

ARCHIVES

OF

OPHTHALMOLOGY

VOL 115 NO. 1, JANUARY 1997

CLINICAL SCIENCES

- Vitreotomy for the Treatment of Full-Thickness Stage 3 or 4 Macular Holes: Results of a Multicentered Randomized Clinical Trial** 11
William R. Freeman, MD; Stanley P. Azen, PhD; Jung W. Kim, MD; Wael El-Haig, MD; Daniel R. Mishell III, MS; Ian Bailey, PhD; for the Vitrectomy for Treatment of Macular Hole Study Group
- Motion Perimetry Identifies Nerve Fiber Bundlelike Defects in Ocular Hypertension** 26
Michael Wall, MD; Charles S. Jennisch, MD; Paul M. Munden, MD
- Acute and Chronic Conjunctivitis Due to Over-the-counter Ophthalmic Decongestants** 34
Charles N. S. Soparkar, MD, PhD; Kirk R. Wilhelmus, MD; Douglas D. Koch, MD; Gary W. Wallace, MD; Dan B. Jones, MD
- The Contralateral Corneal Endothelium in the Iridocorneal Endothelial Syndrome** 40
Tina C. Lucas-Glass, MD; Keith H. Baratz, MD; Leif R. Nelson; David O. Hodge, MS; William M. Bourne, MD
- Comparison of Dorzolamide and Acetazolamide as Suppressors of Aqueous Humor Flow in Humans** 45
Todd L. Maus, MD; Lill-Inger Larsson, MD; Jay W. McLaren, PhD; Richard F. Brubaker, MD
- Relationship Between Difficulty in Performing Daily Activities and Clinical Measures of Visual Function in Patients With Retinitis Pigmentosa** 53
Janet P. Szlyk, PhD; Gerald A. Fishman, MD; Kenneth R. Alexander, PhD; Beatrise I. Revelins; Deborah J. Derlacki; Robert J. Anderson, PhD
- Uveitis Associated With Inflammatory Bowel Disease Compared With Uveitis Associated With Spondyloarthropathy** 61
Jennifer L. Lyons, MD; James T. Rosenbaum, MD
- Sudden Death in Septo-Optic Dysplasia: Report of 5 Cases** 66
Michael C. Brodsky, MD; Felix A. Conte, MD; David Taylor, MD; Creig S. Hoyt, MD; Robert E. Mrak, MD, PhD
- An Anatomical Basis for Primary Acquired Nasolacrimal Duct Obstruction** 71
Sarah A. Groessl, MD; Bryan S. Sires, MD, PhD; Bradley N. Lemke, MD
- Secondary Squamous Cell Carcinoma of the Orbit** 75
Thomas E. Johnson, MD; Khalid F. Tabbara, MD; Robert G. Weatherhead, FRACS; Robert C. Kersten, MD; Charles Rice, MD; Amin M. Nasr, MD

American Medical Association

Physicians dedicated to the health of America



Copyright 1997 by the American Medical Association. All rights reserved. Reproduction without permission is prohibited.

All articles published, including editorials, letters, and book reviews, represent the opinions of the authors and do not reflect the policy of the American Medical Association, the Editorial Board, or the institution with which the author is affiliated, unless this is clearly specified.

P. John Seward, MD
Executive Vice President

Kenneth E. Monroe
Deputy Executive Vice President

James F. Rappel
Group Vice President,
Business and Management Services

George D. Lundberg, MD
Editor in Chief, Scientific
Information and Multimedia

Robert L. Kennett
Vice President, Publishing

Michael D. Springer
Publisher, New Media

Peter L. Payerli
Associate Publisher

Mary C. Steermann
Director, Production &
Distribution Division

Cheryl Iverson
Director, Editorial Processing
Division

Geoffrey A. Flick
Manager, Marketing Services

Advertising Office: J. P. Cahill & Associates, 341 S Waiola Ave, La Grange, IL 60525 (708) 352-0322. **AMA Physician Recruitment Advertising Department:** Robert Lake, Supervisor, 800-262-2260.

LABORATORY SCIENCES

- Corneal Endothelial Damage by Air Bubbles During Phacoemulsification** 81
Eung K. Kim, MD; Stephen M. Cristol, MD, MPH; Dayle H. Geroski, PhD; Bernard E. McCarey, PhD; Henry F. Edelhauser, PhD

- Isolation and Culture of Iris Pigment Epithelium From Iridectomy Specimens of Eyes With and Without Exfoliation Syndrome** 89
Dan-Ning Hu, MD; Steven A. McCormick, MD; Robert Ritch, MD

OPHTHALMIC MOLECULAR GENETICS

- Clinical and Genetic Analysis of a Family Affected With Dominant Optic Atrophy (OPA1)** 95
Jeremiah Brown, Jr, MD; John H. Fingert; Chris M. Taylor; Max Lake, MD; Val C. Sheffield, MD, PhD; Edwin M. Stone, MD, PhD

- Dominant Optic Atrophy, Kjer Type: Linkage Analysis and Clinical Features in a Large British Pedigree** 100
Robert L. Johnston, FRCOphth; Michael A. Burdon, FRCOphth; David J. Spalton, FRCOphth; Stephen P. Bryant, MSc; Joseph T. Behnam, PhD; Mary J. Seller, DSc

EPIDEMIOLOGY AND BIostatISTICS

- Prevalence of Lens Opacities in the Barbados Eye Study** 105
M. Cristina Leske, MD, MPH; Anthea M. S. Connell, FRCS, FCOphth; Suh-Yuh Wu, MA; Leslie Hyman, PhD; Andrew Schachat, MD; for the Barbados Eye Study Group

EDITORIALS

- Verdict on Macular Hole Surgery: More Data Needed** 112
Argye Hillis, PhD; Stuart L. Fine, MD

- Early Diagnosis of Functional Damage in Patients With Glaucoma** 113
Joseph Caprioli, MD

- Genomic Mapping of Kjer Dominant Optic Atrophy** 115
Janey L. Wiggs, MD, PhD

CLINICOPATHOLOGIC REPORT

- Osseous Metaplasia in a Preretinal Membrane** 117
John I. Loewenstein, MD; R. Nick Hogan, MD, PhD; Frederick A. Jakobiec, MD

ARCHIVES

OF

OPHTHALMOLOGY

Editor:

Daniel M. Albert, MD
 Suite 102
 2870 University Ave
 Madison, WI 53705
 (608) 262-7769
 Fax: (608) 265-5896

Associate Editors:

Richard E. Appen, MD
 Madison, Wis
Leonard A. Levin, MD, PhD
 Madison, Wis

Manager, Editorial Operations:

Eleanor Albert, MA
 Madison, Wis

Assistant Manager, Editorial Operations:

Laura Hayes Hoffman
 Madison, Wis

Ophthalmic Molecular Genetics:

Edwin M. Stone, MD, PhD
 Iowa City, Iowa

Socioeconomics of Ophthalmology:

Eric B. Bass, MD, MPH
 Baltimore, Md
Jonathan C. Javitt, MD, MPH
 Washington, DC
Paul P. Lee, MD
 Los Angeles, Calif

Clinicopathologic Reports:

W. Richard Green, MD
 Baltimore, Md

Controversies:

Andrew P. Schachat, MD
 Baltimore, Md

Photo Essays:

Elisabeth J. Cohen, MD
 Philadelphia, Pa

The ARCHIVES Attends:

Robin D. Ross, MD
 Royal Oak, Mich

Book and Software Reviews:

Thomas A. Farrell, MD
 Madison, Wis

Online Editors:

Jon P. Gieser, MD
Stephen D. McLeod, MD

Landmark Articles:

Charles E. Letocha, MD
 York, Pa

Editorial Board:

Eduardo C. Alfonso, MD
 Miami, Fla

Neil M. Bressler, MD
 Baltimore, Md

Mathew D. Davis, MD
 Madison, Wis

Monte A. Del Monte, MD
 Ann Arbor, Mich

Thaddeus P. Dryja, MD
 Boston, Mass

David A. Durfee, MD
 Oregon City, Ore

Robert A. Goldberg, MD
 Los Angeles, Calif

Barbara S. Hawkins, PhD
 Baltimore, Md

Eve J. Higginbotham, MD
 Baltimore, Md

Douglas H. Johnson, MD
 Rochester, Minn

Dan B. Jones, MD
 Houston, Tex

Simmons Lessell, MD
 Boston, Mass

Peter J. McDonnell, MD
 Los Angeles, Calif

William F. Mieler, MD
 Milwaukee, Wis

Stephen A. Obstbaum, MD
 New York, NY

Michael B. Raizman, MD
 Boston, Mass

Arthur L. Rosenbaum, MD
 Los Angeles, Calif

LANDMARK ARTICLE

A Contact Lens 120
A. Eugen Fick, MD

Commentary 121
Oliver H. Dabezies, Jr, MD

CASE REPORTS AND SMALL CASE SERIES

Müllerian Mixed Tumor Metastatic to the Iris and Ciliary Body 122
Christoph W. Spraul, MD; Hans E. Grossniklaus, MD; Jackson T. Giles, MD

Subperiosteal Orbital Hemorrhage From Retrolbulbar Injection Resulting in Blindness 123
V. Vinod Mootha, MD; Thomas P. Cowden, MD; Bryan S. Sires, MD, PhD; Richard K. Dortzbach, MD

NEW INSTRUMENTS

Two Shielded 'Bullet' Probes for Panoramic Endoillumination 125
Edwin H. Ryan, Jr, MD

PHOTO ESSAYS

Thrombotic Thrombocytopenic Purpura Associated With Purtscher Retinopathy 128
LCDR Michael H. Power, MC, USN; Maj Carl D. Regillo, MC, USAF; CDR Peter H. Custin, MC, USN

Spontaneous Resolution of a Full-Thickness Macular Hole With Good Visual Acuity 130
Lyndon da Cruz, MBBS, FRCOphth; Ian J. Constable, MBBS, FRACO; Christopher J. Barry, CRA

CORRESPONDENCE

A Tactical Response to the RAND Study 132
Harold Hassin, MD, MPH

In Reply 132
Jonathan C. Javitt, MD, MPH

Evaluation of Patients With Retinitis Pigmentosa Receiving Electric Stimulation, Ozonated Blood, and Ocular Surgery in Cuba 133
Orfilio Peláez, MD

In Reply 133
Eliot L. Berson, MD; Juancho F. C. Remulla, MD; Bernard Rosner, PhD; Michael A. Sandberg, PhD; Carol Weigel-DiFranco

Metastatic Choroidal Melanoma to the Contralateral Orbit 40 Years After Enucleation 134
David H. Abramson, MD; Camille A. Servodidio, RN, MPH, CRNO

Patient-Physician Covenant 134
The Members of the Ethics Committee of The American Academy of Ophthalmology

BOOK AND SOFTWARE REVIEWS

Cornea Color Atlas 137
Jay H. Krachmer, MD; David A. Palay, MD
Reviewed by Neal P. Barney, MD

Strabismus: A Decision Making Approach 137
Gunter K. von Noorden, MD; Eugene M. Helveston, MD
Reviewed by James Egbert, MD

Walsh and Hoyt's Clinical Neuro-Ophthalmology 137
Neil R. Miller, MD
Reviewed by Richard E. Appen, MD

CORRECTION

Changes in Descemet Membrane and Endothelium After Corneal Epithelial Abrasion Alone and With Photorefractive Keratectomy in Rabbits 44
Yuta Sano, MD; Yoji Itoh, MT; Hiroshi Tsuneoka, MD; Kohtaro Ohki, MD; Isao Sakabe, MD; Kenji Kitahara, MD; Shinseiro Okamoto, MD

REGULAR DEPARTMENTS

Index to Advertisers 10
Notes From Our Ophthalmic Heritage 38, 111, 126
The Archives Attends . . . 135
News & Comment 136
Continuing Medical Education 139
Physician Recruitment Advertising 140
Instructions for Authors—
See July 1996 issue, page 904