



## Highlights from this issue

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Keith Barton, James Chodosh,<sup>1b</sup> Jost B Jonas<sup>1b</sup>, *Editors in chief***Prior non-irradiative focal therapies do not compromise the efficacy of delayed episcleral plaque brachytherapy in retinoblastoma (see page 699)**

In a retrospective study of 50 patients, the lack of prior diode or green laser therapy was predictive of an increased risk of treatment failure. The use of non-irradiative focal therapy was not predictive of time to treatment failure. Visual outcomes and toxicity were favourable, but the incidence of cataracts following brachytherapy often requires intervention.

**Clinical features of paediatric uveitis at a tertiary referral centre in Sao Paulo, Brazil (see page 636)**

In this retrospective study of paediatric uveitis in a tertiary centre in Sao Paulo (SP), Brazil, juvenile idiopathic arthritis was the systemic condition most often associated with uveitis. Preservation of visual acuity was associated with early referral and adequate management.

**Cycloplegic refraction by 1% cyclopentolate in young adults: is it the gold standard? The Anyang University Students Eye Study (AUSES) (see page 654)**

In a school-based study of young Chinese adults, lack of cycloplegia resulted in a significant misclassification of myopia, hypermetropia and emmetropia.

**Quantitative retinal microvasculature in children using swept-source optical coherence tomography: The Hong Kong Children Eye Study (see page 672)**

Age, gender, body mass index, axial length, central macular thickness and OCT-A quality score were associated with quantitative retinal microvasculature measured from optical coherence tomography-angiography in a population-based sample of Chinese school children.

**Evaluation of a deep learning image assessment system for detecting severe retinopathy of prematurity? (see page 580)**

This deep learning image assessment system accurately identified clinically significant retinopathy of prematurity based only on posterior pole fundus photographs. This has potential implications for screening and to improve diagnostic accuracy of retinopathy of prematurity.

**Repeatability of vessel density measurements using optical coherence tomography angiography in retinal diseases (see page 704)**

In patients with retinal disease, vessel density measurements by optical coherence tomography angiography demonstrated a high degree of repeatability. The factors affecting such repeatability were BCVA, signal strength, central macular thickness, and GC-IPL thickness.

**Relationship between vessel density and visual field sensitivity in glaucomatous eyes with high myopia (see page 585)**

Peripapillary vessel density measured by optical coherence tomography angiography shows a significantly better association with the visual field mean sensitivity than the peripapillary retinal nerve fibre layer thickness in glaucomatous eyes with high myopia.

**Morphological and topographical appearance of microaneurysms on optical coherence tomography angiography (see page 630)**

Diabetic microaneurysms were classified into different morphological subtypes on optical coherence tomography angiography. These subtypes were associated with clinical characteristics of microaneurysms, in terms of leakage on fluorescein angiography, and retinal thickening on optical coherence tomography.

**The relationship of intercapillary area to visual acuity in diabetes mellitus: an optical coherence tomography angiography study (see page 604)**

Increased intercapillary area measured from optical coherence tomography angiography, describing enlargement of capillary rarefaction or closure at macular area, was independently associated with poor visual acuity and worsening diabetic retinopathy.

**Comparison of short-wavelength blue-light autofluorescence and conventional blue-light autofluorescence in geographic atrophy (see page 610)**

The increased excitation of short-wavelength fluorophores was associated with the ability of the FAF, using 450 nm, to identify and quantify geographic atrophy lesions. However, enhancement

of the long-wavelength fluorophores improves the accuracy and reliability of assessments.

**Optic nerve edema at high altitude occurs independent of acute mountain sickness (see page 692)**

Swelling of the optic nerve at high altitude occurs independent of acute mountain sickness. The increase of optic nerve sheath diameter and development of optic disc oedema are not directly related.

**Five-year visual outcomes after anti-VEGF therapy with or without photodynamic therapy for polypoidal choroidal vasculopathy (see page 617)**

Anti-vascular endothelial growth factor therapy alone and combination with photodynamic therapy for polypoidal choroidal vasculopathy yields similar 5 year visual outcomes and retinal structural changes; however, macular atrophy tends to be more frequent with combination treatment.

**Characteristics of patients with neovascular age-related macular degeneration who are non-responders to intravitreal aflibercept (see page 623)**

The frequency of aflibercept-nonresponsive AMD was 5.2%. The non-responders were significantly associated with choroidal vascular hyperpermeability and lower frequency of subretinal hyper-reflective materials. Aflibercept-nonresponsive AMD was mostly treatable by photodynamic therapy or ranibizumab.

**LVP keratoprosthesis: anatomical and functional outcomes in bilateral end-stage corneal blindness (see page 592)**

The clinical outcomes of the novel LVP keratoprosthesis were favourable, both in terms of anatomical retention and visual recovery, in children and adults with completely dry eyes and severe blinding end-stage keratopathy.

**Outcomes of ultrathin descemet stripping automated endothelial keratoplasty (UT-DSAEK) performed in eyes with failure of primary descemet membrane endothelial keratoplasty (DMEK) (see page 599)**

Ultrathin DSAEK provided excellent visual rehabilitation for patients following the primary failure of DMEK

### **Intraocular bleeding in patients managed with novel oral anticoagulation (NOAC) and traditional anticoagulation: a network meta-analysis and systematic review (see page 641)**

Meta-analysis of Phase III trials of NOACs vs warfarin for atrial fibrillation or venous thromboembolism shows Edoxaban is significantly associated with a reduction in the rate of intraocular haemorrhage.

### **Randomised, prospective clinical trial of platelet-rich plasma injection in the management of severe dry eye (see page 648)**

Injections of Platelet Rich Plasma into the lacrimal gland of patients with severe dry eye perform well, in terms of safety as well as and improvement of all measured parameters in tear parameters measurement

### **Surgical outcomes of a new affordable non-valved glaucoma drainage device and ahmed glaucoma valve: comparison in the first year (see page 659)**

The new, low cost non-valved drainage device, Aurolab Aqueous Drainage Implant, was observed to have a higher success rate and comparable safety when compared with the Ahmed Glaucoma Valve.

### **Prevalence and clinical consequences of cytomegalovirus dna in the aqueous humor and corneal transplants (see page 666)**

CMV DNA was detected in 10.0% aqueous, 26.7% recipient corneas, and 20.0% donor corneas obtained during keratoplasty from 30 patients. Four patients with CMV positivity in aqueous/recipient developed postkeratoplasty

CMV endotheliitis and subsequently graft failure.

### **Squamous cell carcinoma in the anophthalmic socket - A series of 4 cases with HPV-16 profiling (see page 680)**

Squamous Cell Carcinoma can rarely occur in the conjunctiva of anophthalmic sockets. The exact cause is unclear, but it is likely that human papillomavirus may play a role.

### **Functional and aesthetic outcomes of eyelid skin grafting in facial nerve palsy (see page 692)**

Periocular skin grafts in facial nerve palsy are effective in improving lagophthalmos and periorbital symmetry where skin contraction exists. Graft appearance takes at least 6 months to start looking natural and blend with eyelid skin.