



# Highlights from this issue

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## BTNL2 gene polymorphism and sarcoid uveitis (*see page 1690*)

The butyrophilin-like 2 G16071A gene polymorphism seems to predispose for sarcoidosis; however, it does not seem to predispose for all subtypes of sarcoid uveitis.

**Retinal vessel oxygen saturation is affected in uveitis associated with Vogt-Koyanagi-Harada disease (*see page 1695*)**  
Retinal oximetry may be a valuable tool in monitoring disease progression and might provide new insights into pathophysiology of uveitis associated with VKH disease

**Calcification of hydrophilic acrylic intraocular lenses following secondary surgical procedures in the anterior and posterior segments (*see page 1700*)**  
The authors report 15 cases of calcification in hydrophilic acrylic intraocular lenses following corneal, glaucoma and vitreo-retinal surgery, including lenses with hydrophobic surface properties.

## Clinical and microbiological characteristics of *Moraxella* keratitis (*see page 1704*)

In this single centre retrospective review, the authors demonstrate the value of *Moraxella* subspecies identification by reporting significant differences in the clinical features and prognosis of *M. nonliquifaciens* and *M. lacunata* compared with other subspecies.

## Long-term outcomes of penetrating keratoplasty for corneal complications of herpes zoster ophthalmicus (*see page 1710*)

"Penetrating keratoplasty can achieve favorable tectonic and visual outcomes in patients with corneal complications from herpes zoster ophthalmicus. Long term visual potential may be limited by co-morbid ocular diseases.

## Comparison between Manual-Trephination vs femtosecond laser-assisted deep anterior lamellar keratoplasty for keratoconus (*see page 1716*)

In this retrospective comparative study, femtosecond laser-assisted DALK showed similar clinical outcomes in BSCVA and keratometric astigmatism at 12-month and 24-month postoperative examinations compared to manual DALK. It also

showed less residual myopia and a better corneal topography profile.

## Treatment of neurotrophic keratopathy with minimally invasive corneal neurotization: long-term clinical outcomes and evidence of corneal reinnervation (*see page 1724*)

"In this prospective study, patients with neurotrophic keratopathy showed significant improvement in corneal sensation and corneal epithelial integrity 24 months after corneal neurotization. Evidence of corneal reinnervation was confirmed with immunohistochemistry and functional neuroimaging techniques.

## Six-Year incidence and progression of diabetic retinopathy in Indian adults: the Singapore Indian eye study (*see page 1732*)

In a population-based sample of migrant Indians in Singapore, the 6-year crude incidence and progression of diabetic retinopathy were 18.56% and 29.6%. Poor glycaemic control accounted for 41.29% of the population-attributable risk for incident DR.

## Ziv-Aflibercept versus bevacizumab administration prior to diabetic vitrectomy: a randomized and controlled trial (*see page 1740*)

Better clinical outcomes were achieved when study subjects were administered intravitreal ziv-aflibercept compared with intravitreal bevacizumab prior to vitrectomy for the treatment of diabetic-related complications during this clinical trial.

## Early retinal neurovascular impairment in diabetic patients without clinically detectable retinopathy (*see page 1747*)

Decreased vessel density, reduced retinal nerve fibre layer thickness were found in patients with preclinical diabetic retinopathy. Also, delayed implicit time of flicker ERG was found and it was correlated with decreased vessel density.

## A prospective randomised clinical trial of intravitreal bevacizumab vs triamcinolone in eyes with diabetic macular oedema undergoing cataract surgery: 6-month results (*see page 1753*)

The authors report that eyes with diabetic macular oedema had improved visual outcomes when either intra-vitreous triamcinolone or bevacizumab is used

during cataract surgery, although triamcinolone was more likely to result in sustained anatomical improvement.

## Analyses of quantitative correlations between microaneurysms, ischemic index, and new vessels in ultra-wide field fluorescein angiography using automated software (*see page 1759*)

Using automated software, the quantitative image analyses of ultra-wide field fluorescein angiography of patients with diabetic retinopathy presented reliable and precise results.

**Outcomes of small gauge vitreoretinal surgery without scleral-depressed shaving of the vitreous base in the era of wide-angle viewing systems (*see page 1765*)**  
Using wide-angle viewing systems, small incision pars plana vitrectomy for rhegmatogenous retinal detachment achieves good anatomic and visual outcomes without prophylactic scleral-depressed shaving of the vitreous base.

## Microperimetry in age-related macular degeneration: association with macular morphology assessed by optical coherence tomography (*see page 1769*)

In eyes with age-related macular degeneration (AMD), increasing age, advanced AMD stage, and decreased retinal thickness were associated with impaired retinal sensitivity, as assessed with the MAIA microperimetry device.

## Comorbidity of dementia and age-related macular degeneration calls for clinical awareness: a meta-analysis (*see page 1777*)

In this systematic review and meta-analysis, the authors report a significant association between dementia/Alzheimer's disease and age-related macular degeneration by synthesising evidence from cross-sectional and cohort studies. The comorbidity of these conditions calls for clinical awareness.

## Risk factors for incident central serous retinopathy: case-control analysis of a united states national managed care population (*see page 1784*)

In this review of national insurance databases, male middle-aged patients with recent steroid exposure were more likely to develop central serous retinopathy. Other risk factors included diabetes

mellitus, diabetic macular oedema, and age-related macular degeneration.

**Detailed clinical characterisation, unique features, and natural history of autosomal recessive *rdh12*-associated retinal degeneration (see page 1789)**

This retrospective chart review of 57 subjects with RDH12-associated retinal degeneration provides a comprehensive description of the timeline of vision loss and highlights a unique fundus signature that strongly suggests the genetic diagnosis.

**Prevalence and risk factors of myopic maculopathy in rural southern China: the Yangxi eye study (see page 1797)**

In this population-based, cross-sectional study included 4469 participants in South China the prevalence of myopic maculopathy was 1.4%. Older age and more myopic spherical equivalence were risk factors for myopic maculopathy.

**Risk factors associated with myopia in schoolchildren in Ireland (see page 1803)**

Myopia prevalence in schoolchildren in Ireland was associated with family history, plus environmental and lifestyle factors including sedentary lifestyle, obesity, increased screen-time and reduced daylight exposure. Suggesting lifestyle adjustments in susceptible children may be beneficial.

**Iris colour and astigmatism among Chinese teenagers (see page 1810)**

A school-based study found that darker iris colour might contribute to the occurrence of astigmatism in adolescents. Together with previous findings, the study suggests that iris colour might be an important predictor in refractive development.

**Decreased contrast sensitivity at high altitude (see page 1815)**

A decrease in contrast sensitivity occurs during high altitude exposure. This decrease in contrast sensitivity may be of multifactorial origin as various ocular changes attributed to high altitude hypoxia are known to influence contrast sensitivity.

**Philadelphia telemedicine glaucoma detection and follow-up study: confirmation between eye screening and comprehensive eye exam diagnoses (see page 1820)**

In this retrospective study of 107 consecutive patients with primary uveal melanoma, prognostic risk status was found to influence adherence to metastatic surveillance recommendations. Prognostic risk should be considered when counselling patients about metastatic surveillance.

**Relationship between macular vessel density and central visual field sensitivity at different glaucoma stages (see page 1827)**

Macular vessel density measured by optical coherence tomography angiography was significantly associated with central visual field sensitivity in eyes with moderate-to-advanced glaucoma and this association was stronger than that of macular ganglion cell-inner plexiform layer.

**Dark room prone provocative testing in primary angle closure suspects and those with open angles (see page 1834)**

The extent of IOP rise after a 15 min dark room prone provocative test failed to separate open angle from primary angle closure suspects. It also did not predict the risk of worsening over time.

**Modified Goldmann prism intraocular pressure measurement accuracy and correlation to corneal biomechanical metrics: multi-centre randomised clinical trial (see page 1840)**

A simple modified replacement prism for any Goldmann-type tonometer may decrease applanation tonometry sensitivity to corneal biomechanical factors significantly improving accuracy.

**Differences in ocular biometrics and aqueous humor dynamics between Chinese and caucasian adults (see page 1845)**

The ocular biometrics and aqueous humour dynamics of ageing caucasians were found to differ from age-matched Chinese in numerous ways that may help to explain their relative risks of different glaucomas.

**Exploring patients' expectations and preferences of glaucoma surgery outcomes to facilitate healthcare delivery and inform future glaucoma research (see page 1850)**

A focus group study was performed on glaucoma patients who had undergone surgical treatment, to identify treatment outcomes important to them. Independent living was one of the most important outcomes identified in this study.

**Preservation of retinoblastoma group E eyes with neovascular glaucoma using intravenous chemotherapy: risk factors and outcomes (see page 1856)**

Neovascular glaucoma in retinoblastoma is an uncommon occurrence and these eyes are generally enucleated. Herein, the authors describe the use of systemic chemotherapy to salvage these advanced eyes and indicate certain clinical features that can be used for prognostication.

**Extensive circumferential partial thickness sclerectomy in eyes with extreme nanophthalmos and spontaneous uveal effusion (see page 1862)**

The underlying aetiology of nanophthalmos complicated by uveal effusion is megalosclera. Current therapies have limited success rates because fibrosis over the sclerotomy sites causes recurrent effusions. We present the results of maximal scleral excision surgery (>260° at 90% depth from muscle insertion to vortex vein).

**Risk stratified systemic surveillance in uveal melanoma (see page 1868)**

In this retrospective study of 107 consecutive patients with primary uveal melanoma, prognostic risk status was found to influence adherence to metastatic surveillance recommendations. Prognostic risk should be considered when counselling patients about metastatic surveillance.

**Uveal melanoma incidence trends in Canada: a national comprehensive population-based study (see page 1872)**

This national study based on the analysis of 2215 patients defines incidence trends for uveal melanoma in Canada as well as highlights important longitudinal, geographic and spatial differences in the distribution of this malignancy.