Highlights from this issue

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Micro-interventional endocapsular nucleus disassembly: novel technique and results of first-in-human randomized controlled study (see page 176)

In a prospective, masked, multi-surgeon randomised clinical trial, the authors observed that microinterventional cataract fragmentation and endocapsular nucleus disassembly prior to conventional phacoemulsification safely improved the efficiency of phaco surgery and reduced the cumulative dispersed energy required during the procedure.

Corneal shape changes of the total and posterior cornea after temporal versus nasal clear corneal incision cataract surgery? (see page 181)

In a randomised trial, of nasal vs temporal 2.4 mm clear corneal incision, by two post-operative months there was no difference in corneal astigmatism between the two surgical approaches.

True rotational stability of a single-piece hydrophobic intraocular lens (see page 186)

In a prospective trial, the authors observed a mean absolute rotation of 1.1 degrees up to 6 months. No IOL rotated by more than five degrees.

The prevalence of glaucoma in the Australian National Eye Health Survey (see page 191)

In this national sample of non-Indigenous and Indigenous Australians, the prevalence of glaucoma was 3.4% and 1.6%. Half of non-Indigenous and three quarters of Indigenous Australians who had glaucoma did not have a known history of glaucoma.

Inter-relationship between ageing, body mass index, diabetes, systemic blood pressure and intraocular pressure in Asians: six year longitudinal study (see page 196)

In this population-based cohort study of 3188 Asians living in Singapore followed over a 6 year period, normal ageing and reduced systemic blood pressures are associated with reduced intraocular pressures.

Resting nailfold capillary blood flow in primary open-angle glaucoma (see page 203)

After controlling for multiple covariates, primary open-angle glaucoma patients

had reduced nailfold capillary blood flow compared with control subjects.

Correspondence between retinotopic Cortical mapping and conventional functional and morphologic assessment of retinal disease (see page 208)

This study introduces a novel approach for linking microperimetry and retinal imaging to retinotopic maps acquired by functional MRI which provide a valuable and objective adjunct to conventional testing in patients with retinal disease.

Quantifying vascular density and morphology using different swept-source optical coherence tomography angiographic scan patterns in diabetic retinopathy (see page 216)

The authors evaluated retinal parameters using various swept-source optical coherence tomography angiographic sizes. Patients with diabetic retinopathy had lower vascular density than healthy subjects in all scan sizes, though 3×3 mm images best predicted diabetic retinopathy.

Microaneurysm turnover is a predictor of diabetic retinopathy progression (see page 222)

Eyes with mild nonproliferative diabetic retinopathy show different phenotypes of progression to macular oedema. Of these, only phenotype C, characterised by high values of microaneurysm turnover is associated with worsening in ETDRS level.

Impact of drusen and drusenoid retinal Pigmentepithelium elevations size and structure on the integrity of the retinal pigment epithelium layer (see page 227)

In this work, the relationship between drusen characteristics and the integrity of the overlying retinal layers was investigated. Known risk factors, such as drusen size, had an impact on integrity, but also certain morphologic characteristics.

A retrospective cohort study exploring whether an association exists between spatial distribution of cystoid spaces in cystoid macular oedema secondary to Retinitis Pigmentosa and response to treatment with carbonic anhydrase inhibitors. (see page 233)

This retrospective cohort study demonstrates a possible association between the spatial distribution of cystoid spaces in Retinitis Pigmentosa-associated cystoid macular

oedema and response to carbonic anhydrase inhibitors.

Long-term reconstruction of foveal microstructure and visual acuity after idiopathic macular hole repair: three-year follow-up study (see page 238)

The eyes with faster photoreceptor reconstruction were more likely to achieve better visual acuity at 3 years after macular hole repair.

Comparative analysis of large macular hole surgery using an Internal Limiting Membrane insertion versus inverted flap technique (see page 245)

In this comparative study, the inverted internal limiting membrane (ILM) flap technique resulted in better photoreceptor layers and, consequently, better visual acuity after initial surgery for large macular holes, than the ILM insertion technique.

Atypical epiretinal tissue in full-thickness macular holes: pathogenic and prognostic significance (see page 251)

A subset of patients with full-thickness macular hole had an atypical epiretinal tissue with medium reflectivity on optical coherence tomography. The presence of atypical epiretinal tissue was related to worse outcome after surgery.

Efficacy of Non-Fovea sparing ILM peeling for symptomatic myopic Foveoschisis with and without macular hole (see page 257)

In a prospective interventional case series, vitrectomy with non-fovea-sparing (entire) ILM peeling resulted in a significant functional and anatomical improvement in eyes with Myopic Foveoschisis with or without Macular hole, with no reported complications. The observed results were comparable to fovea-sparing ILM peeling.

Lacrimal gland pleomorphic adenoma and malignant epithelial tumours: clinical and imaging differences (see page 264)

A 16 year review of lacrimal gland pleomorphic adenoma and malignant epithelial tumours reveals distinct clinical and radiological differences that would aid in their preoperative diagnosis.

Clinical characteristics and treatment outcomes of natural killer/T-cell lymphoma involving the ocular adnexa (see page 269)

Natural killer/T-cell lymphoma involving the ocular adnexa is a rare but potentially

At a glance

fatal disease, characterised by acute inflammatory signs that may cause it to masquerade as other forms of orbital inflammation.

Clinical features and visual outcomes of 111 patients with new-onset acute Vogt-Koyanagi-Harada disease treated with pulse intravenous corticosteroids (see page 274)

Clinical features of 111 Japanese patients with new-onset acute VKH disease treated with initial pulse

corticosteroid therapy were retrospectively reviewed. Visual outcomes were generally good and the recurrence rate was quite low during follow-up period.

Novel gene targets for miRNA146a and miRNA155 in anterior uveitis (see page 279)

This study confirms novel gene targets for increased miRNAs expressed in anterior uveitis patient samples; CD80, PRKCE and VASN for regulatory miRNA146a and SMAD2, TYRP1

and FBXO22 for pro-inflammatory miRNA155.

Synthetic biodegradable alternatives to the use of the amniotic membrane for corneal regeneration- assessment of local and systemic toxicity in rabbits (see page 286)

Biodegradable electrospun membranes of poly-lactico- glycolic acid 50:50 were applied to rabbit corneas for 29 days. Membranes were completely cleared from the eye by 29 days without eliciting any local or systemic toxicity