

ARCHIVES OF OPHTHALMOLOGY

The ARCHIVES OF OPHTHALMOLOGY is a member of the consortium of AMA journals listed below. The complete text of all AMA journals is available online directly from AMA as well as the following aggregators: Dialog Information Services, Proquest, Ovid Technologies, Inc, Gale Research, and EBSCO.

The Journal of the American Medical Association (JAMA)

Archives of Dermatology
Archives of Facial Plastic Surgery
Archives of General Psychiatry
Archives of Internal Medicine
Archives of Neurology
Archives of Ophthalmology
Archives of Otolaryngology—Head & Neck Surgery
Archives of Pediatrics & Adolescent Medicine
Archives of Surgery

The ARCHIVES OF OPHTHALMOLOGY (ISSN 0003-9950) is published monthly by the American Medical Association, 515 N State St, Chicago, IL 60610-0946, and is an official publication of the Association. The ARCHIVES OF OPHTHALMOLOGY reaches more than 18 600 readers in over 94 countries each month. Periodicals postage paid at Chicago, IL, and at additional mailing offices. GST registration number 12622 5556 RT. Canada Post International Publications Mail (Canadian Distribution) Sales Agreement No. 318957. Printed in the USA.

Continuing the Publication Founded by Herman Knapp, MD, in 1869. The objective of the ARCHIVES OF OPHTHALMOLOGY is education: To inform its readers of progress, problems, and pertinent research in the practice of ophthalmology through the publication of original contributions and observations.

SUBSCRIPTION RATES—

	Individual Print & Online	Individual Online Only
US	\$200	\$150
Americas	\$260	\$150
Rest of World	£180	£105
	Institution Print & Online	Institution Online Only
US	\$375	\$285
Americas	\$490	\$285
Rest of World	£315	£200

Rates for residents and medical students available.

CHANGE OF ADDRESS—POSTMASTER, send all address changes to ARCHIVES OF OPHTHALMOLOGY, c/o Subscriber Services, American Medical Association, 515 N State St, Chicago, IL 60610. Please notify us of address change at least 6 weeks in advance to ensure uninterrupted service. Include both old and new addresses, a recent mailing label, and new ZIP code. For mailing addresses outside the United States and the Americas, see below.

SUBSCRIPTION INFORMATION—Subscription inquiries for mailing addresses in the US and the Americas: For fastest service, direct inquiries regarding missing issues, address changes, subscription billing, subscription renewal, or back issue purchases as shown below: **AMA members:** Phone: 800-262-3211 between 8:30 AM-4:45 PM CST; Fax: 800-262-3221; E-mail: mse@ama-assn.org. **Other physicians and nonphysician customers:** Phone: 800-262-2350 or 312-670-7827 (same hours as above); Fax: 312-464-5831; E-mail: ama-subs@ama-assn.org. Mail inquiries should be directed to the Unified Service Center, American Medical Association, PO Box 10946, Chicago, IL 60610-0946. For mailing addresses outside the US and the Americas: Contact JAMA and Archives Journals, American Medical Association, Tower House, Sovereign Park, Market Harborough, Leicestershire LE15 9EF, UK. Phone: +44 (0) 1858-438880; Fax: +44 (0) 1858-434958; E-mail: ama@subscription.co.uk.

REPRINTS—Authors place their reprint order at the time the edited typescript is reviewed and should allow 4 to 6 weeks for delivery following publication. Requests for individual reprints should be sent directly to the author at the address shown in the article.

For bulk reprint orders for distribution by commercial organizations, please contact Wanda Bartolotta, 2441 84th St, Brooklyn, NY 11214. Phone: (718) 946-7424. Fax: (718) 946-7372. E-mail: wanda_bartolotta@ama-assn.org. For reprint orders in limited quantities for distribution by educational organizations and for author reprints, please contact Reprints Coordinator, 515 N State St, Chicago, IL 60610. Phone: (312) 464-4594. Fax: (312) 464-4849.

PERMISSIONS—Contact Rhonda Bailey, Permissions Assistant, 515 N State St, Chicago, IL 60610. Phone: (312) 464-2513.

ADVERTISING PRINCIPLES—Each advertisement in this issue has been reviewed and complies with the principles governing advertising in AMA scientific publications. A copy of these principles is available on request. The appearance of advertising in AMA publications is not an AMA guarantee or endorsement of the product or the claims made for the product by the manufacturer.

WORLD WIDE WEB ADDRESS—<http://www.ama-assn.org>

OPHTHALMOLOGY HOME PAGE—<http://www.archophthalmol.com>

Publication Staff

Offices: 515 N State St, Chicago, IL 60610

Editorial Processing Department

Department Director: Paula Glitman

Copyediting Manager:

Brenda Gregoline

Freelance Copyediting Manager:

Diane L. Cannon

Freelance Copyediting Coordinators:

Lauren B. Fischer

Connie Manno

Electronic Systems Managers:

Paul Frank

Monica Mungle

Systems Programmer/Internet Specialist:

J. D. Neff

Senior Copy Editor:

Vickey Golden

Copy Editors:

Juana N. Llorens

Rachel Novickas

Cheryl L. Tobey

Rachel Bodzin Young

Editorial Assistant: Wanda Hill

Circulation & Classified Advertising Division

Director: Curt Reilly

Circulation Processing

Director: Karen Howes

Manager: Alfred Tomaselli

Circulation Development

Director: Bina Oza Trivedi

Managers:

Vida Damijonaitis

Donna Goldman

Michael McGraw

Classified Advertising

Director: Crystal Wells

Manager: Thalia Moss, (800) 262-2260

Scientific Publications & Multimedia Applications

Assistant to the Editor: Helga Fritz

Scientific Online Resources

Director: Margaret Winker, MD

Electronic Media Department Director:

Michelle Kurzynski

Associate Web Editors:

Katherine Behar

Erin M. Giannini

Web Office Manager: Marla A. Hall

Advertising

National Sales Director:

Peter J. Murphy

Director, Advertising Sales:

Peter G. Messina

Advertising Office:

J. P. Cahill & Associates

341 S Waiola Ave

La Grange, IL 60525

(708) 352-0322

Publishing Manager: Geoffrey A. Flick

Licensing & Permissions Department

Director: Norman Frankel, PhD

Permissions: Rhonda Bailey

Publishing Operations Division

Division Director: Vanessa Hayden

Directors: Karen Adams-Taylor,

Paul Gasielcki

Managers: David Antos, Debbie Camp,

Karl Elvin, Betty Frigerio,

Mary Ellen Johnston, Susan Price,

Charl Richey, Carmela Ware

Production Associates and Specialists

Advertising and Production Services:

LaWanda Brown, Susan Chiara,

Mary Anne Donley, Brian McCartney,

Sarah Powell, Denise Steinhauser,

Ellen Yoshihara

Composition: Rebecca Aiken,

Brenda Chandler-Grayer, Amy Evers,

Fred Furtner, Mary Ann Kuranda,

Sandra Lopez

Database & New Media:

Bruce McGregor (indexer),

Clifford O. Barrett, Gail Barrett,

Regina Brownlee, Rowena F. Dagang,

John Marcinek, La'son Diggs Sledge,

Angela Smits

Distribution: Linda Alexander

Graphics: Joe Amft, Noel Chaparro,

Carolyn Hall, Maria Kowalkowski,

Chris Meyer, JoAnne Weiskopf

Proofreading: Carol Joy Farrell,

Daniel James, Teresa H. Omiotek,

Mary Kay Tinerella,

Barbara Wojtowicz,

Agnes A. Zarkadas



ARCHIVES

OF

OPHTHALMOLOGY

MAY 2002

VOLUME 120, NUMBER 5

PAGES 537-688

CLINICAL SCIENCES

Enzymatic Sclerostomy: Pilot Human Study 548

Jacob A. Dan, MD, PhD; Santosh G. Honavar, MD;
David A. Belyea, MD; Anil K. Mandal, MD;
Chandrasekhar Garudadri, MD;
Brian Levy, OD, MSc; Rengappa Ramakrishnan, MD;
Ramasamy Krishnadas, MD; Marc F. Lieberman, MD;
Robert L. Stamper, MD; Ariele Yaron, PhD

Human Immunodeficiency Virus Infection, Bcl-2, p53 Protein, and Ki-67 Analysis in Ocular Surface Squamous Neoplasia 554

Amina Mahomed, MMed, FCS;
Runjan Chetty, FRCPath, PhD

Management of Vitreoretinal Complications in Eyes With Permanent Keratoprosthesis 559

Subhransu Ray, MD, PhD; Bilal F. Khan, MD;
Claes H. Dohlman, MD, PhD; Donald J. D'Amico, MD

Clinical Variations in Assessment of Bull's-eye Maculopathy 567

Malaika M. Kurz-Levin, MD;
Anthony S. Halfyard, PhD; Catey Bunce, MSc;
Alan C. Bird, MD; Graham E. Holder, PhD

Symmetry of Bilateral Lesions in Geographic Atrophy in Patients With Age-Related Macular Degeneration 579

Caren Bellmann, MD; Jork Jorzik, MD;
Georg Spital, MD; Kristina Unnebrink, PhD;
Daniel Pauleikhoff, MD; Frank G. Holz, MD

Limited Macular Translocation for Atrophic Maculopathy 586

Jeffrey D. Benner, MD; Janet S. Sunness, MD;
Matthias D. Ziegler, BS; Jalal Soltanian, MSE

Multicenter Trial of Cryotherapy for Retinopathy of Prematurity: 595

Natural History ROP: Ocular Outcome at 5½ Years in Premature Infants With Birth Weights Less Than 1251 g
Editorial Committee; for the Cryotherapy for Retinopathy of Prematurity Cooperative Group

Association Between Sleep Apnea Syndrome and Nonarteritic Anterior Ischemic Optic Neuropathy 601

Daniel S. Mojon, MD; Thomas R. Hedges III, MD;
Bruce Ehrenberg, MD; Emely Z. Karam, MD;
David Goldblum, MD; Alex Abou-Chebl, MD;
Matthias Gugger, MD; Johannes Mathis, MD

LABORATORY SCIENCES

Toxicity and Dose-Response Studies of 1 α -Hydroxyvitamin D₂ in a Retinoblastoma Xenograft Model 607

Richard J. Grostern, MD; Paul J. Bryar, MD;
Michele L. Zimbric, BS; Soesiawati R. Darjatmoko, MS;
Boaz J. Lissauer, MD; Mary J. Lindstrom, PhD;
Janice M. Lokken; Stephen A. Strugnell, PhD;
Daniel M. Albert, MD, MS

EPIDEMIOLOGY AND BIostatISTICS

Causes of Incident Visual Impairment: The Blue Mountains Eye Study 613

Suriya Foran, MBBS, MPH;
Jie Jin Wang, MMed, PhD; Paul Mitchell, MD, PhD

Near-Work Activity, Night-lights, and Myopia in the Singapore-China Study 620

Seang-Mei Saw, MBBS, MPH, PhD;
Ming-Zhi Zhang, MBBS; Rong-Zhao Hong, MBBS;
Zhi-Fu Fu, MBBS; Mei-Hua Pang, MBBS;
Donald T. H. Tan, FRCS, FRCOphth

JAMA
&
ARCHIVES
JOURNALS
American Medical Association

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.

Catherine D. DeAngelis, MD, MPH
Editor in Chief, Scientific Publications
& Multimedia Applications

Nawin Gupta, PhD
Group Publisher

Cheryl Iverson
Managing Editor

Michael D. Maves, MD, MBA
Executive Vice President,
Chief Executive Officer

Robert A. Musacchio, PhD
Senior Vice President,
Publishing & Business Services

Copyright 2002 by the American Medical Association. All rights reserved.
Reproduction without permission is prohibited.

SPECIAL ARTICLE

- James Thurber and the Problems of Sympathetic Ophthalmia** 628
James G. Ravin, MD

EDITORIALS

- A Need for Innovation in Glaucoma Surgery** 633
M. Roy Wilson, MD, MS
- A Worm Can Be Monkey Business** 634
Gordon K. Klintworth, MD, PhD

NEW INSTRUMENT

- Effects of the Pulsed Electron Avalanche Knife on Retinal Tissue** 636
Daniel V. Palanker, PhD; Michael F. Marmor, MD; Andre Branco, MD; Philip Huie, MSc; Jason M. Miller, MSc; Steven R. Sanislo, MD; Alexander Vankov, PhD; Mark S. Blumenkranz, MD

COMMENTARY

- Can Hormone Replacement Therapy Cause Dry Eye?** 641
Neal P. Barney, MD

CLINICOPATHOLOGIC REPORTS, CASE REPORTS, AND SMALL CASE SERIES

- Human Subconjunctival Infection of *Macacanesma formosana*: The First Case of Human Infection Reported Worldwide** 643
Ling-Ing Lau, MD; Fenq-Lih Lee, MD; Wen-Ming Hsu, MD; Silvio Pampiglione, MD, PhD; Maria Letizia Fioravanti, PhD; Thomas C. Orihel, PhD

- Merkel Cell Carcinoma of the Eyelid With a Positive Sentinel Node** 646
Bita Esmali, MD; Aresu Naderi, MD; Lillie Hidaji, BS; George Blumenschein, MD; Victor G. Prieto, MD, PhD

- The Effect of Transpupillary Thermotherapy on the Human Macula** 648
Dennis M. Robertson, MD; Diva R. Salomão, MD

- Malignant Peripheral Nerve Sheath Tumor in the Orbit of a Child With Acute Proptosis** 653
Daniel Briscoe, MB LRCP&SI, BAO; S. Mahmood, MRCOphth; D. G. O'Donovan, MD, FRCPath; R. E. Bonshek, MD, FRCPath; B. Leatherbarrow, FRCS, FRCOphth; B. P. Eyden, PhD

- Ocular Findings in Spinocerebellar Ataxia 7** 655
Margaret E. McLaughlin, MD; Thaddeus P. Dryja, MD

- Acquired Retinal Myelination in Neurofibromatosis 1** 659
Manoj V. Parulekar, FRCS; John S. Elston, BSc, MD

- Bilateral Giant Macular Holes With Excellent Visual Function** 661
Atsushi Takahashi, MD; Masumi Takeda, MD, PhD; Norihiko Kitaya, MD, PhD; Junichi Takahashi, MD; Suguru Konno, MD, PhD; Satoshi Ishiko, MD, PhD; Taiichi Hikichi, MD, PhD; Akitoshi Yoshida, MD, PhD

ARCHIVES

OF

OPHTHALMOLOGY

Editor:

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

Associate Editors:

Justin L. Gottlieb, MD
Leonard A. Levin, MD, PhD
Madison, Wis

Editorial Manager:

Laura Hayes Hoffman
Madison, Wis

Office Manager:

Eleanor Albert, MA
Madison, Wis

Ophthalmic Molecular Genetics:

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

Socioeconomics and Health Services:

Paul P. Lee, MD
Durham, NC

Clinicopathologic Reports, Case Reports, and Small Case Series:

W. Richard Green, MD
Baltimore, Md

Controversies:

Neil M. Bressler, MD
Baltimore, Md

Book and Software Reviews:

Barbara A. Blodi, MD
Madison, Wis

Online Editors:

Jon P. Gieser, MD
Chicago, Ill

Stephen D. McLeod, MD
San Francisco, Calif

ARCHIVES CME:

William F. Mieler, MD
Houston, Tex

Editorial Board:

Elisabeth J. Cohen, MD
Philadelphia, Pa

Karen J. Cruickshanks, PhD
Madison, Wis

Thaddeus P. Dryja, MD
Boston, Mass

Robert A. Goldberg, MD
Los Angeles, Calif

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

Stephen A. Obstbaum, MD
New York, NY

Annabelle A. Okada, MD
Tokyo, Japan

Michael B. Raizman, MD
Boston, Mass

James G. Ravin, MD
Toledo, Ohio

Arthur L. Rosenbaum, MD
Los Angeles, Calif

Robert N. Weinreb, MD
La Jolla, Calif

M. Roy Wilson, MD, MS
Omaha, Neb

<p>Primary Aberrant Oculomotor Nerve Regeneration From a Posterior Communicating Artery Aneurysm <i>Jacqueline R. Carrasco, MD;</i> <i>Peter J. Savino, MD; Jurij R. Bilyk, MD</i></p>	663	<p>A False Use of “True Color” <i>Dirk-Uwe Bartsch, PhD;</i> <i>William R. Freeman, MD; Ann M. Lopez, MD</i></p>	675
<p>Unilateral Mydriasis Associated With Exposure to Flea Spray <i>Jason D. Burns, MD; Laura T. Muller, MD;</i> <i>Pattye F. Jenkins, CO; Charlise A. Gunderson, MD</i></p>	665	<p>In Reply <i>Ayyakkannu Manivannan, PhD; Peter F. Sharp, PhD</i></p>	676
<p>Acute Psychosis Following the Use of Topical Ciprofloxacin <i>Ajay Tripathi, MS, FRCS(Ed), FRCS(Glas);</i> <i>Sean I. Chen, MRCOphth;</i> <i>Sheila O’Sullivan, MRCPsych</i></p>	665	<p>Imaging to Detect Metastases From Malignant Uveal Melanoma <i>Sebastian Eskelin, MD; Tero Kivelä, MD</i></p>	676
<p>Here’s Egg in Your Eye: An Unusual Penetrating Eye Injury <i>David J. Hilford, MBBS(Hons);</i> <i>Lawrence R. Lee, FRANZCO</i></p>	666	BOOK AND SOFTWARE REVIEWS	
PHOTO ESSAYS			
<p>Primary Conjunctival Rhabdomyosarcoma <i>Simon F. Taylor, MBBS, FRANZCO, FRACS;</i> <i>Kimberly G. Yen, MD; Holly Zhou, MD;</i> <i>Bhupendra C. K. Patel, MD, FRCS, FRCOphth</i></p>	668	<p>Binocular Vision and Ocular Motility: Theory and Management of Strabismus <i>Gunter K. von Noorden, MD; Emilio C. Campos, MD;</i> <i>Reviewed by Ronald V. Keech, MD</i></p>	677
<p>Vitreomacular Traction Syndrome With Extensively Myelinated Nerve Fibers <i>G. Baker Hubbard, MD;</i> <i>Matthew A. Thomas, MD;</i> <i>Hans E. Grossniklaus, MD</i></p>	670	<p>Oculoplastic Surgery: The Essentials <i>William P. Chen, MD, FACS</i> <i>Reviewed by Briggs Cook, Jr, MD</i></p>	677
REGULAR DEPARTMENTS			
CORRESPONDENCE			
<p>The COMS: Why Was It Not Stopped Sooner? <i>William E. Benson, MD</i></p>	672	<p>Fitting Guide for Rigid and Soft Contact Lenses: A Practical Approach <i>Harold A. Stein, MD, MSc, FRCS(C);</i> <i>Bernard J. Slatt, MD, FRCS(C);</i> <i>Raymond M. Stein, MD, FRCS(C);</i> <i>Melvin I. Freeman, MD, FACS</i> <i>Reviewed by Eugene Cropp, OD</i></p>	678
<p>In Reply <i>Stuart L. Fine, MD; Bradley R. Straatsma, MD;</i> <i>John D. Earle, MD; Matthew D. Davis, MD</i></p>	673	<p>Ophthalmic Images</p>	558
<p>Subretinal Fluid in Optic Disc Edema <i>Sohan Singh Hayreh, MD, PhD, DSc, FRCS, FRCOphth</i></p>	673	<p>Ophthalmological Numismatics</p>	566
<p>In Reply <i>Thomas R. Hedges III, MD;</i> <i>Maria Luz Amaro-Quireza, OD;</i> <i>Vincent J. Hoye III, MD;</i> <i>Audina M. Berrocal, MD</i></p>	674	<p>Notice to Authors: Submission of Manuscripts</p>	627
ARCHIVES Web Quiz Winner			
ARCHIVES CME			
CME Announcement			
Continuing Medical Education			
Classified Advertising			
Instructions for authors are available on our Web site: http://www.archophthalmol.com. If you do not have access to the Web, contact Laura Hayes Hoffman at (608) 262-7769.			