At a glance

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

Stromal inflammation in chronic phase of ocular surface diseases

Five pathological corneas, two with Stevens–Johnson syndrome (SJS), two with ocular cicatrical pemphigoid (OCP) and one with an alkali burns obtained during lamellar keratoplasty were examined histologically by immunostains and by quantitative real-time RT–PCR to assess for stromal inflammation. Saito *et al* observed that number of CD34-positive cells in the stroma was decreased and the expression level of biglycan was increased in all of the pathological corneas. The expression level of MIP1a and MIP1b were also markedly increased in all corneas indicating stromal inflammation in the chronic phase of SJS, OCP and alkali burns. ***See page 404***

VEP-based acuity assessment

In an effort to assess visual acuity (VA) estimates generated by visual evoked potentials (VEP), Bach *et al* subjected 40 normal subjects and 24 patients (with corneal and retinal diseases) to checkerboard stimuli with six check sizes. In normal subjects, the stimuli were optically degraded by frosted occluders. Subjective VA was obtained with the automated "Freiburg Acuity Test"'. The subjective VA was within ± 1 octave of the predicted VA in 95% of the cases. Their results provide additional methods to assess patients with possible malingering. ***See page 396***

Intravitreal bevacizumab for macular oedema secondary to BRVO

In a prospective, non-comparative, consecutive, interventional case series of 34 patients with macular oedema secondary to branch retinal vein occlusion (BRVO), repeated intravitreal injections of 1.25 mg bevacizumab were given. Over a follow-up period of 6 months, mean (SD) VA improved to 0.51 (0.34) logMAR from 0.79 (0.39) logMAR at baseline ($p = 0.009$). Mean (SD) retinal thickness reduced from 474 (120) mm at baseline to 316 (41) mm. Kreutzer *et al* conclude that intravitreal injection of 1.25 mg bevacizumb appears to be an effective treatment option for branch retinal vein occlusion. ***See page 351***

Predictive clinical features and outcomes of vitrectomy for proliferative diabetic retinopathy

To assess visual outcome and identify predictive factors in patients undergoing vitrectomy for proliferative diabetic retinopathy, a prospective study of 148 patients was conducted with a minimum follow-up of 4 months. Postoperative complications included vitreous cavity haemorrhage in 22%, retinal detachment in 3% and rubeotic glaucoma in 3% eyes. 75% of eyes improved by at least 0.3 LogMAR units and 72% eyes had a visual acuity of 6/60 or better. Preoperative factors did not account for variation in visual outcomes. Yorston *et al* conclude that visual outcome in such eyes remains unpredictable. ***See page 365***

Intravitreal bevacizumab vs PDT plus intravitreal triamcinolone for neovascular AMD

28 patients with neovascular age-related macular degeneration (AMD) were enrolled in a prospective clinical trial. All patients randomly assigned to 1 mg intravitreal bevacizumab (0.04 ml) received three initial treatments at 4-week intervals. Patients assigned to verteporfin (photodynamic) therapy (PDT) received a same-day intravitreal injection of 4 mg triamcinolone. In the bevacizumab-treated group, mean visual acuity (VA) improved by 2.2 lines at 6 months follow-up. Eyes treated in the PDT plus intravitreal triamcinolone (IVTA) group had a stable mean VA at month 6 compared with baseline. The reduction in central retinal thickness (CRT) showed no significant difference between both groups ($p = 0.3$, analysis of variance). Weigert *et al* conclude that intravitreal bevacizumab showed promising 6-month results in patients with neovascular AMD. ***See page 356***

Intravitreal methotrexate for vitreoretinal lymphoma

Patients with intraocular lymphoma were treated with intravitreal methotrexate injection of 400 μg/0.1 ml twice weekly for 4 weeks, once weekly for 8 weeks, and then once monthly for 9 months, for a total of 25 injections. Frenkel *et al* report their results of 44 eyes (26 patients) treated over the past 10 years. Clinical remission was achieved in 95% of the eyes needing $\leqslant 13$ injections. None of the patients had an intraocular recurrence. The most common side effect was corneal epitheliopathy. The authors propose their protocol as a first-line treatment option for intraocular lymphoma. ***See page 383***

Retinopathy of prematurity in the United States

Lad *et al* determined the incidence and identified baseline characteristics, comorbidities and surgical interventions for retinopathy of prematurity (ROP) by deriving data from The National Inpatient Sample of all US hospital discharges from 1997 to 2002. 4.67 million live births were recorded during the study period and the overall incidence of ROP was 0.12% (7.35% of premature infants). Respiratory distress and intraventricular haemorrhage were predictive of the development of ROP. Hispanic infants were 33% more likely to develop ROP. ***See page 320***

Retinopathy of prematurity in China

Retinopathy of prematurity (ROP) was detected in 10.8% of 639 premature neonates who had completed eye examinations. Logistic regression analysis indicated that low birth weight, apnoea, anaemia, hypoxic–ischaemic encephalopathy and placenta abruption were significantly associated with ROP. The rate of ROP needing treatment has not declined since 2002. Chen *et al* report that more needs to be done to prevent ROP through improved neonatal care. ***See page 326***