



Highlights from this issue

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Association between atopic keratoconjunctivitis and the risk of corneal ulcer (see page 1632)

Our population-based cohort study supports an association between corneal ulcer and atopic keratoconjunctivitis. It suggests that all patients with atopic keratoconjunctivitis should be advised of the risk of developing a corneal ulcer.

Pellucid marginal degeneration versus keratoconus: distinction with wide-field SD-OCT corneal sublayer pachymetry (see page 1638)

Wide-field optical coherence tomography sublayer pachymetry showed favourable reliability in pellucid marginal degeneration and may be clinically helpful to differentiate the disease from the often confused diagnosis keratoconus.

Compression sutures combined with intracameral air injection versus thermokeratoplasty for acute corneal hydrops: a prospective randomised trial (see page 1645)

In treatment of acute corneal hydrops in keratoconus, compression sutures with intracameral air injection results in superior clinical outcomes to thermokeratoplasty. Lamellar keratoplasty may not be feasible following recent thermokeratoplasty.

Ten-year outcomes of microkeratome-assisted lamellar keratoplasty for keratoconus (see page 1651)

Over the first decade following modified microkeratome-assisted LK, most eyes maintain satisfactory visual and refractive outcomes, with low rates of immune rejection, graft failure and no recurrence of ectasia.

Evolution of corneal thickness and optical density after laser in situ keratomileusis versus small incision lenticule extraction for myopia correction (see page 1656)

Both LASIK flaps and SMILE caps show postoperative re-thickening. SMILE-treated corneas present higher optical densities than LASIK corneas in the early postoperative period, with significant decrease thereafter and up to 3-months, explaining the delayed visual recovery observed after SMILE.

Accuracy of common IOL power formulas in 611 eyes based on axial length and corneal power ranges (see page 1661)

Published reports regarding IOL power formula choice are inconsistent. This study investigates the importance of considering the axial length as well as the K value.

Efficacy and safety of oral valganciclovir in cytomegalovirus anterior uveitis with uncontrolled intraocular pressure (see page 1666)

Among patients with uncontrolled intraocular pressure (IOP) due to cytomegalovirus-related anterior uveitis, a short course of oral valganciclovir was effective in controlling IOP in 35.3% of patients over 2 years.

Association between esodeviation and primary open-angle glaucoma – the 2010–2011 Korea National Health and Nutrition Examination Survey (see page 1672)

This was the first study to investigate the association between strabismus and glaucoma in a representative population. In the subjects with esodeviation, the prevalence of glaucoma was significantly greater than in those without esodeviation. Furthermore, esodeviation was independently associated with POAG in the Korean population.

Prevalence, risk factors and management of ocular hypertension or glaucoma in patients with Vogt-Koyanagi-Harada Disease (see page 1678)

Main risk factors for OHT/glaucoma in our VKH patients were worse initial BCVA and final BCVA, treatment delay, increased number of recurrences and posterior synechiae of the iris.

Risk of newly developing visual field defect and neurodegeneration after pars plana vitrectomy for idiopathic epiretinal membrane (see page 1683)

Internal limiting membrane peeling was a risk for postoperative visual field defect (VFD) in idiopathic epiretinal membrane. VFDs frequently appeared nasally, and ganglion cell layer thinning appeared temporally to the fovea after pars plana vitrectomy.

Ten-year survival trends of neovascular age-related macular degeneration at first presentation (see page 1688)

Visual outcomes survival trends 10 years after commencement of treatment for neovascular age-related macular degeneration show that poor visual outcomes could be delayed, independence in daily activities was feasible and a high rate of attendance achievable.

Visual acuity outcomes and anti-VEGF therapy intensity in macular oedema due to retinal vein occlusion: a real-world analysis of 15 613 patient eyes (see page 1696)

In a retrospective analysis of 15 613 patient eyes with macular oedema due to retinal vein occlusion, mean 6 month and 1 year change in visual acuity correlated with treatment intensity, but patients with better vision at presentation were vulnerable to vision loss, reflecting a ceiling effect. Assessed with the same database, these real-world visual gains compared favourably to 1 year gains in neovascular age-related macular degeneration and diabetic macular oedema, but exhibited a larger gap when compared with corresponding randomised controlled trials.

Increased risk of cancer in patients with retinal vein occlusion: a 12-year nationwide cohort study (see page 1705)

In this nationwide, population-based retrospective cohort study in South Korea, patients with retinal vein occlusion were at increased risk of cancer development even after adjusting several factors. Clinicians should keep underlying cancer in mind as one of the causes of retinal vein occlusion.

Presumed retinal pericapillary astrocytic hamartoma: multimodal imaging findings of a novel hamartomatous lesion (see page 1711)

An observational study showing multimodal imaging findings of five patients with isolated retinal lesions suggestive of a new variant of retinal astrocytic hamartoma.

Phenotypic and genetic variations between Asian and Caucasian polypoidal choroidal vasculopathy (see page 1716)

Disease expression in PCV varies in different populations, particularly in East Asians and Caucasians. Polymorphisms in

CFH gene rs800292 constitute increased risk for PCV in Asians and CETP gene rs3764261 in Caucasians, respectively.

Incidence, timing, and risk factors of type 1 retinopathy of prematurity in a North American cohort (see page 1724)

In a large broad-risk cohort of premature infants, we found type 1 ROP developed in 6% infants over wide range of time intervals, providing important information for timely and efficient diagnosis of type 1 ROP.

Prediabetes influences the structure of the macula: thinning of the macula in the Northern Finland Birth Cohort (see page 1731)

This study provides evidence of prediabetes-evoked changes influencing macular structure and retinal vessels. Significant thinning of the macula was observed in pre-diabetes and diabetes

and the diameters of retinal arteries were decreased.

Overcoming barriers of retinal care delivery during a pandemic – attitudes and drivers for the implementation of digital health: global expert survey (see page 1738)

We found an increase in the implementation of teleophthalmology and home monitoring services during the pandemic. The driver for the implementation of teleophthalmology in institutions that did not provide such a service before the pandemic was reimbursement.

Choroidal thickness predicts progression of myopic maculopathy in high myopes: a 2-year longitudinal study (see page 1744)

Our study included 434 high myopic participants with 2 year follow-up and results demonstrated choroidal thickness was associated with myopic maculopathy

progression. This is an indication of the vital role of choroidal thickness in myopic maculopathy progression.

Association of polymorphisms in ZFHX1B, KCNQ5 and GJD2 with myopia progression and polygenic risk prediction in children (see page 1751)

This study confirmed the association of GJD2 rs524952, KCNQ5 rs7744813 and ZFHX1B rs13382811 with myopia progression in children, and polygenic risk scores involving these three variants conferred higher risk than each individual variant.

Gaze-evoked deformations of the optic nerve head in thyroid eye disease (see page 1758)

Biomechanical simulations predict a greater magnitude of gaze evoked deformations in patients with thyroid eye disease. This phenomenon was also observed *in vivo*.