

Journal Watch

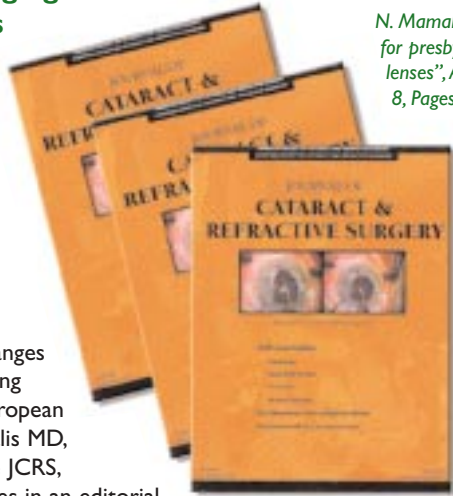
by Sean Henahan

Vision science highlights from the world's leading journals of medicine and science

Multifocals changing regulatory focus

The rapid approval of several multifocal and accommodating intraocular lenses is leading to seismic shifts in the US Medicare system, the national healthcare insurance system that pays for most cataract surgery in the US. Changes now underway are being closely watched by European regulators. Nick Mamalis MD, associate editor of the JCRS, addresses these changes in an editorial of the August issue of the journal.

He reports that US patients can now, for the first time, request presbyopia-correcting IOLs in place of conventional IOLs following cataract surgery, and that the costs will be partially covered by Medicare. Calling it a "momentous ruling", he notes that before the ruling it was unlawful to charge patients additional money for a presbyopia-correcting IOL after standard cataract surgery. While admitting that many questions remain regarding reimbursement for 'value-added' IOLs, Dr Mamalis sounds a hopeful note, commenting that the recent developments in the US should stimulate technological advances in IOL design and



function.

N. Mamalis, JCRS, "Additional payments for presbyopia-correcting intraocular lenses", August 2005, Volume 31, Issue 8, Pages 1467-1468.

New rapid screen for retinitis pigmentosa

A new microchip array provides rapid, accurate, and cost-effective genetic testing for retinitis pigmentosa, report University of

Michigan researchers. The arRP-I sequencing array allows simultaneous screen for mutations in multiple genes on a single platform. This testing approach offers the prospect of a precise genetic diagnosis, which would allow for the application of specific genetic therapies. The researchers study involved 70 individuals with a clinical diagnosis of arRP. Thirty-five had not been previously screened, and 35 others with known genetic mutations were screened to validate the results. The arRP-I chip contained sequences, or genetic codes, of 11 genes that carry approximately 180 mutations associated with early-onset

retinal degenerations. The arRP-I chips produced 97.6 percent of the sequence analysed with greater than 99 percent accuracy and reproducibility. These chips can detect both previously known and novel mutations. The researchers predict broader application of the technology in many areas of ophthalmology.

R. Ayyagari, Invest. Ophthalm. & Vis. Sci., "Sequencing Arrays for Screening Multiple Genes Associated with Early-Onset Human Retinal Degenerations on a High-Throughput Platform", September 2005; 46:3355-3362.

New approach to ocular inflammation

The immunosuppressive drug mycophenolate mofetil, appears promising as a treatment for various ocular inflammatory diseases, say researchers at Johns Hopkins' Wilmer Eye Institute. Researchers gave the drug to 84 patients, of whom 61% had uveitis, 17% had scleritis, 11% had mucous membrane pemphigoid and 11% had inflammation behind the eye or in other areas. Nearly half had been treated previously with at least one other immunosuppressive drug. A majority, 97%, showed control of their ocular inflammation after one month of treatment. Most, 82%, were able to taper their dose of the steroid prednisone to 10 mg or less per day. Side effects in a few patients included upset stomach or mild diarrhoea.

J. Thorne, Ophthalmology, "Mycophenolate Mofetil Therapy for Inflammatory Eye Disease", August 2005, Volume 112, Issue 8, 1472-1477.

Visually provoked seizures

The (US) Epilepsy Foundation issued new recommendations for limiting the risk of seizures triggered by flashing images and certain patterns on television, videogames, computers and other video screens. The consensus recommendations cover factors such as light intensity, flicker, contrast, duration and pattern, and the technical parameters within these factors that are most likely to produce visually provoked seizures in susceptible individuals.

G. Harding, Epilepsia, "Photic- and Pattern-induced Seizures: Expert Consensus of the Epilepsy Foundation of America Working Group", September 2005, Vol. 46, Issue 9, 1423-25.