



Highlights from this issue

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Keith Barton, James Chodosh , Jost B Jonas , *Editors in chief***Smoking and treatment outcomes of neovascular age-related macular degeneration over 12 months (see page 893)**

In this cohort of neovascular age-related macular degeneration (AMD) patients, current smoking was associated with a younger age of AMD onset and key treatment outcomes such as higher mean central macular thickness and greater odds of subretinal fluid presence.

Effect of posterior vitreous detachment on treat-and-extend versus monthly ranibizumab for neovascular age-related macular degeneration (see page 899)

Posterior vitreous detachment did not impact functional outcomes of treat-and-extend ranibizumab therapy for neovascular AMD; however, it was associated with reduced need for retreatment.

Identifying central serous chorioretinopathy biomarkers in coexisting diabetic retinopathy: a multimodal imaging study (see page 904)

In this study, a unique subset of patients with coexistent DR and CSCR, was observed, the prevalence of which was 0.4%. The authors describe the clinical and imaging characteristics with special attention to those presenting with unilateral CSCR

Predictors of treatment response to intravitreal anti-vascular endothelial growth factor (anti-VEGF) therapy for choroidal neovascularization secondary to chronic central serous chorioretinopathy (see page 910)

The study evaluated the response of central serous chorioretinopathy complicated by choroidal neovascularization (CNV) to anti-VEGF treatment. The fluid reduction was variable, dependant on factors such as central retinal thickness, CNV size and CNV flow area.

Optical coherence tomography angiography for the assessment of choroidal vasculature in high myopia (see page 917)

The authors present a novel segmentation technique using Optical coherence tomography angiography to assess the choroid in young myopes. Significant differences in the choroidal thickness

and vasculature in extreme and high myopes have been found

Validation of electronic visual acuity (eva) measurement against standardised ETDRS charts in patients with visual field loss from inherited retinal degenerations (see page 924)

Measurement of visual acuity with an electronic system showing fewer letters, increases precision in the measurement of visual acuity in patients with rod-cone dystrophies who have central visual field loss affecting the foveal area.

Genetic and clinical findings in a Chinese cohort with Leber congenital amaurosis and early-onset severe retinal dystrophy (see page 932)

The authors investigated the mutation frequencies for each LCA gene in Chinese patients with Leber congenital amaurosis and early-onset severe retinal dystrophy. This may be valuable for future genetic counselling and gene therapy

Earlier use of systemic immunosuppression is associated with fewer ophthalmic surgeries in pediatric non-infectious uveitis (see page 938)

We demonstrate that earlier initiation of systemic immunosuppression in paediatric non-infectious uveitis is associated with fewer ophthalmic procedures at 3.5 years. This is likely due to earlier control of uveitis and reduced need for corticosteroids.

New modifications of Swedish ROP guidelines based on 10-year data from the SWEDROP register (see page 943)

Based on ten-year data from the Swedish ROP register, modifications of ROP guidelines are proposed, including infants with gestational age <30 weeks and postponing first examination in infants with gestational age \geq 26 weeks.

Low-dose (0.01%) atropine eye drops to reduce progression of myopia in children: a multi-centre placebo-controlled randomised trial in the United Kingdom (CHAMP-UK)—study protocol (see page 950)

We report the protocol of a multicentre placebo-controlled randomised trial that will evaluate the efficacy, safety and mechanism of action of low dose

atropine (0.01%) eye drops to reduce myopia progression in children with myopia.

Protective behaviours of near work and time outdoors in myopia prevalence and progression in myopic children: a two-year prospective population study (see page 956)

Close reading distance was observed to play a key role in accelerating myopic progression in young children

Intermediate term outcomes of Aurolab aqueous drainage implant in refractory paediatric glaucoma (see page 962)

The authors report the use of a new low cost non-valved aqueous drainage device for management of refractory glaucoma in a series of children, with relatively few sight-threatening complications in the medium-term

Glaucoma following cataract surgery in the first two years of life: frequency, risk factors and outcomes from IoLunder2 (see page 967)

The authors report findings from IoLunder2 on the relationship between ocular size and age in determining childhood aphakic/pseudophakic glaucoma risk, and present a novel risk algorithm for children undergoing early life surgery

Comparison of a commercial spectral-domain OCT and swept-source OCT based on an angiography scan for measuring circumpapillary retinal nerve fiber layer thickness (see page 974)

The authors observed good-to-excellent the agreement in retinal nerve fibre layer thickness measurement between spectral domain optical coherence tomography and swept source optical coherence tomography angiography

Qualitative evaluation of neuroretinal rim and retinal nerve fibre layer on optical coherence tomography to detect glaucomatous damage (see page 980)

This report examined whether Bruch's membrane opening-minimum rim width (BMO-MRW) measurements provides added value to the conventional use of circumpapillary retinal nerve fibre layer (cpRNFL) thickness measurements on optical coherence tomography imaging for the detection of glaucomatous damage.

Heritability of pachymetric indices using Pentacam Scheimflug imaging (see page 985)

Corneal thickness at apex, which is one of the main endophenotypes of diseases such as keratoconus and glaucoma, had the highest Heritability among pachymetric indices.

Efficacy of a new automated method for quantification of corneal neovascularisation (see page 989)

This paper introduces a new automated method for quantification of corneal neovascularisation, which we believe can be useful for diagnosis and monitoring diseases causing corneal neovascularisation

Population-based assessment of visual impairment and pattern of corneal disease: results from the CORE (Corneal Opacity Rural Epidemiological) study (see page 994)

A population-based study revealed that one-third of corneal opacities were bilateral and an equal proportion had a presenting visual acuity less than 3/60. The odds of having visual impairment due to corneal disease were more for the illiterate and the elderly.

Histopathology and selective biomarker expression in human meibomian glands (see page 999)

Meibomian gland dysfunction (MGD) is the most common form of evaporative dry eye disease (DED), but its pathogenesis is poorly understood. Our study, by using human cadaver tissues, revealed two distinct pathogenic mechanisms of MGD.

Clinical clues predictive of Stevens-Johnson syndrome as the cause of chronic cicatrizing conjunctivitis (see page 1005)

This study describes a scoring system based on a combination of clues from the medical history and clinical examination that can help ophthalmologists reliably establish Stevens-Johnson syndrome as the cause of chronic cicatrizing conjunctivitis.

Conjunctival squamous cell carcinoma: prognostic factors for the recurrence and metastasis and clinicopathological characteristics at an oncological hospital in Peru (see page 1010)

This is an extensive conjunctival squamous cell carcinoma (CSCC) study in Latin America, with a high proportion of cases showing advanced TNM stages, and patients that underwent radical treatment. Besides recurrence rates, it describes metastasis rates as poorly reported and as prognostic factors

Combined deep penetrating nevi of the conjunctiva are relatively common lesions characterised by BRAFV600E mutation and activation of the beta catenin pathway—a clinicopathologic analysis of 34 lesions (see page 1016)

Deep penetrating nevus of the conjunctiva represents up to 10% of excised conjunctival nevi. It tends to be darkly pigmented. Genetically, it is characterised by BRAFV600E mutation and activation of the beta catenin pathway.

The expression of prostaglandin E2 receptor 3 in the eyelid epidermis of patients with Stevens-Johnson syndrome/toxic epidermal necrolysis (see page 1022)

We investigated EP3 expression of the eyelid epidermis in SJS/TEN patients with severe ocular complications and revealed that EP3 protein was expressed in the eyelid epidermis and was not downregulated, unlike in conjunctival epithelium

Clinical and biochemical analysis of the ageing tear film (see page 1028)

Biochemical and clinical tear film distinctions, between two populations differing in age by over 30 years, were observed—exemplified by a decrease in lacrimal gland protein concentration paralleled by a reduction in tear secretion and stability.