



Highlights from this issue

doi:10.1136/bjophthalmol-2021-318800

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Morphological change and recovery of corneal endothelial cells after rho-associated protein kinase inhibitor eye-drop (ripasudil 0.4%) instillation (see page 169)

In glaucoma patients treated with ROCK-inhibitor eye-drops, corneal-endothelial-cell density (CECD) number calculated by automated non-contact-specular-microscopy software appeared to show a small change within 1-hour of instillation, with recovery of CECD within approximately 6-hours after instillation.

Bilateral morphometric analysis of corneal sub-basal nerve plexus in patients undergoing unilateral cataract surgery: a preliminary in vivo confocal microscopy study (see page 174)

Patients undergoing unilateral cataract surgery exhibit bilateral morphometric changes in corneal sub-basal nerve plexus one month postoperatively. Alterations of corneal nerve fibres were subclinical and detectable only by means of in vivo confocal microscopy.

Allogenic simple limbal epithelial transplantation (alloSLET) from cadaveric donor eyes in patients with persistent corneal epithelial defects (see page 180)

This study demonstrates the usefulness of alloSLET from limbal tissue of cultured cadaveric corneoscleral buttons for the therapy of non-healing corneal epithelial defects associated with limbal stem cell deficiency when autologous limbal tissue is not available. 12 months after surgery, 10 of 14 patients (71.4%) had an epithelialised corneal surface.

Effect of long-term rigid gas-permeable contact lens wear on keratoconus progression (see page 186)

Long-term rigid gas-permeable contact lens wear did not impact the progression of keratoconus based on Scheimpflug-based corneal tomographic evaluation.

Puberty could regulate the effects of outdoor time on refractive development in Chinese children and adolescents (see page 191)

Parental myopia, outdoor time and estradiol were associated with axial length and spherical equivalent changes.

Puberty may play a regulatory role in the effect of outdoor time on delaying the elongation of axial length.

Eye trauma in falls presenting to the emergency department from 2006 through 2015 (see page 198)

Over ten years, the frequency of eye trauma, including vision-threatening trauma, in patients presenting to Emergency Departments with falls, increased in the United States. Females, elderly and middle-aged age-groups were the most affected.

Intraocular pressure changes following topical ocular hypotensive medications washout (see page 205)

Review of intraocular pressure may be prudent in patients with quiescent inflammation as a significant proportion of uveitic glaucoma eyes retained intraocular pressure levels of less than 22 mmHg after medication washout.

Ocular toxoplasmosis: phenotype differences between toxoplasma IgM positive and IgM negative patients in a large cohort (see page 210)

Retrospective study to examine the differences in the clinical characteristics and demographics of patients diagnosed of ocular toxoplasmosis according to their IgM status. IgM positive were more likely to have macular involvement.

Visual acuity outcomes and anti-VEGF therapy intensity in diabetic macular edema: a real-world analysis of 26,658 patient eyes (see page 216)

In DME patients, 1 year visual improvement associates with anti-VEGF treatment intensity and baseline vision. Those with mild baseline impairment generally are at risk of vision loss, unless treated intensively. Those with moderate baseline impairment improve meaningfully, if treated intensively.

OCT-A characterisation of recurrent type 3 macular neovascularisation (see page 222)

In this study, we reported that detectable flow from the deep vascular complex to the retinal pigment epithelium space is mandatory for the development of exudation due to recurrent exudative type three macular neovascularisation.

Visual outcomes after surgery for primary rhegmatogenous retinal detachment in era of microincision vitrectomy: Japan-Retinal detachment Registry report IV (see page 227)

Analyses of the Japan-Retinal Detachment Registry showed that the 6 month post-operative BCVA of patients with a retinal detachment treated by PPV was comparable to that treated by SB if concurrent cataract surgery is not performed.

Optical coherence tomography angiography of flat irregular pigment epithelial detachments in central serous chorioretinopathy (see page 233)

The authors observed that flat irregular PED, and thinner choroid may indicate the presence of an underlying choroidal neovascular network in central serous chorioretinopathy in Chinese patients.

Prognostic value of intermediate age-related macular degeneration phenotypes for geographic atrophy progression (see page 239)

Structural intermediate age-related macular degeneration phenotypes were shown to confer an increased risk of progression of geographic atrophy with the fastest enlargement of lesions developing from reticular pseudodrusen.

Progression of retinopathy and incidence of cardiovascular disease: findings from the chronic renal insufficiency cohort (CRIC) study (see page 246)

Our results suggest that in patient with kidney disease progression of retinopathy is associated with higher incidence of cardiovascular events, and therefore, assessment of retinal vascular morphology may provide important information when assessing cardiovascular disease in patient with renal pathology.

Long-term outcomes of treat-and-extend ranibizumab with and without navigated laser for diabetic macular oedema: TREX-DME 3-year results (see page 253)

Treat-and-extend ranibizumab provided visual improvements which were sustained with a mean of 3 injections. Long-term physician vigilance is encouraged as approximately 80% of eyes required at least one injection in the final year.

Retinal light sensitivity as outcome measure in recessive Stargardt disease (see page 258)

This study demonstrates that fundus-controlled perimetry could serve as clinical outcome measure in patients with recessive Stargardt disease based on the evidenced concurrent validity, retest-variability, as well as ability to detect functional decline over time.

Diagnostic accuracy of diabetic retinopathy grading by an artificial intelligence-enabled algorithm compared with a human standard for wide-field true-colour confocal scanner and standard digital retinal images (see page 265)

EyeArt software was demonstrated to classify true-colour, wide-field confocal images with comparable accuracy and sensitivity to that of manual grading of

standard digital photographs for diabetic retinopathy.

Long-term natural history of visual acuity in eyes with choroideremia: a systematic review and meta-analysis of data from 1004 individual eyes (see page 271)

In a meta-analysis of 1004 eyes with choroideremia, visual acuity declined slowly (0.33 letters/year) before and rapidly (1.23 letters/year) after 39 years, suggesting age as a biomarker to identify patients with measurable visual acuity decline.

Prognostic factors for relapse and survival among patients with ocular adnexal lymphoma: validation of the eighth edition of the American Joint Committee on Cancer (AJCC) TNM classification (see page 279)

This validation study of the AJCC eighth edition classification for ocular adnexal

lymphoma showed that the T, N, and M categories were predictive of relapse and survival among 140 patients with primary ocular adnexal lymphoma.

In vivo confocal microscopy features and clinico-histological correlation of limbal nerve corpuscles (see page 285)

In vivo confocal microscopy is a useful noninvasive tool to identify and image limbal nerve corpuscles and it can be used to investigate the role of these structures in normal and disease conditions.

Characterisation of human orbital fibroblasts cultivated from intraconal, nasal, and central adipose tissues (see page 290)

Orbital fibroblasts cultivated from nasal fat pads in normal controls had similar characteristics to those from intraconal fat tissues in patients with Graves' orbitopathy.