g. corneal opacity)
 - Anterior partial thickness: PTK/ALTK/DALK + phaco
 - Posterior partial thickness: DSAEK triple procedure
 - Full thickness (partial): OI/CRAK + phaco
 - Full thickness (total): PK triple procedure



Dr Aaron Yeung

Diabetic retinopathy... an update 2017

- Leading cause of vision loss in 20–74 year olds
- In 2010, 285 million diabetics worldwide – 1/3 had DR and 1/3 of this DR was vision-threatening (severe NPDR/PDR/DMO)
- **Most common cause of vision loss:** PDR for T1DM, DMO for T2DM
- **Prevention:** cholesterol and blood pressure management, stop smoking
- **Diagnosis/monitoring:** OCT (quick, non-invasive), FFA (identify ischaemia)
- **Treatment:** shift from laser to injections, laser still has its uses