Highlights from this issue

doi:10.1136/bjophthalmol-2020-316384

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Longitudinal changes in axial length in high myopia: 4-year prospective study (see page 600)

A persistent increase in axial length was observed over 4 years in adult myopic patients, which correlated with initial axial length.

Longitudinal changes in the ganglion cell-inner plexiform layer thickness in high myopia: a prospective observational study (see page 604)

A greater reduction in GC-IPL was observed over time in high myopia. This was more obvious in older subjects and may be related to various co-morbidities in patients with high myopia.

Singapore Chinese eye study: key findings from baseline examination and the rationale, methodology of the 6-year follow-up series (see page 610)

Key findings from the baseline Singapore Chinese Eye Study complement other population-based studies in Asia. The 6-year follow-up study will provide useful insights into eye diseases in adult Chinese.

Prevalence and causes of vision loss in East Asia in 2015: magnitude, temporal trends, and projections (see page 616)

Sixty million people in East Asia are blind or have distance vision impairment (<6/18 in the better eye) and 265 million uncorrected presbyopia. Leading but readily addressable causes are uncorrected refractive error and cataract with these rising along with diabetic retinopathy and glaucoma in recent decades.

Changes in intraocular pressure during reading or writing on smartphones in patients with normal-tension glaucoma (see page 623)

During work on a smartphone under low-light conditions, transient IOP elevation occurred in treated normal-tension glaucoma patients. The IOP change was much smaller in patients that had undergone trabeculectomy than in patients treated with medication.

Intraocular pressure control and visual field changes in primary angle closure disease: the CUHK PACG longitudinal (CUPAL) study (see page 629)

In eyes with primary angle closure diseases, greater intraocular pressure (IOP) fluctuation was significantly associated with VF

deterioration; moreover, eyes with both high-threshold IOP fluctuation and high-threshold mean IOP had the fastest rate of visual function deterioration.

Automated anterior chamber angle pigmentation analyses using 360-degree gonioscopy (see page 636)

A novel 360 degree gonioscope classified the entire distribution of the trabecular meshwork pigmentation with good agreement in comparison with manual grading. The highest previously reported pigmentation grade in the inferior angle was confirmed by this modality.

Predicting Humphrey 10-2 visual field from 24-2 visual field in eyes with advanced glaucoma (see page 642)

Support vector regression predicted total deviation in Humphrey Field Analyzer 10-2 in advanced glaucoma from HFA 24-2 results from the same eye with around 25% margin of error. The HFA 24-2 result was not able to predict HFA 10 results in advanced glaucoma with sufficient accuracy to replace the latter.

Rate of three-dimensional neuroretinal rim thinning in glaucomatous eyes with optic disc haemorrhage (see page 648)

In glaucomatous eyes with optic disc haemorrhage (DH), three-dimensional neuroretinal rim thickness (3D-NRT) progressed faster, and the DH frequency at inferotemporal region affected the progression rate of 3D-NRT.

Comparison of retinal ganglion cell related layer asymmetry between early glaucoma eyes with superior and inferior hemiretina damage (see page 655)

Different patterns of retinal ganglion cell related layer asymmetry thinning was observed between early glaucoma eyes that start with superior and inferior hemiretina damage, suggesting an underlying difference in the pathological process.

Prevalence and risk factors for outer retinal layer damage after macula-off retinal detachment (see page 660)

Duration of macular detachment is the main factor affecting the outer retinal layer integrity after macula-off retinal detachment surgery. Postoperative visual

acuity is strongly associated with the number of affected bands.

Outer retina hyperreflective deposits (ORYD). A new OCT feature in naïve diabetic macular oedema after PPV with ILM peeling—The ORYD Study (see page 666)

A new potentially useful OCT feature is described which is seen after PPV with ILM peeling in naïve DME cases. We found that these outer retinal hyperreflective deposits (ORYD) are formed by a sudden disorganisation of inflammatory cells.

Visual benefit vs visual gain: what is the effect of baseline covariants in the treatment arm relative to the control arm? A pooled analysis of ANCHOR and MARINA (see page 672)

A post-hoc analysis from the ANCHOR and MARINA trials showed that higher baseline BCVA is associated with lower BCVA gains; however, visual benefits should be considered when assessing treatment response in nAMD.

One year outcomes of anti-vascular endothelial growth factors therapy in peripapillary choroidal neovascularisation (CNV) (see page 678)

Anti vascular endothelial growth factors (VEGF) agents form the first line therapy in treatment of peripapillary choroidal neovascular membrane. Young age and good baseline visual acuity are predictors of better long term visual outcomes.

The Moorfields AMD database report 2: fellow eye involvement with neovascular age-related macular degeneration (see page 684)

Depending on age, fellow eye involvement occurs in 32% of patients with neovascular AMD by 2 years. Fellow eyes generally maintain better vision, except in cases where late-stage disease in the first eye was untreated.

Foveal microvasculature, refractive errors, optical biometry and their correlations in school-aged children with retinopathy of prematurity after intravitreal anti-vascular endothelial growth factors or laser photocoagulation (see page 691) Favourable foveal and anterior segment developmental outcomes are seen in children with retinopathy of prematurity

who have been treated using anti-vascular endothelial growth factor antibodies, as compared with laser photocoagulation. These foveal microvascular anomalies are closely correlated with anterior segment anomalies.

Nomogram for visual acuity outcome after iodine-125 plaque radiotherapy and prophylactic intravitreal bevacizumab for uveal melanoma in 1131 patients (see page 697)

Two nomograms are described that use the initial clinical features and radiation parameters to predict visual acuity outcomes at 2 and 4 years after plaque radiotherapy and prophylactic intravitreal bevacizumab for uveal melanoma.

Local therapy for cancer therapy-associated uveitis: a case series and review of the literature (see page 703)

Immune-related adverse events (irAEs) from cancer immunotherapy and targeted therapy can lead to aggressive inflammation, necessitating systemic steroids or discontinuation of immunotherapy. Local therapy for ophthalmic irAEs is a favourable alternative that may allow for

concurrent continuation of life-prolonging immunotherapy.

Long-term outcome of scleral-sutured posterior chamber intraocular lens: a case series (see page 712)

Retrospective analysis of 345 consecutive cases requiring scleral suture fixated IOLs over a 10-year period. Preoperative, intraoperative and postoperative factors were analysed regarding causes of suture breakage. Young adults, combination of sutures and only one flap sutured was associated with a higher risk of suture breakage and IOL dislocation. No association with axial length and suture breakage was demonstrated.

Cornea verticillata in Fabry disease: a comparative study between slit-lamp examination and in vivo corneal confocal microscopy (see page 718)

The presence of corneal deposits can lead to early diagnosis and treatment of Fabry disease. A negative slit-lamp examination does not exclude the presence of epithelial deposits, which may be better detected and scored by corneal confocal microscopy

A 3-year follow up study of a new corneal inlay: clinical results and outcome (see page 723)

The safety, efficacy and clinical outcomes are described 3 years after implantation of the Flexivue MicroLens.

Differential effect of primary disease and corneal vascularisation on corneal transplant rejection and survival (see page 729)

This retrospective cohort study of 13 435 first corneal transplants confirms pre-operative host vascularisation is a risk factor for corneal allograft rejection but not failure within 5 years, and the effect varies by indication for transplant.

Tear cytokines profiling in superior limbic keratoconjunctivitis patients underwent medical treatment or in conjunction with surgical management (see page 735)

Tear MCP-1 level was correlated with clinical grading of SLK. While both medical and surgical treatments improve SLK disease severity, conjunctival resection provides better efficacy in decreasing tear cytokine levels compared with medical treatment alone.