

Highlights from this issue

doi:10.1136/bjophthalmol-2011-301441

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

Diabetic retinopathy in Koreans: Seoul Diabetes Prevention Program

Park *et al* evaluated the prevalence of and risk factors for diabetic retinopathy (DR) in Koreans with type II diabetes (400 male, 296 female; aged 30–65 years) enrolled in the Seoul Metro-City Diabetes Prevention Program (SMC-DPP). The overall prevalence of any type of DR was 18.7%. In addition to traditional risk factors (duration of diabetes, serum HbA1c, mean arterial pressure, serum total cholesterol and serum triglycerides) insulin resistance was associated with an increased risk of DR. (*see page 151*)

Sub-Tenon's anaesthesia for vitrectomy: a randomised trial

Gill *et al* compared the efficacy and safety of a two-quadrant technique that allows the use of a higher volume of local anaesthetic in 54 patients undergoing vitrectomy. Control group (27) received a standard 5 ml single inferonasal sub-Tenon injection of a 50:50 mixture of 2% lidocaine and 0.5% bupivacaine with 150 IU hyaluronidase and the study group (27) received a 5 ml inferonasal and 5 ml superotemporal injection of the same mixture (10 ml total). Block onset was shorter, eyelid akinesia was improved and pain scores were lower in the study group. 24 patients required a top-up in the control group (none in the study group). IOP measurements were similar in both groups. (*see page 189*)

In vivo identification of neurosensory layers in branch retinal artery occlusion

Ritter *et al* characterised the extension and progression of *in vivo* alteration of neurosensory layers following acute (8 eyes) and chronic (9 eyes) branch retinal artery occlusion (BRAO) using SD OCT. Segmentation evaluation revealed a distinct increase in thickness of inner neurosensory layers predominantly in the NFL/GCL, IPL, and INL/OPL in acute

ischaemia compared with corresponding layers in non-ischaemic areas. Regression of intraretinal oedema was followed by persistent retinal atrophy with loss of differentiation between IPL and INL/OPL at month 2. In contrast, the ONL and subadjacent PR/RPE retained their physiological thickness in patients with chronic BRAO. (*see page 201*)

Nd:YAG laser iridotomy in dark irides: a randomised trial

Thirty patients with occludable anterior chamber angles underwent bilateral standard pulsed 1064 nm Nd: YAG laser iridotomy with one eye randomly assigned to sequential pretreatment with 532 nm continuous-wave Nd:YAG laser.

Iris haemorrhage occurred in 43% of the standard treatment group and 13% of the sequential treatment group. All iridotomies were patent at the end of the procedure in the sequential treatment group, while 2/30 in the standard treatment group were abandoned due to significant haemorrhage. Mean IOP at 1 h was significantly lower than pre-laser values in both groups. Silva *et al* conclude that iridotomy with pretreatment using a continuous-wave Nd: YAG laser is safer and more effective than pulsed Nd: YAG-only laser iridotomy for dark irides. (*see page 263*)

Impression cytology for diagnosis of CIN

Kheirkhah *et al* evaluated sensitivity of impression cytology (IC) for the diagnosis of conjunctival intraepithelial neoplasia (CIN) by three repeated applications of cellulose acetate filter paper for IC in 35 eyes. All eyes had subsequent surgical excision with histopathological evaluation. All IC specimens were negative in the CIN group. In the CIN group, the first IC was positive in 17 eyes (56.7%), the second IC was positive in 25 eyes (83.3%), and the IC was positive in 26 eyes (87.7%). The consecutive repeated applications of filter paper significantly increased the diagnostic sensitivity of IC. (*see page 229*)

Non-posturing macular-hole surgery: SF₆ versus C₂F₆ gas tamponade

Rahman *et al* compared the outcomes of non-posturing macular hole surgery (39 eyes) using sulfur hexafluoride (SF₆) gas versus perfluoroethane (C₂F₆) gas tamponade. All patients underwent 23G transconjunctival phakovitrectomy without prone posturing in the post-operative period. Primary hole closure was achieved in 89.75% in the C₂F₆ group and 87.2% in the SF₆ group. Two weeks after surgery, SF₆ was completely absorbed in all cases, and the mean VA improved to 0.5 logMAR; however, it remained at 1.9 logMAR in the C₂F₆ group. Overall, macular-hole surgery with SF₆ gas achieved similar results to C₂F₆ but absorbed faster, allowing quicker visual rehabilitation. (*see page 185*)

Pupil size and uncorrected visual acuity in astigmatic eyes

Kamiya *et al* determined the effects of pupil size on uncorrected visual acuity (UCVA) in astigmatic eyes. After fully correcting cycloplegic refraction, the authors created with-the-rule and against-the-rule astigmatism of 1, 2 and 3 dioptres (D) in each eye (20 normal eyes), and then assessed UCVA using artificial pupils (1 to 5 mm). Both the amount of astigmatism and the pupil size affected the UCVA in astigmatic eyes. (*see page 267*)

Clinical significance of an equivocal interferon γ release assay result

Ang *et al* conducted a prospective cohort study of consecutive new patients, with ocular signs consistent with tuberculosis (TB)-associated uveitis (TAU). All subjects underwent ocular and systemic evaluation to rule out underlying disease. Fifteen subjects (9.7%) had 'equivocal' T-SPOT.TB result that was associated with age >55 years. Such patients were likely to have a negative QuantiFERON-TB Gold In-tube result. (*see page 284*)