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Highlights from this issue

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Rate and risk factors for conversion of fovea on to fovea off rhegmatogenous retinal detachment while awaiting surgery (see page 1011)

The rate of conversion of fovea on to fovea off rhegmatogenous retinal detachment was observed at 1.1%. Supero-temporal detachments extending to the vascular arcades were most at risk. Visual outcomes were good.

A prospective, randomized, double-masked comparison of local anesthetic agents for vitrectomy (see page 1016)

In a prospective, randomized, double-masked study 1% ropivacaine alone delivered via the peribulbar route during vitrectomy provided adequate intraoperative anesthesia as well as better postoperative analgesia and less postoperative subconjunctival hemorrhage

Incidence, mechanism and outcomes of schisis retinal detachments revealed through a prospective population-based study (see page 1022)

In a national epidemiological study the annual incidence of progressive schisis retinal detachments was found to be 0.85 per million. The findings also suggest a key role for posterior vitreous detachment in the pathogenesis of this rare condition.

Intake of key micro-nutrients and food groups in patients with late-stage age-related macular degeneration compared with age-sex matched controls (see page 1027)

Subjects with late-stage AMD reported a lower intake of vitamins C and E, betacarotene, folate than controls, but a higher zinc intake. A low proportion of AMD sufferers met the recommended daily intake of vegetables.

Retinal segmented layers with strong aquaporin-4 expression suffered more injuries in neuromyelitis optica spectrum disorders compared with optic neuritis with aquaporin-4 antibody seronegativity detected by optical coherence tomography (see page 1032)

In optic neuritis patients with neuromyelitis optica or aquaporin-4 antibody seropositivity, retinal layers with strong aquaporin-4 expression, including the retinal nerve fibre layer, inner plexiform

layer and inner nuclear layer, suffered more damage than those in patients with aquaporin-4 antibody seronegative optic neuritis.

Characterisation of choroidal morphological and vascular features in diabetes and diabetic retinopathy (see page 1038)

Choroidal morphometric and vascular traits were observed to be significantly altered in diabetes and diabetic retinopathy. It is anticipated that these findings will aid in further understanding the role and contribution of choroidal measures in pathogenesis of these blinding conditions.

Optical coherence tomography angiography in acute non-arteritic anterior ischaemic optic neuropathy (see page 1045)

Optical coherence tomography angiography in acute non-arteritic anterior ischaemic optic neuropathy reveals both sectorial and global reduction of the peripapillary vascular flow density.

The relationship between central visual field sensitivity and macular ganglion cell/Inner Plexiform Layer Thickness in Glaucoma (see page 1052)

In a study correlating local macular ganglion cell/inner plexiform layer thickness measurements with sensitivity at individual test locations on central 10–2 visual field testing, the authors observed that twenty-one test points of central 10–2 visual field provided most of the information on sectoral ganglion cell/inner plexiform layer thickness. Given the overlapping nature of structure–function relationships in the macula, a small number of test locations may be able to summarise central VF damage.

Understanding the reasons for loss to follow-up in glaucoma patients at a tertiary-referral teaching hospital in Korea (see page 1059)

In a study whereby glaucoma patients who had been lost to follow-up were traced, approximately half had not had continuous treatment. This emphasises the need for ongoing educational support and improved appointment notification.

Diagnostic ability of peripapillary vessel density measurements of optical coherence tomography angiography in primary open-angle and angle-closure glaucoma (see page 1066)

The ability to distinguish glaucomatous eyes from control eyes using peripapillary vessel density parameters on optical coherence tomography angiography was found to be good and comparable to the use of retinal nerve fibre layer thickness parameters, both in primary open angle and angle closure glaucoma.

The effects of ocular and systemic factors on the progression of glaucomatous visual field damage in various sectors (see page 1071)

Age was associated with glaucomatous visual field progression outside of the central area while smoking was associated with inferior visual field damage.

In vivo ocular biomechanical compliance in thyroid eye disease (see page 1076)

In a prospective study of thyroid eye disease patients and healthy patients examined using a Scheimpflug tonometer, a significant difference in maximum orbital deformation, was observed between the two groups. This was attributed to the decrease in orbital compliance in thyroid eye disease.

Use of bioresorbable implants for orbital fracture reconstruction (see page 1080)

A ten-year review of bioresorbable implants for simple and complex orbital fractures showed significant improvement in ocular motility, diplopia and enophthalmos postoperatively, while postoperative imaging showed features of nebone formation and resorption of implants.

First-line intra-arterial versus intravenous chemotherapy in unilateral sporadic group D retinoblastoma: evidence of better visual outcomes, ocular survival and shorter time to success with intra-arterial delivery from retrospective review of 20 years of treatment (see page 1086)

The authors observed an improvement in eye retention rates, fewer relapses, shorter treatment duration and more cases retaining useful vision with intra-arterial chemotherapy in comparison to

intravenous chemotherapy for advanced (stage D) retinoblastoma.

Topical 1% 5-Fluoruracil as a sole treatment of corneo-conjunctival ocular surface squamous neoplasia: long term study (see page 1094)

Topical 1% 5-Fluoruracil as a sole therapy, is a long-term safe and effective treatment for patients affected by both pre-invasive (CIN) and a limited proportion of selected invasive ocular surface squamous neoplasia.

Patients' perception of DED and its relation with time to diagnosis and quality of life: an international and multilingual survey (see page 1100)

Patients' experience of symptoms, diagnosis, and treatment of DED are associated with their subjective perception, descriptions and impact on quality of life. Earlier diagnosis of DED may improve quality of life for patients.

Single-step transepithelial PRK versus alcohol-assisted PRK in the treatment of high myopia: a comparative evaluation over 12 months (see page 1106)

Refractive outcomes of single-step transepithelial photorefractive keratectomy have been comparable to alcohol-assisted-PRK in mild-to-moderate myopia. Studies evaluating the efficacy and safety of TransPRK in myopia larger than -6.00D are lacking.

Very early endothelial cell loss after penetrating keratoplasty with organ cultured corneas (see page 1113)

In organ culture, the endothelial cell density determined by eye banks 2 days before surgery significantly overestimates the number of viable cells at the time of graft.

In vivo confocal microscopy appearance of fusarium and aspergillus species in fungal keratitis (see page 1119)

In this study using in vivo confocal microscopy, the authors were unable to differentiate *Fusarium* and *Aspergillus* spp. using morphological features alone (branching angle, adventitious sporulation or dichotomous branching); culture remains essential for speciation.

Organ-cultured, pre-stripped donor tissue for DMEK surgery: Clinical outcomes. (see page 1124)

This study evaluated whether clinical performance of DMEK grafts from organ-cultured corneas is negatively affected by stripping the tissue 24 hours before transplantation. No difference in clinical outcomes was detected.

Cataract surgery in children with retinopathy of prematurity (ROP): surgical outcomes (see page 1128)

Outcomes of cataract surgery in children with retinopathy of prematurity (ROP) are favourable and intraocular lens implantation can be carried out in these children

with complication rates being similar to those in children without ROP.

Cataract surgery in uveitis: a multicenter database study (see page 1132)

Demographics, surgical factors and outcomes from 1173 eyes with uveitis undergoing cataract surgery were compared with control eyes using electronic medical records, highlighting the increased complexity and management requirements of this patient group.

Comparison of intraocular pressure during the application of a liquid patient interface (FEMTO LDV Z8) for femtosecond laser-assisted cataract surgery using two different vacuum levels (see page 1138)

Vacuum application of the liquid patient interface (FEMTO LDV Z8) was observed to be associated with an increase of IOP in the anterior chamber and also higher IOP values with a higher vacuum level.

Prognostic biopsy of choroidal melanoma – an optimised surgical and laboratory approach (see page 1143)

Analysis of data from 232 uveal melanoma patients undergoing prognostic tumour biopsy demonstrated that improved surgical techniques and laboratory methods yielded successful cytology and genetic information in 99% and 89% of cases, respectively.