TREATMENT OF BIRDSHOT RETINOCHOROIDOPATHY

Cervantes-Castañeda et al reported outcomes of immunomodulatory therapy (IMT) consisting of systemic cyclosporine A and mycophenolate mofetil in 49 patients (98 eyes) with birdshot retinochoroidopathy. Overall, 31 patients (67.4%) achieved inflammation control at the 1-year endpoint. Vitreous inflammation scores and angiographic leakage were significantly reduced. However, cystoid macular oedema reduced. Side effects were transient, and resolved after lowering or withholding IMT for a few weeks.

PRIMARY TRABECULECTOMY FOR PRIMARY OPEN ANGLE GLAUCOMA IN DIABETICS

Law et al evaluated primary trabeculectomy with adjunctive mitomycin-C for primary open angle glaucoma (POAG) in diabetic patients. 41 eyes (29 patients) with diabetes mellitus (DM) and 81 eyes (64 patients) without DM were compared. Kaplan-Meier cumulative survival rates at 60 months were 58±9% (DM group) and 69±5% (control group). Mean postoperative IOP of control group was statistically significant lower during 7-year follow-up. Rates of postoperative complications and additional glaucoma surgeries required were similar between the groups. POAG patients with DM do not achieve the same long-term IOP control compared with patients without DM.

BRANCH RETINAL VEIN OCCLUSION AND OPTIC NERVE HEAD TOPOGRAPHY

Chan et al examined the association between branch retinal vein occlusion (BRVO) and quantitative optic disc topographic parameters in population-based study of 3400 Singapore Indians aged 40+ years (The Singapore Indian Eye Study [SINDI]).

Optic disc parameters were quantified using the Heidelberg Retinal Tomograph III (HRT III). Of 6173 eyes (comprising 19 BRVO) that had gradable retinal photographs and HRT images, BRVO was associated with larger optic disc area and larger cup-disc area ratio. Optic nerve head morphology may play a role in BRVO pathogenesis.

THE EFFECT OF SMOKING ON CHOROIDAL THICKNESS

Sizmaz et al investigated the effects of smoking on choroidal thickness of 17 otherwise healthy smokers (study group) and 17 non-smokers (control group). All participants underwent SD OCT at baseline, and 1 and 3 h following smoking one standard cigarette (study group). The mean choroidal thickness at the fovea prior to smoking was 301.1±63.1 μm, which decreased to 284.2±56.7 μm at 1 h and 270.8±80.0 μm at 3 h following smoking. Further long-term studies may help to explain the role of smoking as a risk factor in age related macular degeneration.

OCULAR FINDINGS OF 3573 HEALTHY FULL-TERM NEWBORNS

Li et al documented findings of a newborn eye examination programme for detecting ocular pathology in the healthy 3573 full-term newborn. There were 871 abnormal cases (25%), the majority (769, 22%) due to retinal haemorrhages. Of these, 215 cases (6%) were significant retinal haemorrhage, possible sight threatening or amblyogenic. The other 107 cases (3%) with abnormal ocular findings included subconjunctival haemorrhage, congenital microphthalmos, congenital corneal leukoma, posterior synechia, persistent pupillary membrane, congenital cataract, enlarged C/D ratio, retinal hamartoma, optic nerve defects, macular pigment disorder and non-specific peripheral retinopathy.

FUNDUS AUTOFLUORESCENCE AND MICROPERIMETRY IN PROGRESSING GEOGRAPHIC ATROPHY

Pilotto et al prospectively analysed microperimetry, standard short-wavelength fundus autofluorescent and near infrared-wavelength FAF (NIR-FAF) changes in 20 consecutive eyes (14 patients) with geographic atrophy (GA) secondary to AMD. Repeated microperimetric examinations and FAF images were obtained over a mean follow-up period of 12 months. GA area was always wider on NIR-FAF versus SW-FAF images. Mean retinal sensitivity significantly decreased during follow-up from 7.7±3.9 to 6.7±4.4 dB. Retinal areas showing relative dense scotoma and characterised by hypo-SW-FAF or hyper- NIR-FAF at baseline had a higher risk of evolving to dense scotoma. The authors conclude that microperimetry, SW-FAF and NIR-FAF should be combined to obtain adequate morphological and functional information.

ORBITAL MORPHOLOGY FOR DECOMPRESSION SURGERY

Borumandi et al created an easily measurable two-dimensional (2D) reference dataset of the bony orbit for study of individual orbital morphology prior to decompression surgery in Graves’ orbitopathy. CT images of 70 European adults (140 orbits) with unaffected orbits were included. On axial views, orbital length (OL, average 42 mm), globe length (GL, average 25 mm), GL/OL ratio (average 0.6) and cone angle (average 50.2°) were assessed. The 2D orbital parameters were significantly correlated to the corresponding 3D parameters. Three orbital sizes were classified: short (OL<40 mm), medium (OL>40 to <45 mm) and large (OL≥45 mm). Prospective clinical trials are needed to demonstrate how individual orbital morphology may affect the outcome of decompression surgery.

SERPIGINOUS-LIKE CHOROIDITIS AS A MARKER FOR TUBERCULOSIS IN A NON-ENDEMIC AREA

Gan and Jones described increasing incidence of multifocal outer retinal and inner choroidal inflammation as a marker for intraocular tuberculosis in the UK. 14 patients presented with serpiginous-like choroiditis (SLC) over 10 years (seven within the last 2 years). Seven of 14 patients showed evidence of exposure to tuberculosis and received antituberculous treatment. The authors recommend that every patient with SLC, even in a non endemic areas such as UK should undergo testing for tuberculosis.