



Highlights from this issue

doi:10.1136/bjophthalmol-2019-314864

Keith Barton, Jost B Jonas,^{1b} James Chodosh^{1b}, *Editors in chief***Altered retinoid metabolism gene expression in chronic Stevens-Johnson's syndrome (see page 1015)**

Altered vitamin A metabolism in chronic ocular sequelae of SJS.

Photophobia and sensations of dryness in migraine patients occur independent of baseline tear volume and improve following botulinum toxin A injections (see page 1024)

The authors report that, in migraine patients, photophobia and dry eye symptoms are not a direct consequence of reduced tear volume. Both symptoms improve following botulinum toxin A injections.

Reappraisal of the suitability of corneas from bacteremic donors for use in corneal transplants (see page 1030)

With proper donor disinfection, corneas donated from bacteremic donors presented the same quality for transplant use as corneas donated from nonbacteremic donors.

Longitudinal changes in corneal leucocyte density in vivo following transplantation (see page 1035)

In vivo measurement of intracorneal leucocyte density is associated with corneal diagnosis, vascularisation, steroid use and interval post-corneal transplantation. Leucocyte density measurement is potentially useful in identifying patients who are at risk of graft rejection

Outcomes of cataract surgery performed by non-physician cataract surgeons in remote north Cameroon (see page 1042)

The authors report reasonable visual outcomes when non-physician cataract surgeons performed cataract surgery in remote North Cameroon

Lens nuclear opacity quantitation with long-range swept-source optical coherence tomography: correlation to LOCS III and a Scheimpflug imaging-based grading system (see page 1048)

Quantification of the lens nuclear density using long-range swept-source optical coherence tomography images correlated well with several commonly-used indices in assessing nuclear cataract. This might serve as an objective and quantitative indicator for evaluating nuclear opacity.

Incidence and risk of major heart diseases in middle-aged adults with moderate to severe vision impairment: a population-based cohort study (see page 1054)

Middle-aged women with visual disabilities had a higher incidence of heart failure and ischemic heart disease than the age-, sex-, and comorbidity-matched controls. Visual disability was an independent risk factor for these major heart diseases.

The association between mitochondrial DNA damage and ocular blood flow in glaucoma patients (see page 1060)

The mitochondrial/nuclear DNA ratio was significantly associated with temporal and superior optic nerve head tissue blood flow in male patients with severe glaucoma. This finding may benefit research on biomarkers of mitochondrial dysfunction in glaucoma.

Clinical effectiveness of the Manchester Glaucoma Enhanced Referral Scheme (see page 1066)

This study evaluated the clinical effectiveness of the Manchester Glaucoma Enhanced Referral Scheme (GERS). The results show GERS is clinically effective, with a low false positive and negative rate and no cases of missed glaucoma.

Changes in intraocular pressure after intravitreal fluocinolone acetonide (ILUVIEN): real-world experience in three European countries (see page 1072)

Intraocular pressure events were analysed in this ongoing study of patients with chronic diabetic macular oedema who were treated with a fluocinolone acetonide implant. Results were consistent with the clinical trial

Early life factors for myopia in the British Twins Early Development Study (see page 1078)

A UK twin cohort examining risk factors for myopia across childhood development, identified higher maternal education, younger age starting school, and longer hours computer gaming as associated with myopia, while fertility treatment was inversely associated.

Study of Optimal Perimetric Testing in Children (OPTIC): evaluation of kinetic approaches in childhood neuro-ophthalmic disease (see page 1085)

This cross-sectional comparison of Goldmann and Octopus perimetry, in 30 children aged 5–15 years with neuro-ophthalmic disease, shows children ≥ 8 years can perform either test well, but differences in outputs mean they are not interchangeable.

Optimisation of dark adaptation time required for mesopic microperimetry (see page 1092)

This paper provides evidence-based guidance for duration of dark adaptation required for MAIA microperimetry testing in future clinical and research settings. This paper also provides evidence for cone-mediated central retinal responses under mesopic conditions.

Associations between physical activity and cataract treated surgically in diabetic patients: findings from the 45 and up study (see page 1099)

In a study of 9113 diabetic patients, more vigorous physical activity was independently.

Meeting the need for corrective spectacles in visually impaired chinese school children: the potential of ready-made spectacles (see page 1106)

In this large sample of school-aged Chinese children, visual morbidity in two-thirds or more of visually impaired children could be alleviated with ready-made spectacles.

Refractive error and visual impairment in Republic of Ireland schoolchildren (see page 1112)

The refractive error prevalence and visual impairment in the "Republic of Ireland schoolchildren study", found hyperopia and astigmatism in younger children and myopia in older children resulted in a high frequency of presenting visual impairment.

Association between glaucomatous optic disc and depressive symptoms independent of light exposure profiles: a cross-sectional study of the HEIJO-KYO cohort (see page 1119)

The authors report a significant association between glaucomatous optic disc and depressive symptoms that is

independent of daily light exposure profiles measured objectively in a general elderly population.

Obstructive sleep apnea and increased risk of nonarteritic anterior ischemic optic neuropathy (see page 1123)

The incidence of non-arteritic ischaemic optic neuropathy was 0.92% in patients with obstructive sleep apnoea (OSA). Patients with OSA had a 3.80-fold higher risk of developing nonarteritic anterior ischemic optic neuropathy in a 12-year, nationwide population-based cohort study.

Clinical features of Chinese patients with relapsing polychondritis (see page 1129)

In a series of patients with relapsing polychondritis, ocular involvement mainly presents as scleritis or uveitis, with men appearing to show more severe ocular involvement and a worse prognosis.

Autologous internal limiting membrane flap for retinal detachment due to posterior retinal tears over choroidal atrophy in highly myopic eyes (see page 1133)

Autologous internal limiting membrane may seal retinal tears located where there is no RPE. This may reduce the risk of retinal re-detachment.

Cilioretinal artery hypoperfusion and its association with paracentral acute middle maculopathy (see page 1137)

The authors report the utility of spectral domain optical coherence tomography in assessing the severity of retinal ischaemia and identifying the 3 main causes of cilioretinal artery occlusion (nocturnal hypotension, central retinal vein occlusion and giant cells arteritis).

The spectrum of choroidal neovascularization associated with dome-shaped macula (see page 1146)

Serous macular detachment should be investigated by a multimodal imaging approach to exclude choroidal neovascularization which, may otherwise remain undetected.

Immunosuppressants and/or anti-vascular endothelial growth factor inhibitors in punctate inner choroidopathy—follow-up results with optical coherence tomography angiography (see page 1152)

A significant amount of controversy exists regarding optimal management of punctate inner choroidopathy. Immunosuppressants in addition to anti-VEGF injections seem to reduce the disease activity in case of secondary choroidal neovascularisation.

Trainee-led vs. specialist-led management of neovascular age-related macular degeneration. A registry-based study (see page 1158)

In this study, trainee-led treatment of neovascular age-related macular degeneration demonstrated similar visual and safety outcomes at one and three years to specialist-led treatment.

Prevalence of cystoid macular edema, epiretinal membrane and cataract in retinitis pigmentosa (see page 1163)

The authors report that prevalence of treatable retinitis pigmentosa (RP) complications is high, suggesting it may be clinically beneficial to screen RP patients to identify those who may benefit from current or future interventions.

Retinal oxygen saturation is an independent risk factor for the severity of diabetic retinopathy (see page 1167)

The study shows that the oxygen saturation in larger retinal vessels is an

independent risk factor for the severity of diabetic retinopathy with a weight comparable to diabetes duration and HbA1c.

Unmeasurable small size superficial and deep foveal avascular zone in Nanophthalmos—the Collaborative Nanophthalmos OCTA study (see page 1173)

Nanophthalmic macula is characterised by absent foveal avascular zone in both superficial and deep capillary plexus, prominent retinal capillary tortuosity, and absent foveal fold.

Surgical management of acquired implantation iris cysts: indications, surgical challenges and outcomes (see page 1179)

Complete excision of the acquired implantation iris cyst with sector iridectomy is an effective treatment option if other less invasive surgical approaches fail. Although there is an improvement in visual acuity post-surgery, this is typically limited secondary to associated comorbidities.

Two-year follow-up of mineralocorticoid receptor antagonists for chronic central serous chorioretinopathy (see page 1184)

In this retrospective study, treatment by mineralocorticoid receptor antagonists allowed subfoveal fluid resolution in 81% of patients with chronic central serous chorioretinopathy and epitheliopathy at 2 years. BCVA improved significantly during follow-up.

Proteomic analysis of the aqueous humor in eyes with pseudoexfoliation syndrome (see page 1190)

An in-depth proteomics exploration of aqueous humour in patients with and without pseudoexfoliations was performed. The results indicate oxidative stress and inflammation as contributing factors in the formation of PEX.