Mass treatment of trachoma with azithromycin eye drops

Huguet et al undertook a campaign to treat the entire population of Kolofata Health District, Cameroon with azithromycin 1.5% eye drops as part of a trachoma elimination programme. One drop in each eye, twice a day for three consecutive days (six doses) was administered to 96.6% of the total population (115274). Epidemiological studies were conducted just prior to and one year after treatment on a representative sample of children (aged 1–10 years) to measure the effectiveness of treatment. The authors observed 80% reduction in the prevalence of active forms of trachoma (from 31.5% to 6.3%). Moreover, the treatment was tolerated well. See page 158

Bevacizumab and reduced light dose PDT in AMD: the VIA study

Potter et al conducted a randomised, double-masked, controlled clinical trial (56 patients) to determine if light-dose PDT combined with bevacizumab will decrease the number of bevacizumab treatments required over 6 months in neovascular AMD. Patients received intravitreal bevacizumab plus PDT using a light dose of either 25 J/cm² (group 1) or 12 J/cm² (group 2), or intravitreal bevacizumab plus sham PDT (group 3). Retreatment decisions were primarily based on OCT. Patients required a mean of 2.8 bevacizumab injections in group 1 and 2.5 in group 2, compared with 5.1 in group 3 (p=0.005).

The authors conclude that combining light-dose PDT with bevacizumab significantly reduced the number of bevacizumab injections required over 6 months. Additional studies are needed to explore visual outcomes. See page 175

IOP control with bimatoprost and the bimatoprost/timolol fixed combination

Konstas et al compared 24 h IOP control with morning and evening administered bimatoprost/timolol fixed combination (BTFC) and evening administered bimatoprost in 60 patients with exfoliative glaucoma (XFG). One eye was included in this prospective, observer-masked, crossover comparison. Following wash-out, all patients received bimatoprost monotherapy for 6 weeks. They were then randomised to morning, or evening administered BTFC for 3 months and then switched to the opposite therapy. The authors observed that both BTFC dosing regimens reduced IOP significantly more than bimatoprost alone. A 24 h IOP reduction ≥50% was seen most frequently with evening administered BTFC. See page 210

Intraocular sarcoidosis and high-resolution chest CT findings

Clement et al correlated specific ophthalmic features of 50 patients with uveitis who underwent high-resolution CT of the chest (HRCT) because of suspicion of sarcoidosis. Only 10 (20%) uveitis patients demonstrated signs of sarcoidosis on HRCT. The presence of peripheral choroidal punched out lesions and posterior synechiae were significantly related to an abnormal HRCT scan. See page 220

Vision self-management for older adults: a randomised controlled trial

Girdler et al conducted a randomised controlled trial of older adults (477) with age-related visual loss comparing ‘usual care’ of low vision rehabilitation with an extended model of care (usual care+ 8-week structured programme). The intention-to-treat analysis demonstrated that the extended model produced significantly better participation in life situations when compared with the usual care only group. The addition of the 8-week structured programme also significantly improved depression, increased physical and mental health, and generalised and vision specific rehabilitation outcomes. See page 223

PRK for refractive accommodative esotropia

Hutchinson et al report the long-term outcomes of PRK for the treatment of hyperopia associated with purely refractive accommodative esotropia. Eighty eyes of 40 patients (age 17–59 years) were treated for a mean preoperative SEQ of +3.06 D hyperopia. The mean final postoperative SEQ was +0.06 D. All patients were orthophoric without correction at 1 month and 1 year with stable alignment after that. There were no complications. The authors conclude that PRK can be used to treat low to moderate hyperopia associated with purely refractive accommodative esotropia in young adults. See page 236

Secondary DSEK for graft failure after DMEK

Dapena et al evaluated efficacy of a secondary Descemet stripping endothelial keratoplasty (DSEK) for managing graft failure after primary Descemet membrane endothelial keratoplasty (DMEK). Of 50 cases with Fuchs endothelial dystrophy that underwent DMEK, 10 cases did not show corneal clearance (at postop 2–5 weeks), so a secondary DSEK was performed. At 6 months, 87% of the cases had a BCVA of ≥20/40 and donor DSEK graft endothelial cell density averaged 1510±799 cells/mm². The authors conclude that in the event of a DMEK graft failure, a secondary DSEK may be an effective back-up procedure. See page 242

Genome-wide expression profile of LHON patients

Abu-Amero et al performed a whole genome-expression profile in Leber hereditary optic neuropathy (LHON) patients with the 11778 mitochondrial DNA mutation. The most commonly upregulated genes were related to the cellular transport (13.8%) and transcription (12.4%). Similarly, the most commonly downregulated genes were also related to the cellular transport (17.8%) and transcription (18.4%). None of the 13 mitochondrial coded genes were differentially expressed. OPA1 gene, which could lead to fragmentation of the mitochondrial network and disorganisation of the cristae was downregulated in all LHON patients. See page 257