At a glance

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Toxoplasma gondii in the peripheral blood of patients with toxoplasmosis

Silveira et al studied 20 immunocompetent patients with acute, recurrent active, and with old toxoplasmic retinal scars. They also included 10 patients with circulating IgG antibodies against T gondii without ocular lesions. Blood samples were analysed by light microscopy, immunofluorescence assay, and confirmed by PCR amplification of parasite DNA. Tachyzoite-like organisms were found in the blood samples of 16 patients (9, light microscopy; 7, immunofluorescence assay). The results indicate that the parasite may circulate in the blood of immunocompetent individuals and that parasitaemia could be associated with the reactivation of the ocular disease. See page 396

Diagnosis of endophthalmitis by PCR

Sugita et al measured bacterial genome in 19 ocular fluid samples (8, aqueous; 11, vitreous) from 19 patients with suspected bacterial endophthalmitis, 50 ocular samples from uveitis patients, and 40 controls. Bacterial ribosomal DNA (16S rDNA) as measured by a quantitative PCR assay was detectable in 18 (95%) patients with suspected bacterial endophthalmitis, whereas only 10 samples (53%) were positive for bacterial cultures and 9 samples (47%) positive for Gram-staining. Real-time PCR detected bacterial 16S rDNA in three (6%) samples of uveitis patients and none of the control samples were positive. The authors conclude that quantitative broad-range PCR of bacterial 16S rDNA is a useful tool for diagnosing bacterial endophthalmitis. See page 345

SMILE procedure for myopia and myopic astigmatism

Sekundo et al report 6 month results of prospective multi-centre study evaluating

the feasibility of myopic femtosecond lenticule extraction (FLEx) through a small incision using the small incision lenticule extraction (SMILE) procedure in 91 eyes (48 patients). Most treated eyes (95.6%) were within ±1.0 D, and 80.2% were within ±0.5 D ofintended correction. Of the eyes treated, 83.5% had an UCVA of 1.0 (20/20) or better. When answering a standardised questionnaire, 93.3% of patients were satisfied with the results obtained. The authors conclude that SMILE is a promising new flapless minimally invasive refractive procedure to correct myopia. *See page 335*

RPE transplantation

Falkner-Radler et al evaluated the outcome after two types of RPE transplantation techniques. Fourteen consecutive patients with advanced exudative AMD were randomly assigned to RPE-choroid sheet transplantation (group 1) or RPE cellsuspension transplantation (group 2). At 24 months, a gain of three or more lines in BCVA was found in two patients in group 1 and in one patient in group 2, whereas a loss of vision of three or more lines occurred in one patient in each group. Revision surgery for proliferative vitreoretinopathy was required in one patient in group 1. Recurrence was not observed. OCT showed a decrease in retinal thickness in all patients with SD-OCT. The authors conclude that the anatomical and functional outcome after both RPE transplantation techniques was comparable. See page 370

ERM after intravitreal bevacizumab for RVO

Marticorena et al report the development of epiretinal membranes (ERM) in 25 eyes (25 patients) with retinal vein occlusions (RVO) treated with intravitreal bevacizumab. After an initial 2.5 mg/0.1 ml intravitreal bevacizumab injection all patients were followed-up every 6 weeks. Four eyes developed an ERM within 6–7 weeks after the administration of

bevacizumab. The authors suggest that intravitreal bevacizumab may be associated with ERM in eyes with RVO. *See page 391*

Imaging of blebs after phacotrabeculectomy

Boey et al compared blebs after phacotrabeculectomies performed with Ologen collagen implants (33 patients) with blebs after mitomycin C (MMC) augmented phacotrabeculectomies (33 patients). Blebs were analysed for height and area using anterior segment OCT and were also graded clinically. With ASOCT, there was no difference in mean bleb height at 30 and 60 days, but at 90 days, bleb height was lower in the Ologen group (Ologen vs MMC, 0.74 vs 1.00 mm). At 90 days, the Ologen implants were visible (ASOCT) in 13 (39.4%) participants. The authors conclude that within 3 months of surgery, mean bleb height was lower in the Ologen blebs compared with the MMC blebs. The Ologen implants had not degraded in a third of eyes. See page 340

A safety review of bevacizumab versus ranibizumab for AMD

Schmucker et al conducted a systematic review in order to compare adverse effects (AE) and the reporting of harm in published randomised controlled trials (RCTs) and non-RCTs evaluating intravitreal ranibizumab and bevacizumab in AMD. The 2 year results of phase III trials evaluating ranibizumab show that the rates of serious ocular AE were low (≤2.1%) but indicate major safety concerns (RR 3.13). A possible signal with regard to thromboembolic events (RR 1.35) and a significant increase in non-ocular haemorrhage (RR 1.62) were also noted. In contrast, the RCTs evaluating bevacizumab are of limited value because of small sample sizes and an apparent lack of rigorous monitoring for AE. The authors conclude that any perception that intravitreal bevacizumab injections are not associated with major ocular or systemic AE are not supported by reliable data. See page 308