Highlights from this issue

doi:10.1136/bjophthalmol-2013-303641

Arun Singh and Harminder Dua, *Editors-in-Chief***DEEP SCLERECTOMY VERSUS TRABECULECTOMY: A MORPHOLOGICAL STUDY**

Konstantopoulos *et al* investigated the intraocular pressure lowering mechanisms of deep sclerectomy (DS) with anterior segment optical coherence tomography (AS-OCT) in a prospective cross-sectional study. AS-OCT parameters were compared between 18 DS (15 patients), 17 trabeculectomy (16 patients) and 15 controls (15 patients). Trans-conjunctival aqueous percolation was identified as a novel DS drainage route. DS had a fluid reservoir below the scleral flap, the intrascleral lake, analogous to the trabeculectomy bleb cavity. A postoperative tall intrascleral lake and a thick conjunctival/Tenon's layer were associated with good outcome.

STAINING INNER LIMITING MEMBRANE WITH BBG AND SODIUM HYALURONATE

Uemoto *et al* evaluated the intraoperative applicability and safety of a mixture of brilliant blue G and sodium hyaluronate (visco-BBG) for staining the inner limiting membrane (ILM). A retrospective consecutive case series of 74 eyes that had undergone ILM peeling were studied (visco-BBG group, 40 eyes; BSS-BBG group 34 eyes). The visco-BBG did not disperse throughout the vitreous cavity or into the subretinal space. The BSS-BBG dispersed throughout the vitreous cavity, and its distribution was difficult to control. The two solutions did not stain the epiretinal membranes or residual posterior hyaloid membrane. The difference in the retinal sensitivity between the two groups was not significant.

VIRTUAL REALITY TRAINING CURRICULUM FOR OPHTHALMOLOGY

Saleh *et al* investigated the effect of a structured, supervised, sequential, customised, virtual reality cataract training programme developed through the International Forum of Ophthalmic Simulation on ophthalmic surgeons in their first year of training. A set of one-handed, bimanual, static and dynamic tasks were evaluated before and after the course and scores obtained. While improvement was evident and found to be statistically significant in all

parameters, greatest improvements were found for capsulorhexis and antitremer training.

MANAGEMENT OF COMPLICATED RECURRENT PTERYGIA USING POLYTETRAFLUOROETHYLENE

Expanded polytetrafluoroethylene (e-PTFE) because of hydrophobic properties can prevent wound area from adhering to adjacent tissues. Kim *et al* evaluated the efficiency of e-PTFE in complicated multirecurrent pterygia. A total of 62 eyes (62 patients) underwent pterygia excision followed by application of 0.033% mitomycin C, amniotic membrane transplantation and conjunctival limbal autograft. Multimicroporous e-PTFE was inserted intraoperatively in 30 eyes between the transplanted amniotic membrane and the conjunctiva, but not inserted in the other 32 eyes. At a mean follow-up period of 17.2 months, postoperative symblepharon formation, motility restriction and conjunctival hyperaemia, and recurrence were significantly less in e-PTFE group.

RATES OF CHILDHOOD SQUINT SURGERY IN ENGLAND

Chou *et al* studied trends in rates of childhood squint surgery in England over five decades, and recent geographical variation within England using routine hospital statistics (Oxford record linkage study area 1963–2010 and England 1968–2010). The study included 519 089 admissions for operations on squint. All rates, numerators and population denominators were restricted to people aged under 15 years. Annual admission rates for squint surgery in England fell from 188.8 episodes per 100 000 population (1968) to 64.1 episodes (2010). A similar decline was seen in the Oxford region. There was wide variation across regions with a 4.9-fold difference between the highest and lowest annual rates. Factors such as patient/parental choice, inequalities in the availability of ophthalmic services or variation between clinician recommendations may influence squint surgery rates.

GENOTYPE-PHENOTYPE ANALYSIS OF SNPS ASSOCIATED WITH PRIMARY ANGLE CLOSURE GLAUCOMA

Day *et al* investigated if the single nucleotide polymorphisms rs3753841, rs1015213 and rs11024102, recently implicated in the development of primary angle closure glaucoma, were associated with ocular biometric characteristics of British adults in the European Prospective Investigation of Cancer-Norfolk eye study. Genotyping data were available on 3268 participants. Direct genotypic data was available for rs1015213 and rs3753841. Data was imputed for rs11024102. Ocular biometric data was available on 1137 participants. Presence of at least one A allele (AG or AA genotype) for rs1015213 was associated with a shallower anterior chamber depth (ACD). There was no association with AL or corneal keratometry for rs1015213 genotypes. Axial length, ACD and keratometry were not associated with rs3753841 or rs11024102 genotypes. This study suggests that primary angle closure glaucoma susceptibility at the PCMTD1-ST18 locus may be partly explained by an association between rs1015213 and ACD in European populations.

ORTHOVOLTAGE RADIOTHERAPY IN THE MANAGEMENT OF MEDIAL CANTHAL BASAL CELL CARCINOMA

Krema *et al* reported the local control and complication rates of orthovoltage radiotherapy in the management of medial canthal basal cell carcinoma (BCC) as primary treatment, adjuvant treatment after incomplete surgical excision, or for tumour recurrence following surgical excision. 90 patients were retrospectively studied. Tumour control rate for the entire cohort was 94% at 10 years without significant differences among different treatment intents or treatment radiation energies. Radiation-related complication rates included loss of eyelashes (59%), epiphora (51%), dry eye (14%), and conjunctival scarring (11%). Corneal complications were not observed. Orthovoltage radiotherapy can be a reliable therapeutic alternative for selected medial canthal BCC.

Competing interests None.

Provenance and peer review Commissioned; internally peer reviewed.