

## Undiagnosed refractive error in British adults

Rahi *et al* investigated the frequency of visual impairment due to undiagnosed refractive error (RE) and its associations with vision-related quality of life (VRQOL), general health, and social circumstances in a representative population of 9271 British working-age adults. 1.6% of individuals had undiagnosed RE and 37.9% had diagnosed RE. 18% of individuals with undiagnosed RE were visually impaired. Individuals with undiagnosed RE were more likely to have a manual (vs non-manual) occupation and to be separated, divorced or widowed, and were less likely to be in a social or professional organisation. Existing health-care delivery systems should be improved so as to benefit such individuals during their working lives. **See page 1190**

## Fibrin glue in pterygium surgery

Conjunctival autografting after pterygium excision offers low rates of recurrence. Karalezli *et al* randomised 50 eyes undergoing primary pterygium surgery to fibrin glue (25 eyes) or 8-0 Vicryl sutures (25 eyes) to attach the conjunctival autograft. The patients were followed up for 12 months. Two patients in the fibrin glue group had partial graft dehiscence which was successfully reattached with fibrin glue. The use of fibrin glue significantly reduced surgery time (mean 15.7 min vs 32.5 min), improved post-operative patient comfort, and resulted in a lower recurrence rate compared with suturing (4% vs 12%). **See page 1206**

## 24-h IOP and BP with bimatoprost vs latanoprost in NTG

As prostaglandin analogues are preferred for monotherapy in NTG, Quaranta *et al* performed a prospective, randomised, crossover, observer-masked study evaluating 24-h intraocular pressure (IOP) and blood pressure (BP) in 40 patients randomised to either latanoprost or bimatoprost for 8 weeks and then crossed over to the other drug for additional 8 weeks. Both drugs were equally effective in low-

ering IOP at each time point and over the 24-h period (16% decrease). Additionally, no differences were found between treated 24-h systolic BP, diastolic BP, and diastolic ocular perfusion pressure. Similarly, no difference was observed between drugs for any adverse event. **See page 1227**

## Time-dependent increment in the luminescence of fundus autofluorescence

Fundus autofluorescence (FAF) imaging with confocal scanning laser ophthalmoscope is a new technique to evaluate in vivo distribution of lipofuscin in the RPE. In an effort to study effects of bleaching of the photopigments on the FAF, Ayata *et al* enrolled 21 normal subjects and obtained 60 FAF images of each eye at 1s time intervals. The time-dependent increment of the autofluorescence was observed in all subjects with maximum luminosity (45.4 MGv) achieved between 25 and 30 s. The authors recommend that FAF imaging techniques should be standardised for quantitative, comparative and longitudinal studies. **See page 1241**

## Recurrence characteristics of ocular toxoplasmosis

Garweg *et al* contacted 139 patients with ocular toxoplasmosis (OT), collecting information about course and activity of their disease. 63 patients responded and were included in this retrospective study. The mean reported age at the time of first ocular manifestation was 23.9 years. 54%–63% of patients developed a recurrence after each episode without a tendency to enlarge, and the interval between successive episodes remained stable between 1.0 and 1.7 years for the first three recurrences. The recurrence rate was higher in patients below 20.9 years (66%) than in older patients (39%). **See page 1253**

## ILM staining and peeling using Rhodamine 6 G

Vital dyes help to visualise and facilitate removal of internal limiting membrane (ILM) and epiretinal membrane (ERM).

Haritoglou *et al* assessed whether low concentrations of Rhodamine 6G would help the unaided human eye to visualise the vitreous and ILM under standard halogen illumination. A few drops of the dye (0.2%) were applied over the posterior pole in the air-filled globe (monkey eyes) and irrigated after 1 min. Immediately after vitrectomy the globes were enucleated and histologically evaluated. With halogen illumination through a standard 20-gauge light pipe, the dye provided sufficient green fluorescence to identify and safely remove the ILM and to clearly differentiate areas of peeled from non-peeled ILM. Signs of acute retinal toxicity were not observed. **See page 1265**

## In vitro effects of photodynamic therapy on Acanthamoeba

Antiamoebic drugs are not effective against Acanthamoeba cysts. Therefore, Chen *et al* investigated in vitro effectiveness of Hypocrellins B (HB) photodynamic therapy (PDT) on Acanthamoeba trophozoites and cysts and its cytotoxic potential on the corneal epithelial and stromal cells. Acanthamoeba trophozoites and cysts and rabbit corneal epithelial and stromal cells were incubated with various concentrations of HB, followed by exposure to light (>470 nm) for 30 min at a fluence rate of 50 mW/cm<sup>2</sup>. Although HB-PDT had amoebicidal properties in vitro, it was also cytotoxic to the corneal epithelial and stromal cells. **See page 1283**

## NCK2 as a new candidate gene for NTG

Akiyama *et al* investigated the association between NTG and the candidate disease locus glaucoma 1, open angle, B (GLC1B) on chromosome 2. They extracted genomic DNA from NTG (n = 143) and healthy controls (n = 103) of Japanese origin. 15 microsatellite markers within and/or near GLC1B locus were genotyped and their association with NTG analysed. D2S176 marker had the strongest association. As D2S176 marker is close to NCK2 gene (within 24 kb), these observations suggest that NCK2 is a new candidate gene. However, additional confirmatory studies are necessary. **See page 1293**