

Ophthalmology

Editorial inquiries should be addressed to Veronica Doyle, 600 North Wolfe St, Jefferson Street Building, B1-136, Baltimore, MD 21287 (phone: 443-287-2445; FAX: 443-287-2448; email: aaojournal@jhmi.edu; Web site: www.aao.org/journal)

Contents

Volume 110, Number 11, November 2003

- Editorial: Safe and Effective** 2073
Andrew P. Schachat, MD, Wiley A. Chambers, MD, Thomas J. Liesegang, MD, Daniel A. Albert, MD
- A Randomized Trial of Prescribed Patching Regimens for Treatment of Severe Amblyopia in Children** 2075
The Pediatric Eye Disease Investigator Group
In a randomized multicenter treatment trial, severe amblyopia (20/100–20/400) showed improvement of similar magnitude when either full-time patching or 6 hours of patching per day was prescribed.
- The Relationship between Stereopsis and Visual Acuity after Occlusion Therapy for Amblyopia** 2088
Se Youp Lee, MD, Sherwin J. Isenberg, MD
Sixty-one children with amblyopia due to anisometopia, small-angle or intermittent strabismus, or a combination underwent occlusion therapy. As visual acuity improved, the near stereopsis also improved. Occlusion therapy for amblyopia can improve binocularity.
- Common Forms of Childhood Exotropia** 2093
Brian G. Mohny, MD, Roland Keith Huffaker, MD
The most common forms of childhood exotropia during a 6-year retrospective study in a predominantly rural Appalachian region included intermittent exotropia, exotropia associated with central nervous system defects, convergence insufficiency, and sensory exotropia.
- Horizontal Rectus Tenotomy in Patients with Congenital Nystagmus** 2097
Richard W. Hertle, MD, Louis F. Dell'Osso, PhD, Edmond J. FitzGibbon, MD, Darby Thompson, MA, Dongsheng Yang, PhD, Susan D. Mellow, RN
Nine of 10 adult patients with congenital nystagmus who underwent simple horizontal rectus muscle tenotomy with reattachment had improved nystagmus and visual functioning.

(Continued on page 25A)



0161-6420(200311)110:11;1-M

Ophthalmology

Contents

(Continued)

A Phase III, Multicenter, Randomized, Placebo-Controlled Clinical Trial of Topical Aminocaproic Acid (Caprogel) in the Management of Traumatic Hyphema 2106

Dante J. Pieramici, MD, Morton F. Goldberg, MD, Michele Melia, ScM, Sharon Fekrat, MD, Cynthia A. Bradford, MD, Alan Faulkner, MD, Mark Juzych, MD, John S. Parker, MD, Stephen D. McLeod, MD, Richard Rosen, MD, Samuel H. Santander, MD, MPH

Topical aminocaproic acid (Caprogel) may safely reduce the chance of secondary hemorrhages in patients with traumatic hyphema.

Telemedicine Approach to Screening for Severe Retinopathy of Prematurity: A Pilot Study 2113

Anna L. Ells, MD, FRCS, Jonathan M. Holmes, BM, BCh, William F. Astle, MD, FRCS, Geoff Williams, MD, FRCS, David A. Leske, BS, Michael Fielden, BSc, Brad Uphill, BFA, Penny Jennett, PhD, MA, Marilynne Hebert, PhD, MEd

Remote reading of digital photographs had a sensitivity of 100% and a specificity of 96% in detecting severe (referral-warranted) retinopathy of prematurity (ROP) longitudinally over a series of examinations in consecutive infants screened for ROP.

Retinal Vascular Abnormalities in Persons with Type 1 Diabetes: The Wisconsin Epidemiologic Study of Diabetic Retinopathy: XVIII 2118

Ronald Klein, MD, MPH, Barbara E. K. Klein, MD, MPH, Scot E. Moss, MA, Tien Y. Wong, MD, PhD, Larry Hubbard, MAT, Karen J. Cruickshanks, PhD, Mari Palta, PhD

Higher mean arterial blood pressure and retinopathy severity were independently associated with retinal arteriolar narrowing and venular dilation in persons with type 1 diabetes.

Histopathology and Regression of Retinal Hard Exudates in Diabetic Retinopathy after Reduction of Elevated Serum Lipid Levels 2126

Michael Cusick, BS, Emily Y. Chew, MD, Chi-Chao Chan, MD, Howard S. Kruth, MD, Robert P. Murphy, MD, Frederick L. Ferris III, MD

A clinical histopathologic association between serum lipids and retinal hard exudates in 2 patients with diabetes and severe exudative maculopathy is described.

(Continued on page 27A)

Ophthalmology

Contents

(Continued)

Polymerase Chain Reaction Detection of *Neisseria meningitidis* in the Intraocular Fluid of a Patient with Endogenous Endophthalmitis but without Associated Meningitis 2134

Frank T. Kerkhoff, MD, Anneke van der Zee, PhD, Anneke M. C. Bergmans, PhD, Aniki Rothova, MD, PhD

A 17-year-old male with meningococcal endophthalmitis but without associated meningitis had his diagnosis proven with polymerase chain reaction analysis and confirmed by culture of the intraocular fluid sample.

Medical Malpractice Predictors and Risk Factors for Ophthalmologists Performing LASIK and Photorefractive Keratectomy Surgery 2137

Richard L. Abbott, MD, Richard J. Ou, MD, Mariko Bird, MD

High surgical volume and history of a claim or lawsuit are predictors for future photorefractive keratectomy or LASIK malpractice claims.

Ten-Year Follow-up of Epikeratophakia for the Correction of High Myopia 2147

Stephan L. Kaminski, MD, Robert Biowski, MD, Didem Koyuncu, MD, Julius R. Lukas, MD, Günther Grabner, MD

The visual outcome of epikeratophakia surgery for the correction of high myopia was studied retrospectively; a minimum of 10 years after surgery, uncorrected visual acuity was better than that before surgery, but best-corrected visual acuity was found to be significantly decreased.

Outcome after Treatment of Ametropia with Implantable Contact Lenses 2153

Birgit Lackner, MD, Stefan Pieh, MD, Gerald Schmidinger, MD, Georg Hanselmayer, MD, Irene Dejaco-Ruhsworm, MD, Martin A. Funovics, MD, Christian Skorpik, MD

The implantation of posterior chamber phakic intraocular lenses was associated with a low rate of perioperative complications and satisfactory visual outcome; however, the most severe complication was the formation of lens opacifications in 33.3%, necessitating cataract surgery in 10.7%.

Impact of Graft Diameter on Corneal Power and the Regularity of Postkeratoplasty Astigmatism before and after Suture Removal 2162

Berthold Seitz, MD, FEBO, Achim Langenbacher, PhD, Michael Kuchle, MD, Gottfried O. H. Naumann, MD

With and without sutures, a smaller corneal graft diameter results in a flatter curvature and a higher degree of topographic irregularity, but not higher net astigmatism, after penetrating keratoplasty.

(Continued on page 29A)

Ophthalmology

Contents

(Continued)

Human Fibrin Tissue Adhesive for Sutureless Lamellar Keratoplasty and Scleral Patch Adhesion: A Pilot Study 2168

Herbert E. Kaufman, MD, Michael S. Insler, MD, Hosan A. Ibrahim-Elzembely, MD, Stephen C. Kaufman, MD

Fibrin adhesive was used successfully to replace sutures in lamellar keratoplasty and in amniotic membrane transplantation for corneal surface reconstruction, with the advantages of reduced surgical time, increased patient comfort, and diminished possibility of postoperative epithelial ingrowth.

Fungal Infection of Sutureless Self-sealing Incision for Cataract Surgery 2173

Prashant Garg, MS, S. Mahesh, MD, Aashish K. Bansal, MS, Usha Gopinathan, PhD, Gullapalli N. Rao, MD

Fungal infection of the self-sealing sutureless incision for cataract surgery has varied presentations and poses a diagnostic and therapeutic challenge.

Visual Field and Optic Disc Progression in Patients with Different Types of Optic Disc Damage 2178

Marcelo T. Nicolela, MD, Terry A. McCormick, BA, Stephen M. Drance, OC, MD, Suzanne N. Ferrier, MSc, Raymond P. LeBlanc, MD, Balwantray C. Chauhan, PhD

Patients with the senile sclerotic type of glaucomatous optic disc damage tend to have a lower incidence of progression, as defined by visual field and optic disc progression, than patients with other patterns of optic disc damage.

Retinal Nerve Fiber Layer Thickness Measured with Optical Coherence Tomography Is Related to Visual Function in Glaucomatous Eyes 2185

Tarek A. El Beltagi, MD, Christopher Bowd, PhD, Catherine Boden, PhD, Payam Amini, BS, Pamela A. Sample, PhD, Linda M. Zangwill, PhD, Robert N. Weinreb, MD

Regional optical coherence tomography-measured retinal nerve fiber layer (RNFL) thinning and regional decreases in standard automated perimetry (SAP) sensitivity are topographically related, and the magnitude of RNFL thinning is related to the magnitude of decreased SAP sensitivity.

(Continued on page 31A)

Ophthalmology

Contents

(Continued)

Cystic Bleb Formation and Related Complications in Limbus- versus Fornix-Based Conjunctival Flaps in Pediatric and Young Adult Trabeculectomy with Mitomycin C 2192

Anthony P. Wells, FRANZCO, M. Francesca Cordeiro, PhD, FRCOphth, Catey Bunce, MBBS, Peng T. Khaw, PhD, FRCOphth

After mitomycin C trabeculectomy in young patients, patients who have limbus-based flaps may develop earlier and more serious complications than patients operated on with a fornix-based approach. Simple changes in surgical technique may significantly reduce serious long-term complications of mitomycin trabeculectomy.

Otago Glaucoma Surgery Outcome Study: Factors Controlling Capsule Fibrosis around Molteno Implants with Histopathological Correlation 2198

Anthony C. B. Molteno, FRCS, FRACO, Martin Fucik, MD, Alex G. Dempster, MRCPATH, FRCPA, Tui H. Bevin, BSc, MPH

Histological examination of capsules surrounding Molteno implants suggests that their long-term permeability depends on a balance between an initial inflammatory fibrovascular phase and a later chronic fibrodegenerative process in the inner layers of the capsule wall.

Transpupillary Thermotherapy versus Plaque Radiotherapy for Suspected Choroidal Melanomas 2207

J. William Harbour, MD, Travis A. Meredith, MD, Paul A. Thompson, PhD, Mae E. Gordon, PhD

Transpupillary thermotherapy for primary treatment of choroidal melanoma does not result in better visual outcomes and has a higher local failure rate than plaque radiotherapy.

Discussion: *James J. Augsburger, MD* 2215

Choroidal Vascular Changes after Transpupillary Thermotherapy for Choroidal Melanoma 2216

Edoardo Midena, MD, Elisabetta Pilotto, MD, Valentina de Belvis, MD, Silvia Zaltron, MD, Daniele Doro, MD, Tatiana Segato, MD, Stefano Piermarocchi, MD

This prospective study suggests that transpupillary thermotherapy for choroidal melanoma leaves patent medium and large choroidal vessels and induces choroidal vascular remodeling in the treated area; these factors might influence long-term efficacy of this treatment.

(Continued on page 33A)

Ophthalmology

Contents

(Continued)

Iodine Brachytherapy as an Alternative to Enucleation for Large Uveal Melanomas	2223
<i>Ilkka Puusaari, MD, Jorma Heikkinen, PhD, Paula Summanen, MD, Ahti Tarkkanen, MD, Tero Kivelä, MD</i>	
According to a population-based study of 97 consecutive patients, iodine 125 plaque brachytherapy did not compromise survival or local tumor control. Brachytherapy allowed approximately 80% of patients to keep their eye, even though most eyes eventually lost useful vision.	
Transscleral Resection versus Iodine Brachytherapy for Choroidal Malignant Melanomas 6 Millimeters or More in Thickness	2235
<i>Tero Kivelä, MD, Ilkka Puusaari, MD, Bertil Damato, MD</i>	
Matched case-control analysis of 49 pairs of patients with choroidal uveal melanoma, managed concurrently in 2 national ocular oncology centers, suggests that clinically meaningful differences exist in the type and frequency of complications of transscleral resection and iodine plaque brachytherapy. Knowledge about these differences may help in further refining each method and in planning prospective randomized trials to compare these treatments.	
Metastatic Melanoma in the Eye and Orbit	2245
<i>Leonidas Zografos, MD, Nicolas Ducrey, MD, Donata Beati, MD, Ann Schalenbourg, MD, Barbara Spahn, MD, Aubin Balmer, MD, Chantal Bornet Othenin-Girard, MD, Line Chamot, MD, Emmanuel Egger, PhD</i>	
Metastatic melanoma to the eye and orbit is rare, occurs mainly in patients with disseminated metastasis with short life expectancy, and treatment is always palliative.	
Letters to the Editor	2257
Headache Syndrome	
Mitomycin C and Pterygium Excision	
Tracker-Assisted LASIK	
Viscocalostomy versus Trabeculectomy	
Management of Acute Elevation of IOP	
Inverted Pneumatic Retinopexy	
RPE Translocation in ARMD	
Botulinum Toxin Injection	
Unilateral Temporal Artery Biopsy	
<hr/> American Academy of Ophthalmology, Inc.	2265
• <i>Report of Independent Certified Public Accountants</i>	

(Continued on page 35A)