



# Highlights from this issue

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## Ocular findings in Loeys-Dietz syndrome (see page 1036)

Loeys-Dietz syndrome (LDS), an autosomal-dominant connective tissue disorder that shares clinical features with Marfan syndrome, is associated with decreased central cornea thickness, mild myopia and increased axial length. Ectopia lentis is uncommon. Hypertelorism, scleral changes and retinal vascular tortuosity were not features of LDS in our cohort.

## Vision in former very low birthweight young adults with and without retinopathy of prematurity compared with term born controls: the NZ 1986 VLBW follow-up study (see page 1041)

Compared with term born controls, former very low birthweight young adults with a history of untreated retinopathy of prematurity had poorer visual acuity, were less likely to drive and more likely to experience vision problems affecting daily living.

## Prevalence and factors associated with age-related macular degeneration in a southwestern island population of Japan: the Kumejima study (see page 1047)

The prevalence of age-related macular degeneration (AMD) in a rural island of southwestern Japan was higher than the averaged prevalence of the Asian population. Furthermore, AMD was associated with age, sex, history of cataract surgery and axial length.

## Visual field indices and patterns of visual field deficits in mesopic and dark-adapted two-colour fundus-controlled perimetry in macular diseases (see page 1054)

Dark-adapted, two-colour, fundus-controlled perimetry provides additional diagnostic information and allows for refined structure–function correlation in macular disease. Hereby, the variability-weighted mean deviation and pattern standard deviation exhibited the lowest retest variability of the tested visual field indices.

## Spirolactone versus observation in the treatment of acute central serous chorioretinopathy (see page 1060)

Oral spiro lactone is a promising treatment for acute central serous chorioretinopathy with faster absorption of subretinal fluid.

## Changes in retinal ischaemic index correlate with recalcitrant macular oedema in retinal vein occlusion: WAVE study (see page 1066)

The severity of macular oedema in retinal vessel occlusion was correlated with the ischaemic index of the entire retina and the perimacular area in particular. Targeted treatment to perimacular or near peripheral areas of non-perfusion is associated with a reduction in recalcitrant macular oedema in retinal vessel occlusion.

## Macular thickness profile and diabetic retinopathy: the Singapore Epidemiology of Eye Diseases study (see page 1072)

Compared with eyes without diabetic retinopathy, eyes with diabetic retinopathy but no macular oedema had thicker maculae and outer retinae, and such thickening was most prominent in more severe cases.

## Antivascular endothelial growth factor agents pretreatment before vitrectomy for complicated proliferative diabetic retinopathy: a meta-analysis of randomised controlled trials (see page 1077)

Controversies about antivascular endothelial growth factor (anti-VEGF) pretreatment before vitrectomy for proliferative diabetic retinopathy still exist. Relevant studies were analysed to re-evaluate this topic, and the pooling results suggested anti-VEGF pretreatment could facilitate easier surgery and better visual rehabilitation.

## Macular capillary plexuses after epiretinal membrane surgery: an optical coherence tomography angiography study (see page 1086)

Optical coherence tomography angiography demonstrated deformation of macular capillary plexuses in the eyes after epiretinal membrane removal. Greater alteration in vasculature was correlated with more severe retinal structural change and poorer visual outcome.

## Calculating the individual probability of successful ocriplasmin treatment in eyes with VMT syndrome: a multivariable prediction model from the EXPORT study (see page 1092)

Known predictive factors for vitreomacular traction resolution after intravitreal ocriplasmin injection were confirmed in this

study and combined into a formula—one that allows the calculation of an individual probability of treatment success.

## Significant correlation between meibomian gland dysfunction and keratitis in young patients with *Demodex brevis* infestation (see page 1098)

Ocular demodicosis, especially by *Demodex brevis*, is significantly associated with meibomian gland dysfunction and keratitis in young patients.

## Avoiding big bubble complications: outcomes of layer-by-layer deep anterior lamellar keratoplasty in children (see page 1103)

Manual deep anterior lamellar keratoplasty in children has a high structural success rate in conditions such as mucopolysaccharidosis, full-thickness pathology, corneal neovascularisation and high-risk patients with behavioural disorders, with only a mild decrease in endothelial cell density.

## Comparative evaluation of progression rate in keratoconus before and after collagen crosslinking (see page 1109)

Serial evaluation of corneal tomography parameters is useful in the detection of disease progression in patients with keratoconus. Corneal collagen crosslinking may be deferred in patients with stable corneal tomography.

## Keratolimbal allograft for limbal stem cell deficiency after severe corneal chemical injury: a systematic review (see page 1114)

Keratolimbal allograft (KLAL) is performed commonly for limbal stem cell deficiency after severe corneal chemical injury. In a systematic review, the authors did not find sufficient evidence to provide a definitive recommendation for KLAL in this setting.

## Comparing a new hydroexpression technique with conventional forceps method for SMILE lenticule removal (see page 1122)

A new hydroexpression technique for lenticule removal during SMILE is described and its advantages discussed. The authors also report comparable visual and refractive outcomes when compared with the conventional forceps technique.

**Frequency of a diagnosis of glaucoma in individuals who consume coffee, tea and/or soft drinks (see page 1127)**

In a retrospective cohort study examining caffeinated beverage consumption and glaucoma risk for participants in the 2005–2006 National Health and Nutrition Examination Survey, there was a negative correlation between daily consumption of hot tea and glaucoma.

**Topographic correlation between juxtapapillary choroidal thickness and parapapillary deep-layer microvasculature dropout in primary open-angle glaucoma (see page 1134)**

Localised reduction of juxtapapillary choroidal thickness (JPCT) was observed at the location of parapapillary deep-layer microvasculature dropout in primary open-angle glaucoma eyes with parapapillary  $\gamma$ -zone, while JPCT showed generalised reduction in the eyes with  $\beta$ -zone.

**Optical coherence tomographic angiography identifies peripapillary microvascular dilation and focal non-perfusion in giant cell arteritis (see page 1141)**

Optical coherence tomography-angiography (OCT-A) was performed in four

patients with giant cell arteritis showing superficial peripapillary microvascular dilation and focal non-perfusion, involving symptomatic and asymptomatic eyes. OCT-A could provide useful adjunctive data in making this life-threatening diagnosis.

**Natural history of primary paediatric optic nerve sheath meningioma: case series and review (see page 1147)**

The authors report a series of primary paediatric optic nerve sheath meningiomas with long-term data on untreated patients, highlighting a small subset of tumours that are indolent and can be managed conservatively.

**Ruthenium-106 brachytherapy for iris and iridociliary melanomas (see page 1154)**

In an analysis at 3 years of follow-up of 88 patients with iris or iridociliary melanoma treated with ruthenium-106 brachytherapy, the authors observed tumour control in 98.9%, an eye preservation rate of 97.7% and treatment-related toxicity in 74.0%, which did not affect overall visual acuity.

**Prevalence and characteristics of ocular pain in non-infectious uveitis: a quality of life study (see page 1160)**

Using three questionnaires (NEI VFQ-25, SF-36 and MPQ-DLV), the authors observed ocular pain to be common in patients with non-infectious uveitis, including poster uveitis, and also impacting various aspects of quality of life.

**Decreased expression of A20 is associated with ocular Behcet's disease (BD), but not with Vogt-Koyanagi-Harada disease (VKH) (see page 1167)**

We demonstrate that A20 expression is decreased in patients with Behcet's disease. This may affect cytokine levels secreted by dendritic cells via the MAPK signalling pathway. Silencing A20 is shown to shift T cell differentiation.

**Depot-specific characteristics of adipose tissue-derived stromal cells in thyroid-associated orbitopathy (see page 1173)**

Donor-matched periocular and subcutaneous adipose tissue-derived stromal cells (ADSC) from patients with thyroid-associated orbitopathy exhibited similar mesenchymal phenotypes, while significantly higher adipogenic, myofibrogenic potentials and HA synthesis were found in periocular ADSC.