

## Highlights from this issue

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Arun D Singh, Harminder S Dua, *Editors-in-Chief***ULTRASOUND BIOMICROSCOPY OF THE LACRIMAL DRAINAGE SYSTEM**

Al-Faky evaluated lacrimal sac (LS) pump failure in 17 patients with lower motor neuron facial nerve palsy using ultrasound biomicroscopy (UBM).

Anatomical patency was confirmed through irrigation of the lacrimal drainage system. UBM evaluation of the LS during opening and closure of the eyelids was performed for both sides. LS showed obvious fluid turbulence within the sac during opening and closure of the eyelids on the normal side. Fluid turbulence was absent in severe LS and reduced in the milder LS. The authors conclude that UBM can be used as a safe and non-invasive tool to evaluate the LS pump.

**GLAUKOS iSTENT COMBINED WITH PHACOEMULSIFICATION**

Arriola-Villalobos *et al* conducted a prospective, non-comparative, interventional study to assess the mid-term efficacy and safety of the GTS-400-iStent combined with phacoemulsification in 20 patients with cataract and open-angle glaucoma or ocular hypertension. At 1 year follow-up, mean IOP decreased by 36% ( $9.4 \pm 3$  mm Hg) from baseline washout IOP. Mean number of medications fell from 1.3 to 0.3 (75% of patients were off medications). Mean endothelial cell count decreased from 2289 cells/mm<sup>2</sup> to 1986 cells/mm<sup>2</sup>. Authors conclude that combined cataract surgery with implantation of GTS-400-iStent seems to be an effective and safe procedure.

**DSEK AND PENETRATING KERATOPLASTY IN CHED**

Ashar, Ramappa, and Vaddavalli report surgical outcomes in five patients with congenital hereditary endothelial dystrophy (CHED) who underwent penetrating keratoplasty (PK) in one eye and Descemet's stripping endothelial keratoplasty (DSEK) in the contralateral eye. At 1 year, all grafts were clear. There was no significant difference in the spherical component of the

refraction; the astigmatism was significantly lower after DSEK. The refraction stabilised in DSEK eye within 3 months, while it continued to change up to 1 year after PK. Complications included graft dislocation in two eyes with DSEK (managed by rebubbling) and a graft dehiscence in one eye with PK (managed by resuturing). The authors conclude that DSEK offers early visual stabilisation compared with PK in patients with CHED.

**UVEITIS IN PREGNANCY AND POSTPARTUM**

Chiam *et al* examined the course of non-infectious uveitis during pregnancy in a retrospective study of 47 subjects with a previous history of non-infectious uveitis pre-dating their pregnancy. The rate of flare-up was 1.188 per person year prior to pregnancy, 0.540 per person year during pregnancy and 0.972 per person year in postpartum. Rates of flare-up only began to decrease in the second trimester. After delivery, rates of flare-up rebounded within 6 months and were similar to pre-pregnancy levels. Even so, 40% of subjects remained inactive within 1 year postpartum. These findings could guide uveitis management during pregnancy.

**MORNING GLORY SYNDROME ASSOCIATED WITH PHPV**

Fei *et al* describe the clinical manifestations and treatment outcomes in 22 eyes (19 patients) with morning glory syndrome (MGS) associated with persistent hyperplastic primary vitreous (PHPV) accounting for 26% of all the MGS eyes. Fifteen patients (79%) were younger than 1 year old at initial diagnosis. Six eyes were associated with microphthalmia. Nineteen of 22 eyes (86%) had complications, including cataract (10 eyes), secondary glaucoma (8 eyes), corneal leucoma or oedema (8 eyes), and retinal detachment (8 eyes). Three of the eight patients had abnormal neuro imaging studies. Compared with MGS and PHPV alone, the combination of the two conditions manifested with higher

incidence and more severe complications in younger patients.

**RPE-BRUCH'S MEMBRANE COMPLEX THICKNESS IN DRY AMD**

Karampelas *et al* compared retinal pigment epithelium-Bruch's membrane (RPE-BM) complex thickness in 25 patients with early and intermediate dry age-related macular degeneration (AMD) and 25 age-matched controls using manually segmented SD-OCT scans. Central subfield RPE-BM thickness was significantly thicker in the dry AMD group ( $32.3 \mu\text{m}$ ) compared with the normal eyes ( $22.7 \mu\text{m}$ ). RPE-BM thickness was positively correlated with age in controls but not in the AMD group and negatively correlated with visual acuity in the dry AMD group. These findings confirm the electron and light microscopy data and also establish the value of OCT in the quantification of the RPE-BM complex.

**RANIBIZUMAB WITH AND WITHOUT KETOROLAC EYEDROPS FOR EXUDATIVE AMD**

Russo *et al* conducted a pilot study in 56 eyes with new-onset CNV randomised (1:1) to receive intravitreal ranibizumab and topical ketorolac or ranibizumab alone. All patients received monthly 0.5-mg ranibizumab intravitreal injections for 3 months, after which monthly injections were administered in accordance with the standard of care. Group 1 patients also self-administered one drop of ketorolac three times a day for 6 months. The two treatments did not show differences in the number of ranibizumab injections or improvement in visual acuity. However, the mean 6-month change in central macular thickness was greater in the combination group than ranibizumab alone group ( $-124 \mu\text{m}$  vs  $-86.9 \mu\text{m}$ , respectively). Lesser disruption of retinal architecture in the combination group may preserve vision over the longer term.