At a glance

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

Third-year safety results of the VISION trial

Singerman et al report the safety data for patients who continued for 3 years in the VEGF Inhibition Study in Ocular (VISION) Neovascularization trial. Throughout the study, safety was assessed by adverse event reporting, ophthalmic examination. laboratory assessments, electrocardiograms (ECG), and vital signs. The primary safety population consisted of the 161 subjects who received at least one dose of study medication in year 3. Ocular adverse events occurred in 114/161 (71%) subjects and the majority of events were associated with the injection procedure. The most common ocular adverse events were punctate keratitis (25%), increased IOP (20%), eye pain (17%), and cataract (14%). There were two cases of endophthalmitis (0.06% per injection) and one case each of rhegmatogenous retinal detachment (0.03% per injection) and vitreous hemorrhage. There was no evidence of systemic side effects. The authors conclude that 3-year safety profile of pegaptanib sodium was favourable. See page 1606

Same day verteporfin and ranibizumab (PROTECT Study)

PROTECT is an open-label, multicentre, phase II study of the safety of ranibizumab administered on the same day as verteporfin in patients with occult or predominantly classic subfoveal CNV secondary to AMD. The patients received standard-fluence verteporfin at baseline and months 3, 6 and 9, based on fluorescein angiography (FA) and ranibizumab 0.5 mg at baseline and months 1, 2 and 3. Schmidt-Erfurth et al did not observe severe vision loss or systemic adverse events. At 9 months, all lesions were inactive with absence of leakage (FA) and macular oedema and subretinal fluid resolved. The authors conclude that same day administration of verteporfin and ranibizumab was safe and effective as only minimal treatment was required after 3 months. See pages 1620 and 1628

Avastin: loading dose or PRN

Arias et al prospectively evaluated two treatment options with bevacizumab for CNV secondary to AMD: once a month for 3 months and thereafter as needed (loading dose (LD)) and (2) administered as needed, after the first injection (pro re nata (as needed) (PRN)). Of the 50 consecutive patients, the first 25 patients were enrolled in the LD group and the last 25 patients in the PRN group. In both groups, the need for re-treatment was based on the presence of persistent or recurrent macular oedema, subretinal fluid or pigment epithelial detachment on OCT. At the 6-month follow-up, 36% of patients in the LD group compared with 12% in the PRN group gained 15 or more letters. Mean foveal thickness decreased by 91.3 µm in the LD group and 48.2 µm in the PRN group. The authors conclude that patients treated with a LD protocol had better visual outcomes than patients treated with a PRN protocol. See page 1636

Minimally invasive strabismus surgery

Mojon studied if minimally invasive strabismus surgery (MISS) is suitable for rectus muscle reoperations in 51 consecutive patients (62 eyes). The surgery was done by applying two small radial cuts along the muscle insertion and then performing recession, advancement or plication. A total of 86 horizontal rectus muscles were reoperated. On the first postoperative day, conjunctival and lid swelling and redness was hardly visible in 11 eyes and severe in 15 eyes. At 6 months, unsatisfactory alignment was observed in 5 patients. This study demonstrates that a small-cut, minimal dissection technique is suitable for rectus muscle reoperations. See page 1648

Accuracy of tonometers

Mollan et al prospectively evaluated agreement of IOP measurement between four tonometers (Goldman applanation tonometer (GAT), PascalH dynamic contour tonometer (DCT), ReichertH ocular

response analyser (ORA) and TonoPenH XL tonometer) in 118 normal and 76 keratoconic eyes. The difference in IOP was highly significant in both groups. IOP measured with DCT and TonoPen was significantly higher than for GAT in both groups. Apart from the DCT, all techniques tended to measure IOP higher in eyes with thicker corneas. The DCT is not affected by corneal thickness and corneal hysteresis. The authors conclude that the DCT and the ORA are currently the most accurate tonometers to use in patients with keratoconus. See page 1661

Trabeculectomy with mitomycin C

Reibaldi et al evaluated the long-term efficacy and safety of trabeculectomy with MMC in 114 patients with POAG randomised (3:2) to receive intraoperative application of 0.2 mg/ml MMC or BSS. 67 eyes were treated with MMC and these eyes had a lower mean IOP, a lower rate of additional surgery (9% vs 26%), and visual-field progression (21% vs 49%) than 47 BSS treated eyes. There was no difference in the complication rate. The authors conclude that low-dose MMC improved the long-term outcome of the trabeculectomy. See page

Hydroxychloroquine retinopathy screening

Semmer et al assessed current screening practices and knowledge of patient risk factors by performing a multiple-choice survey of 105 ophthalmologists. 64% of the surveys were completed. The majority (90%) of ophthalmologists screen for hydroxychloroquine retinopathy with either central automated threshold perimetry or Amsler grid as recommended by American Academy Ophthalmology (Preferred Practice Patterns (PPP)). However, most survey respondents could not correctly identify the evidence-based risk factors resulting in excessive follow-up. If all patients were screened using exact PPP paradigm, savings could exceed \$150 million every 10 years. See page 1653