Highlights from this issue

doi:10.1136/bjophthalmol-2011-300800

Harminder S Dua and Arun D Singh, *Editors-in-Chief*

Continuing medical education for BJO readers

The BJO has joined forces with the Cleveland Clinic to offer certified continuing medical education (CME) credits. Readers will be able to claim credit towards the American Medical Association Physician's Recognition Award (AMA PRA category 1 credit) for each module they pass. We hope you will try this new approach to online continuing medical education and that you will give us your feedback, so that we too can continue to improve on what we provide (<http://www.bmj.com/content/340/bmj.c2410.full?sid=5324587b-af67-4e6c-928b-5e292ad8710c>). (See page 1299)

Aqueous humour penetration of moxifloxacin and gatifloxacin eye drops

Güngenör *et al* compared the aqueous humour penetration of moxifloxacin 0.5% and gatifloxacin 0.3% eye drops. Ninety-seven patients were randomly divided into two treatment groups. All patients received the topical antibiotics four times per day for 2 days prior to phacoemulsification. Patients in each group were further subdivided to receive additional doses of antibiotic drops as two drops 30 min apart versus four drops 10 min apart 1 h prior to the surgery. At the beginning of surgery, 0.1 ml of aqueous humour was aspirated and the concentrations were analysed by high-performance liquid chromatography. Moxifloxacin, given in the same dosage, penetrated the aqueous humour better than gatifloxacin. The penetration of both antibiotics increased significantly when the dosage was doubled. In addition, mutant prevention concentration (MPC) for common pathogens was achieved with moxifloxacin (four doses 1 h prior to surgery) whereas gatifloxacin could only achieve minimum inhibitory concentration (MIC) at the same dose. (See page 1272)

Agreement to detect glaucomatous visual field progression

Lester *et al* examined the level of agreement among nine clinicians in assessing

progressive deterioration in visual field using three different methods of analysis ('overview printouts' (HFA OP), Guided Progression Analysis (GPA) and GPA2). The presence of stability or progression of each field series was judged by considering the first two baseline visual field examinations and the behaviour of the glaucomatous defect over time. The inter-observer agreement (k statistic) was 0.65 for HFA OP, 0.54 for GPA and 0.70 for GPA2. The authors conclude that the agreement even between expert clinicians is moderate. The agreement was highest with GPA2 but the difference with other methods was not significant. (See page 1276)

Meta-analysis of vitrectomy with or without intravitreal bevacizumab pretreatment for severe diabetic retinopathy

Zhao *et al* examined possible benefits of intravitreal bevacizumab (IVB) pretreatment in vitrectomy for severe diabetic retinopathy by performing a comprehensive literature search using the Cochrane Collaboration methodology to identify randomised controlled trials and comparative studies of vitrectomy with or without IVB pretreatment. Six randomised controlled trials and one comparative study was identified (142 eyes). Meta-analyses revealed that the incidence of intraoperative bleeding, frequency of endodiathermy, surgical time, blood reabsorption time, and recurrent VH were significantly less in the IVB group. In addition, final best-corrected visual acuity was significantly better in the IVB group than the controls. (See page 1216)

Retinal detachment repair by vitrectomy

Wickham *et al* devised a simple formula to estimate risk of failure and PVR (within 6 months) following primary retinal detachment repair by vitrectomy.

Preoperative risk factors of 641 patients for surgical failure were identified and a multiple variable logistic regression model developed. Further analyses were performed to devise a simple points system to produce risk estimates of failure. Previous lens extraction, grade C PVR, and extent of detachment were risk factors related to failure. Vitreous haemorrhage, presence of pre operative grade C PVR, and extent of detachment were identified as risk factors related to failure due to PVR. There was good agreement between risk estimates produced by the points system and those calculated directly using a multivariate regression model. This points system may help select appropriate surgical approaches and stratify cases for research and surgical training. (See page 1234)

C reactive protein and complement factor H in aged human eyes

Bhutto *et al* examined the immunolocalisation of CRP and CFH in aged human donor eyes (n=10; mean age 79 years) and eyes with AMD (n=18; mean age 83 years). Alkaline phosphatase immunohistochemistry was performed using polyclonal antibodies against CRP and CFH on cryopreserved tissue sections from disc/ macular blocks. Three independent masked observers scored the slides. In aged eyes, the retinal pigment epithelium/Bruch's membrane/choriocapillaris (RPE/BrM/CC) complex including intercapillary septa (ICS) had the most prominent immunostaining for CRP and CFH. In contrast, CFH was significantly lower in BrM/CC/ICS complex of AMD choroids than in controls. CRP and CFH were significantly reduced in BrM/CC/ICS complex in geographical atrophy. Drusen and basal laminar deposits were intensely positive for CRP and CFH. This study supports the hypothesis that inflammation and immune-mediated mechanisms are involved in the pathogenesis of AMD. (See page 1323)