

Low-dose transpupillary thermotherapy versus PDT for AMD

In an effort to compare the efficacy of low-dose transpupillary thermotherapy (TTT) and PDT in patients with occult neovascular AMD, Odergren *et al* randomised patients to receive either low-dose TTT (and sham PDT) (n = 52) or PDT (and sham TTT) (n = 46). The primary outcome measure was the proportion of patients who lost 15 letters at 12 months. They observed that TTT and PDT were equally efficient at stabilising visual acuity, suggesting that low-dose TTT may be considered as an alternative to PDT in selected patients. *See page 757*

Ethnic differences in retinal nerve fibre layer thickness

One eye of each of 137 healthy Korean subjects underwent determination of false-positive rates (FPRs) relating to retinal nerve fibre layer (RNFL) thickness parameters. Kim *et al* observed that the FPR for the non-nasal region was much lower than expected at <5% level. Given that the current OCT normative database is based on a largely non-Asian population, these findings suggest that RNFL thickness profiles may differ according to ethnicity. *See page 735*

Intravitreal triamcinolone (TA) versus laser photocoagulation for persistent diabetic macular oedema

Eighty-eight eyes with persistent clinically significant macular oedema, after at least one prior laser photocoagulation, were included in a randomised trial to determine if repeated TA improved visual acuity at 1 year compared with conventional laser therapy. Ockrim *et al* randomised 43 patients to 4 mg of TA and 45 to laser photocoagulation. The primary endpoint of vision improvement by 15 ETDRS letters at 12 months, occurred in two patients in the TA group (4.8%) and in five patients in the laser group (12.2%; p = 0.265). This study did not show greater benefit from

TA over conventional laser therapy. *See page 795*

The power of hope

To ascertain whether a physician's attitude (positive or negative) impacts the patient's quality of life, a standardised, validated, time trade-off, utility instrument was administered to 247 consecutive vitreoretinal patients to assess the quality of life associated with their current ocular health (baseline scenario). Each was then presented a scenario in which possible negative consequences were emphasised (bad-news scenario) and one in which possible positive consequences were emphasised (good-news scenario). The mean baseline utility was 0.87 (SD 0.19). The mean bad-news scenario utility was 0.80 (SD 0.22), a 70% diminution in quality of life compared with the mean baseline utility (p = 0.0009). The mean good-news scenario utility was 0.89 (SD 0.18), an insignificant difference compared with the mean baseline utility (p = 0.26). Godshalk *et al* conclude that a negative emphasis approach by the physician may considerably diminish patient's quality of life. *See page 783*

HRT III machine learning classifiers for glaucoma detection

To assess performance of classifiers trained on HRT3 parameters for discriminating between healthy and glaucomatous eyes, classifiers were trained using HRT3 parameters from 60 healthy subjects and 140 glaucomatous subjects. Seven types of classifiers, including Support Vector Machines with radial basis (SVM-radial) and Recursive Partitioning and Regression Trees (RPART) were trained on the parameters. The area under the ROC curve (AUC) was calculated for classifiers, individual parameters, and glaucoma probability scores (GPS). Townsend *et al* conclude that machine learning classifiers of the data provide significant enhancement over current methods for detection of glaucoma. *See page 814*

Changes in meibomian gland dysfunction after oral minocycline

Souchier *et al* evaluated the break-up time (BUT), corneal staining and quality of

meibomian oil in 20 individuals suffering from MGD before and after 8 weeks of eyelid hygiene only (n = 10) and eyelid hygiene combined with oral minocycline (n = 10). The meibomian fatty acid composition was slightly modified after 8 weeks in both groups. The decrease in a branched-chain fatty acid (isoC20) was greater after minocycline treatment than after lid hygiene only (-65% and -25%, respectively; p = 0.05). A significant improvement in the BUT was also observed after minocycline treatment (p = 0.03). This study demonstrates a biological effect of minocycline on meibomian fatty acid composition and better tear film stability after minocycline treatment than with lid hygiene alone. *See page 819*

Orally administered doxycycline in the tear film

Smith *et al* quantified doxycycline from tear and blood plasma samples obtained from patients with ocular surface disease and healthy individuals by spectrophotometry. The MMPs present in the patients tear films before and during doxycycline treatment were analysed zymographically. Although doxycycline was not detected in the tear samples, the treatment caused the disappearance of the MMPs in the tear film. The authors conclude that doxycycline reduces tear film MMPs by its effects on the circulatory neutrophils rather than on the corneal epithelial cells. *See page 856*

Restorative effects of ranibizumab (Lucentis) on microvascular retinal endothelial cells

Deissler *et al* undertook a study to determine whether VEGF-stimulated processes in immortalised bovine retinal endothelial cells (iBREC) were reversed by ranibizumab. The authors observed that ranibizumab reversed proliferation, cell migration, and delocalisation of tight junction proteins stimulated by VEGF iBREC. *See page 839*