

# Abstracts

Edited By Dr. Qasim Lateef Chaudhry

## **Efficacy and Safety of Long-term Corticosteroid Eye Drops after Penetrating Keratoplasty: A Prospective, Randomized, Clinical Trial**

Shimazaki J, Iseda A, Satake Y, Shimazaki-Den S  
Ophthalmology 2012; 119: 668-73.

In a prospective, randomized clinical trial, Shimazaki et al (p. 668) have found that prolonged use of 0.1% fluorometholone helps to prevent rejection following penetrating keratoplasty (PKP). Of the initial 42 patients in this 12 - month trial randomly assigned to either the steroid group (treated with 0.1% fluorometholone 3 times a day) or the non-steroid group (discontinuation of steroid eye drops), 4 in the steroid group and 6 in the no-steroid group did not complete the trial. Of the remaining patients, 1 patient in the steroid group and 6 in the non-steroid group developed endothelial rejection at an average of  $5.2 \pm 4.5$  (mean  $\pm$  standard deviation) months after they entered the study - a significant difference. In contrast, the researchers did not detect a significant difference between the groups in visual acuity, intraocular pressure, epithelial damage, tear - film break-up time, cataract progression, infection, or incidence of systemic side effects. The authors conclude low - dose corticosteroids should be considered in PKP patients, even in those at low risk of rejection.

## **Correlation between Clinical Features, Magnetic Resonance Imaging, and Histopathologic Findings in Retinoblastoma: A Prospective Study**

Chawla B, Sharma S, Sen S, Azad R, Bajaj MS, Kashyap S, Pushker N, Ghose S  
Ophthalmology 2012; 119: 850-6.

Chawla et al (p. 850) present findings from what they maintain is the first prospective study on the relationship among clinical features, magnetic resonance imaging (MRI) and histopathologic findings in eyes

primarily enucleated for retinoblastoma. The study involved 75 patients with Group E retinoblastoma. The investigators found neovascularization of the iris, raised intraocular pressure, shallow anterior chamber, and tumor volume correlated well with high-risk histopathology. They note the accuracy of MRI in detecting choroidal invasion was 68% - a figure found in earlier, similar reports. This shows that microscopic invasion of the choroid may be missed on MRI. Detection of ciliary body invasion was more accurate (93.3%) compared with previous studies, and MRI correctly detected scleral invasion in all affected eyes, with no false positive findings. Given the limitations of MRI in reliably predicting microscopic infiltration of the choroid and optic nerve, the authors conclude any decision to treat with neoadjuvant chemotherapy based on suspected post-laminar invasion on MRI is not justified without histopathologic evidence of disease.

## **Outcomes of sulfur hexafluoride (SF<sub>6</sub>) versus perfluoroethane (C<sub>2</sub>F<sub>6</sub>) gas tamponade for non-posturing macular - hole surgery**

Rahman R, Madgula I, Khan K  
Br J Ophthalmol 2012; 96: 185-8.

Rahman *et al* compared the outcomes of non-posturing macular hole surgery (39 eyes) using sulfur hexafluoride (SF<sub>6</sub>) gas versus perfluoroethane (C<sub>2</sub>F<sub>6</sub>) gas tamponade. All patients underwent 23G transconjunctival phakovitrectomy without prone posturing in the postoperative period. Primary hole closure was achieved in 89.75% in the C<sub>2</sub>F<sub>6</sub> group and 87.2% in the SF<sub>6</sub> group. Two weeks after surgery, SF<sub>6</sub> was completely absorbed in all cases, and the mean VA improved to 0.5 log MAR; however, it remained at 1.9 log MAR in the C<sub>2</sub>F<sub>6</sub> group. Overall, macular-hole surgery with SF<sub>6</sub> gas achieved similar results to C<sub>2</sub>F<sub>6</sub> but absorbed faster, allowing quicker visual rehabilitation.