

AMERICAN JOURNAL OF OPHTHALMOLOGY[®]

VOLUME 149

ARE YOU COMPLIANT WITH ADDRESSING GLAUCOMA ADHERENCE?

Mansberger

**WHEN SHOULD ANTI-VASCULAR ENDOTHELIAL GROWTH FACTOR TREATMENT BE STOPPED
IN AGE-RELATED MACULAR DEGENERATION?**

Gaudric and Cohen

**FROM THE LABORATORY TO THE CLINIC: MOLECULAR GENETIC TESTING IN PEDIATRIC
OPHTHALMOLOGY**

Drack, Lambert, and Stone

**SPECTRAL-DOMAIN OPTICAL COHERENCE TOMOGRAPHY: A COMPARISON OF MODERN
HIGH-RESOLUTION RETINAL IMAGING SYSTEMS**

Kiernan, Mieler, and Hariprasad

THE VITREOUS GEL: MORE THAN MEETS THE EYE

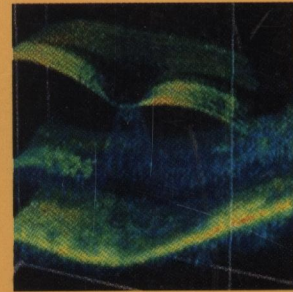
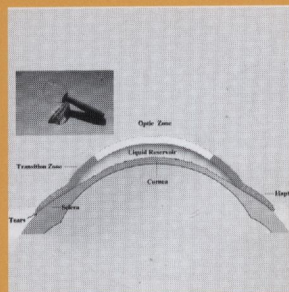
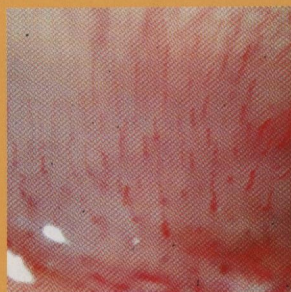
Holekamp

**AIRSOFT GUN-RELATED OCULAR INJURIES: NOVEL FINDINGS, BALLISTICS INVESTIGATION,
AND HISTOPATHOLOGIC STUDY**

Kratz, Levy, Cheles, and Co-Authors

MANAGEMENT OF IRIS MELANOMAS WITH ¹²⁵IODINE PLAQUE RADIOTHERAPY

Fernandes, Krema, Fulda, and Co-Authors



AJO[®]

MONTHLY SINCE 1884
Full-text online at www.ajo.com

ELSEVIER

ISSN 0002-9394

AMERICAN JOURNAL OF OPHTHALMOLOGY®

ISSN 0002-9394 • VOL. 149, NO. 6 JUNE 2010

CONTENTS

EDITORIAL

- 875 Comparing glaucoma drainage implants. Steven J. Gedde and Richard K. Lee

SERIES ON EPIDEMIOLOGY

- 878 Diagnostic tests: understanding results, assessing utility, and predicting performance. Alain B. Labrique and William K.-Y. Pan

ORIGINAL ARTICLES

- 882 The risk of capsular breakage from phacoemulsification needle contact with the lens capsule: a laboratory study. Jay J. Meyer, Annie F. Kuo, and Randall J. Olson
This laboratory investigation calculated capsular breakage risk from contact by phacoemulsification needles by machine and tip type. Using surrogate and human cadaveric lenses, we observed that factors influencing capsular breakage may include ultrasound method, active vacuum at the tip, needle gauge and sharpness.
- 887 Pediatric cataract: the Toronto experience—etiology. Zena Lim, Shehla Rubab, Yiong Huak Chan, and Alex V. Levin
This is a large retrospective study of a diverse cohort of patients presenting with pediatric cataract. Unilateral cataracts and idiopathic etiology accounted for the majority of cases. Diseases with steroid treatment-induced cataracts were the most frequent systemic association. Down syndrome represented the majority of syndrome-associated cataracts.

- 893 Ahmed glaucoma valve and single-plate Molteno implants in treatment of refractory glaucoma: a comparative study. Nader Nassiri, Ghazal Kamali, Mohammad Rahnavardi, Babak Mohammadi, Saman Nassiri, Laleh Rahmani, and Nariman Nassiri

This randomized, comparative study evaluated the safety and efficacy of the Ahmed valve implant versus the Molteno single-plate implant in the surgical treatment of refractory glaucoma. Ninety-two patients were recruited and followed up for 2 years. Both Ahmed and Molteno implants were effective and safe options for refractory glaucoma and may preserve visual fields after surgery.

- 903 Demonstration of angle widening using EyeCam after laser peripheral iridotomy in eyes with angle closure. Shamira A. Perera, Desmond T. Quek, Mani Baskaran, Tin A. Tun, Rajesh S. Kumar, David S. Friedman, and Tin Aung

This study found that it was possible to use the EyeCam to document angle changes after laser peripheral iridotomy in eyes with angle closure. However, the EyeCam's current disadvantages, such as variable angle of view, intense illumination, inability to distinguish appositional from synechial closure, and subjectivity of image grading, may limit its clinical application.

- 908 Rates of progressive retinal nerve fiber layer loss in glaucoma measured by scanning laser polarimetry. Felipe A. Medeiros, Linda M. Zangwill, Luciana M. Alencar, Pamela A. Sample, and Robert N. Weinreb

In a longitudinal study, rates of retinal nerve fiber layer thickness change detected by the GDx with enhanced corneal compensation were significantly greater in eyes with progressive glaucoma compared to eyes with stable disease.

AJO®

AMERICAN JOURNAL OF OPHTHALMOLOGY®

ISSN 0002-9394 • VOL. 149, NO. 6 JUNE 2010

CONTENTS

Continued from page A4

- **916 Intracameral voriconazole injection in the treatment of fungal endophthalmitis resulting from keratitis.** *Ying-Cheng Shen, Chun-Yuan Wang, Hin-Yeung Tsai, and Hsin-Nung Lee*

This study showed that intracameral voriconazole injection may be effective in the treatment of fungal endophthalmitis spreading contiguously as a result of keratitis. Ten eyes were treated with an intracameral injection of 100 µg voriconazole. *Fusarium* and *Aspergillus* were the most common causative organisms. Repeat injections may be necessary in most cases.

- **922 A method to confirm correct orientation of Descemet membrane during Descemet membrane endothelial keratoplasty.** *Bjoern O. Bachmann, Kathrin Laaser, Claus Cursiefen, and Friedrich E. Kruse*

Descemet membrane endothelial keratoplasty is a new technique for the replacement of diseased corneal endothelium. However, this technique is challenging and manipulation of the donor endothelium–Descemet membrane layer within the recipient anterior chamber can be associated with loss of the correct anteroposterior orientation, resulting in corneal opacification and postoperative graft detachment. Herein, we describe a simple method to maintain the correct donor orientation during transplantation by marking the edge of the endothelium–Descemet membrane layer.

- **926 Phase I study of subconjunctival ranibizumab in patients with primary pterygium undergoing pterygium surgery.** *Anat Galor, Sonia H. Yoo, Fernanda V.R. Piccoli, Artur J. Schmitt, Victoria Chang, and Victor L. Perez*

Ten patients with pterygia were administered subconjunctival ranibizumab either 3 days prior to or at the time of pterygium surgery. The conjunctival autograft remained intact in 9 patients whose graft was secured with sutures. There was autograft dehiscence in 1 patient whose graft was secured with glue. Three pterygium recurrences were

noted at 6 months, all in patients injected prior to surgery. These data suggest that one ranibizumab injection in conjunction with pterygium surgery is well tolerated.

- **932 Reduced tear meniscus dynamics in dry eye patients with aqueous tear deficiency.** *Yimin Yuan, Jianhua Wang, Qi Chen, Aizhu Tao, Meixiao Shen, and Mohamed Abou Shousha*

The upper and lower tear menisci during the blink cycle were determined in both aqueous tear deficiency dry eye patients and healthy subjects using optical coherence tomography. The dry eye patients had smaller tear meniscus dimensions and reduced changes in tear meniscus volume during a normal blink cycle. The reduction of tear meniscus dynamics may be the result of low tear secretion and the possible reduction or shutting down of the tear drainage system.

- **939 Incidence of new choroidal neovascularization in fellow eyes of patients treated in the MARINA and ANCHOR trials.** *Irene A. Barbazetto, Namrata Saroj, Howard Shapiro, Pamela Wong, Allen C. Ho, and K. Bailey Freund*

The analysis of 2 randomized clinic trials, the Minimally Classic/Occlude Trial of the Anti-VEGF Antibody Ranibizumab in the Treatment of Neovascular Age-Related Macular Degeneration (MARINA) study and the Anti-VEGF Antibody for the Treatment of Predominantly Classic Choroidal Neovascularization in Age-Related Macular Degeneration (ANCHOR) study, of monthly intraocular injections of ranibizumab in eyes with neovascular age-related macular degeneration failed to show an effect on the conversion rates from nonneovascular to neovascular disease in the untreated fellow eye.

AMERICAN JOURNAL OF OPHTHALMOLOGY®

ISSN 0002-9394 • VOL. 149, NO. 6 JUNE 2010

CONTENTS

Continued from page A10

Haluk Kazokoglu • 1012 Reply. *Keegan S. Johnson and David S. Chu* • 1013 Peripheral exudative hemorrhagic chorioretinopathy: a clinical, angiographic, and histologic study. *John A. Gonzales, Kapil G. Kapoor, and Syed K. Gibran* • 1014 Reply. *Imela Mantel and Leonidas Zografos* • 1014 Two-year visual results for older Asian women treated with photodynamic therapy or bevacizumab for myopic choroidal neovascularization. *Claudio Campa and Simon P. Harding* • 1015 Reply. *Yasushi Ikuno, Yoshimi Nagai, Satoshi Matsuda, Akiko Arisawa, Kenichiro Sho, Takashi Oshita, Kanji Takahashi, Yasutaka Uchihori, and*

Fumi Gomi • 1016 Endothelial cell density after Descemet membrane endothelial keratoplasty: 1- to 3-year follow-up. *Lisanne Ham, Isabel Dapena, Jacqueline Van Der Wees, and Gerrit R. J. Melles*

BOOK REVIEWS _____ 1018

CLASSIFIEDS _____ A13

FULL-TEXT ONLINE—AJO.COM

EDITORIAL OFFICE

SARAH L. DUNCAN POWERS, *Managing Editor*

CORRESPONDENCE

ContentsDirect delivers the tables of contents of this journal by e-mail approximately 2–4 weeks prior to each issue's publication. To subscribe to this FREE service, complete the ContentsDirect registration form at www.elsevier.com/locate/contentsdirect/



0002-9394(201006)149:6;1-5

The American Journal of Ophthalmology is abstracted and/or indexed by the following services: AIM; Biodet.Abstr.; Biol.Abstr.; Biotech.Abstr.; Chem.Abstr.; Curr.Adv.Cancer Res.; Curr.Adv.Ecol.Sci.; Curr.Cont.; Dent.Ind.; Dok.Arbeitsmed.; Excerpt.Med.; Helminthol.Abstr.; Ind.Med.; Ind.Sci.Rev.; Ind.Vet.; INIS Atomind; Kidney; Lab.Haz.Bull.; Med. & Sur.Dermat.; Neurosci.Cit.Ind.; Nutr.Abstr.; Protozool.Abstr.; Psychol.Abstr.; Rev.Med. & Vet.Mycol.; Risk.Abstr.; Sci.Cit.Ind.; SSCI; and Vet.Bull.