

ARCHIVES OF NEUROLOGY

The ARCHIVES OF NEUROLOGY is a member of the consortium of AMA journals listed below. The complete text of all AMA journals is available online from Dialog Information Services and Ovid Technologies, Inc.

The Journal of the American Medical Association (JAMA)

Archives of Dermatology

Archives of Facial Plastic Surgery

Archives of Family Medicine

Archives of General Psychiatry

Archives of Internal Medicine

Archives of Neurology

Archives of Ophthalmology

Archives of Otolaryngology-Head & Neck Surgery

Archives of Pathology & Laboratory Medicine

Archives of Pediatrics & Adolescent Medicine

Archives of Surgery

The ARCHIVES OF NEUROLOGY (ISSN 0003-9942) is published monthly by the American Medical Association, 515 N State St, Chicago, IL 60610, and is an official publication of the Association. The ARCHIVES OF NEUROLOGY reaches more than 11 600 readers in over 77 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. 318973.

Printed in the USA.

SUBSCRIPTION RATES—The personal subscription rates for the ARCHIVES OF NEUROLOGY are \$195 for 1 year (12 issues) in the United States and US possessions; \$295 in the Americas; £175 outside the Americas. The institution rates for 1 year are \$295 in the United States; \$395 in the Americas; £245 outside the Americas. Special rates for residents and medical students are available. Address all subscription communications to: Subscriber Services Center, American Medical Association, PO Box 10946, Chicago, IL 60610-0946. Phone: (800) 262-2350. Fax: (312) 464-5831. E-mail: ama-subs@ama-assn.org. For mailing addresses outside the United States and US possessions, see International Subscription Information.

CHANGE OF ADDRESS—POSTMASTER, send all address changes to ARCHIVES OF NEUROLOGY, 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 US possessions, see International Subscription Information.

SUBSCRIBER SERVICES—For information about subscribing to any of the AMA publications, change of address, missing issues, or purchasing back issues, please contact Subscriber Services Center, American Medical Association, PO Box 10946, Chicago, IL 60610-0946, or call (800) 262-2350 or (312) 670-SUBS (670-7827) between 8:30 AM and 4:30 PM CST. Fax: (312) 464-5831. E-mail: ama-subs@ama-assn.org. For mailing addresses outside the United States and US possessions, see International Subscription Information.

INTERNATIONAL SUBSCRIPTION INFORMATION—Subscriptions outside the United States and US possessions are served according to geographic region. Please address correspondence to the following 2 offices based on delivery address: (1) For delivery in North America, Central America and South America, contact Subscriber Services, AMA, PO Box 10946, Chicago, IL 60610-0946. Phone: (312) 670-7827. Fax: (312) 464-5831. E-mail: ama-subs@ama-assn.org. (2) For delivery outside the Americas: Subscription Department, JAMA & Archives Journals, American Medical Association, Tower House, Sovereign Park, Market Harborough, Leicestershire LE15 9EF, England. Phone: +44 (0) 1858-438880. Fax: +44 (0) 1858-434958.

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, 500 Fifth Ave, #2210, New York, NY 10110. Phone (212) 354-0050. Fax: (212) 354-1169. 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>

NEUROLOGY HOME PAGE—<http://www.archneuro.com>

Publication Staff

Offices: 515 N State St, Chicago, IL 60610

Editorial Processing Department, Archives Journals

Director: Paula Glitman

Manager: Lise M. Stevens

Freelance Manager: Diane L. Cannon

Freelance Coordinators:

Gwen Chaffen

Connie Manno

Electronic Editing Specialist:

Paul Frank

Assistant Electronic Editing Specialist:

Monica Mungle

Senior Copy Editors:

Dee E. Egger

Vickey Golden

Copy Editors:

Keith Huff

John McFadden

Jennifer L. Reddy

Editorial Assistant: Wanda Hill

Scientific Publications & Multimedia Applications

Staff Assistant: Helga Fritz

Scientific Online Resources

Director: Margaret Winker, MD

Electronic Media Department

Director: Marty Suter

Assistant Editors:

Brandt Martin

Neal Shankman

Staff Assistant: Marla A. Hall

Production & Distribution Division

Manager, Budgets & Costs:

Bonnie Van Clevon

Publishing Manufacturing Analyst:

Diane Darnell

Office Manager: Karen Branham

Production Assistant:

Shannon Epplert

Advertising & Production Department

Director: Karen Adams-Taylor

Production Specialist: Terri Hanley

Manager, Advertising Services:

Carole Piszker

Manager, Production Services:

Susan Price

Supervisor, Production Services:

Debbie Camp

Production Associates:

Mary Ann Donley

Sarah Powell

Denise Steinhauer

Jo Anne Turner

Carmela Ware

Production Assistants:

Bryan Irzyk

Amelia Zamudio

Distribution

Distribution Manager: Paul Gasielki

Distribution Analyst:

Michelle Robinson

Traffic Control Specialist:

Victoria Buckner



Specialty Journal Division Office

Assistant to the Publisher:

Christine Hearne

Circulation & Content Marketing Division

Administrative Assistant:

Millette Jackson-Bates

Circulation Processing Department

Director: Robert Herling

Subscriber Services Manager:

Susan Stoken

Circulation Systems Manager:

Alfred Tomaselli

Circulation Specialists:

Reginald Jordan

Kathryn Osten

Circulation Development Department

Director: Bina Oza

Circulation Marketing Managers:

Audrey Mathies

Timothy Ryan

Circulation Marketing Specialists:

Sandra Garzon

Michael McGraw

Licensing & Permissions Department

Director: Norman Frankel

Permissions: Rhonda Bailey

International Coordinator: Sharon Ali

Electronic Production Department

Manager, Composition & Pagination:

Phil Arko

Electronic Production Specialists:

Brenda Chandler-Grayer

Heather Crego

Karl Elvin

Amy Evers

Mary Ann Kuranda

Sandra Lopez

Manager, Graphics: Charl Richey

Electronic Imaging Specialists:

Joe Amft

Noel Chaparro

Carolyn Hall

Maria Kowalkowski

Chris Meyer

JoAnne Weiskopf

Proofreaders:

David Antos

Daniel James

Rachel Novickas

Teresa H. Omiotek

Mary Kay Tinerella

Barbara Wojtowicz

Manager, Database & New Media:

Mary Ellen Johnston

Indexer: Kathy Gaydar

New Media Specialists:

Gail Barrett

Joel Brammeier

Regina Brownlee

La'son J. Diggs

Melanie Parenti

Angela Smits

Production Assistant: Ruth Sprague

ARCHIVES OF NEUROLOGY

VOL 57 NO. 2, FEBRUARY 2000

EDITORIAL

- Criteria for Vascular Dementia: Replacing Dogma With Data** 170
John V. Bowler, MB, MD, MRCP;
Vladimir Hachinski, MD, DSc

NEUROLOGICAL REVIEW

- Alzheimer Disease: Mouse Models Pave the Way for Therapeutic Opportunities** 176
Gérard Emilien, PhD;
Jean-Marie Maloteaux, MD, PhD;
Konrad Beyreuther, PhD;
Colin L. Masters, MD

BASIC SCIENCE SEMINARS IN NEUROLOGY

- Cortical and Subcortical Interhemispheric Interactions Following Partial and Complete Callosotomy** 185
Margaret G. Funnell, PhD;
Paul M. Corballis, PhD;
Michael S. Gazzaniga, PhD

ORIGINAL CONTRIBUTIONS

- Clinical Criteria for the Diagnosis of Vascular Dementia: A Multicenter Study of Comparability and Interrater Reliability** 191
Helena C. Chui, MD; Wendy Mack, PhD;
J. Edward Jackson, MD; Daniel Mungas, PhD;
Bruce R. Reed, PhD; Jared Tinklenberg, MD;
Fen-Lei Chang, MD; Kate Skinner, MD, PhD;
Cora Tasaki, MD; William J. Jagust, MD
- Effects of Bilateral Posteroventral Pallidotomy on Gait of Subjects With Parkinson Disease** 198
Karen Lohmann Siegel, MA, PT;
Leo Verhagen Metman, MD
- Striatal Dopamine Transporter Binding Assessed by [I-123]IPT and Single Photon Emission Computed Tomography in Patients With Early Parkinson's Disease: Implications for a Preclinical Diagnosis** 205
Johannes Schwarz, MD;
Rainer Linke, MD;
Martina Kerner, MD;
P. David Mozley, PhD;
Claudia Trenkwalder, MD;
Thomas Gasser, MD;
Klaus Tatsch, MD

American Medical Association

Physicians dedicated to the health of America



Copyright 2000 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.

E. Ratcliffe Anderson, Jr, MD
Executive Vice President,
Chief Executive Officer

Lynn E. Jensen, PhD
Chief Operating Officer

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

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

Robert L. Kennett
Vice President, Publishing

Peter L. Payerli
Publisher

Peter G. Messina
National Sales Manager

Geoffrey A. Flick
Manager, Marketing Services
Cheryl Iverson

Director, Editorial Processing Division
Vanessa Hayden

Director, Production & Distribution Division
James A. Skowrenski

Director, Circulation & Content Marketing

Advertising Office:
East: Kelly Lezynski, 119 Cherry Hill Rd,
3rd Flr, Parsippany, NJ 07054 (973)
263-9191.

Midwest/West: J. P. Cahill & Associates,
341 S Waiola Ave, La Grange, IL 60525
(708) 352-1450.

AMA Classified Advertising Department:
Thalia Moss, 800-262-2260.

Association Between Angiotensin-Converting Enzyme and Alzheimer Disease 210
Lindsay A. Farrer, PhD; Tatyana Sherbatich; Sergey A. Keryanov, PhD; Galina I. Korovaitseva, PhD; Ekaterina A. Rogaeva, PhD; Svetlana Petruk, PhD; Smita Premkumar, PhD; Yuri Moliaka, PhD; You Qiang Song, PhD; York Pei, MD; Christine Sato; Natalya D. Selezneva, MD; Svetlana Voskresenskaya, MD; Vera Golimbet, PhD; Sandro Sorbi, MD; Rangene Duara, MD; Svetlana Gavrilova, MD; Peter H. St. George-Hyslop, MD; Evgeny I. Rogaev, PhD

A Novel Missense Mutation (W797R) in the Myophosphorylase Gene in Spanish Patients With McArdle Disease 217
Roberto Fernández, MS; Carmen Navarro, MD; Antonio L. Andreu, MD; Claudio Bruno, MD; Sara Shanske, PhD; José Gámez, MD; Susana Teijeira, MS; Iñigo Hernández, MD; Alfonso Teijeiro, MS; José M. Fernández, MD; Olimpia Musumeci, MD; Salvatore DiMauro, MD

Intracranial Volume and Alzheimer Disease: Evidence Against the Cerebral Reserve Hypothesis 220
Rhian Jenkins, BSc; Nick C. Fox, MRCP; Alex M. Rossor; Richard J. Harvey, MRCPsych; Martin N. Rossor, FRCP

Differences Between Pick Disease and Alzheimer Disease in Clinical Appearance and Rate of Cognitive Decline 225
Giuliano Binetti, MD; Joseph J. Locascio, PhD; Suzanne Corkin, PhD; Jean Paul Vonsattel, MD; John H. Growdon, MD

Lack of an Association of Estrogen Receptor α Gene Polymorphisms and Transcriptional Activity With Alzheimer Disease 236
Hirofumi Maruyama, MD; Hiromasa Toji, MD; Charles R. Harrington, PhD; Ken Sasaki, MD; Yuishin Izumi, MD; Tohru Ohnuma, MD; Heii Arai, MD; Minoru Yasuda, MD; Chikako Tanaka, MD; Piers C. Emson, PhD; Shigenobu Nakamura, MD; Hideshi Kawakami, MD, PhD

ARCHIVES OF NEUROLOGY

Editor:

Roger N. Rosenberg, MD
Department of Neurology
University of Texas Southwestern
Medical Center
5323 Hines Blvd
Dallas, TX 75390-9108

Associate Editors:

Vladimir Hachinski, MD, DSc
London, Ontario

Susan T. Iannaccone, MD
Dallas, Tex

David E. Pleasure, MD
Philadelphia, Pa

E. S. Roach, MD
Dallas, Tex

Assistant Editors:

Christopher G. Goetz, MD
Chicago, Ill

Lawrence S. Honig, MD, PhD
Dallas, Tex

Ira Shoulson, MD
Rochester, NY

Editorial Assistant:

Jenny Kang
Dallas, Tex

Editorial Office

(214) 648-9383
fax: (214) 648-9388
e-mail: archneuro@mednet.swmed.edu

Section Editors:

Neurological Review Editor:
David E. Pleasure, MD
Philadelphia, Pa

*Controversy in Neurology/
Consensus in Neurology Editor:*
Vladimir Hachinski, MD, DSc
London, Ontario

*Basic Science Seminars
in Neurology Editor:*
Hassan M. Fathallah-Shaykh, MD
Dallas, Tex

NeuroTherapeutics Editor:
Ira Shoulson, MD
Rochester, NY

History of Neurology Editor:
Christopher G. Goetz, MD
Chicago, Ill

Neurology and Public Health Editor:
Matthew Menken, MD
Somerset, NJ

Book Review Editor:
Susan T. Iannaccone, MD
Dallas, Tex

Web Editor:
Lawrence S. Honig, MD, PhD
Dallas, Tex

CME Editor:
Matthew Menken, MD
Somerset, NJ

Editorial Board

James I. Ausman, MD, PhD
Chicago, Ill

Louis R. Caplan, MD
Boston, Mass

Steven T. DeKosky, MD
Pittsburgh, Pa

Mahlon R. DeLong, MD
Atlanta, Ga

Hassan M. Fathallah-Shaykh, MD
Dallas, Tex

James A. Ferrendelli, MD
Houston, Tex

John H. Growdon, MD
Boston, Mass

Matthew Menken, MD
Somerset, NJ

Audrey S. Penn, MD
Bethesda, Md

Stanley B. Prusiner, MD
San Francisco, Calif

Bruce R. Ransom, MD, PhD
Seattle, Wash

Thomas R. Swift, MD
Augusta, Ga

Kenneth L. Tyler, MD
Denver, Colo

Paul C. Van Ness, MD
Dallas, Tex

John N. Whitaker, MD
Birmingham, Ala

International Advisory Committee

Johan A. Aarli, MD
Bergen, Norway

Oded Abramsky, MD, PhD
Jerusalem, Israel

Samir F. Atweh, MD
Beirut, Lebanon

Paula Coutinho, MD, PhD
Porto, Portugal

Alexandra Dürr, MD
Paris, France

Bruno Estanol, MD
Mexico City, Mexico

Cesare Fieschi, MD
Rome, Italy

Hans J. Freund, MD
Düsseldorf, Germany

Wang Guo-Xiang, MD
Beijing, China

Sang-Bok Lee, MD, PhD
Seoul, Korea

Colin Masters, MD
Melbourne, Victoria, Australia

Sergio Novis, MD
Rio de Janeiro, Brazil

Michael Piradov, MD
Moscow, Russia

Nipon Pongvarin, MD, FRCP
Bangkok, Thailand

Anthony H. V. Schapira, DSc, MD, FRCP
London, England

Bhim S. Singhal, MD
Bombay, India

Erik Stalberg, MD
Uppsala, Sweden

Eduardo Tolosa, MD
Barcelona, Spain

Shoji Tsuji, MD, PhD
Niigata, Japan

OBSERVATIONS

Very Late-Onset Friedreich Ataxia Despite Large GAA Triplet Repeat Expansions 246
Sanjay I. Bidichandani, MBBS, PhD;
Carlos A. Garcia, MD; Pragna I. Patel, PhD;
Mazen M. Dimachkie, MD

Mechanism in Progressive Lacunar Infarction: A Case Report With Magnetic Resonance Imaging 255
Satoshi Terai, MD; Tomohiko Hori, MD;
Shunji Miake, MD; Kinya Tamaki, MD;
Akiko Saishoji, MD

Cerebral Venous Thrombosis Associated With Epoetin Alfa Therapy 260
Pasquale F. Finelli, MD;
Matthew D. Carley, MD

Tolcapone and Hepatotoxic Effects 263
C. Warren Olanow, MD, FRCPC;
and the Tasmar Advisory Panel

IMAGES IN NEUROLOGY

Weak and Numb Feet in a Man With Knobby Hands 271
Peter W. Kaplan, MBBS, FRCPC;
Douglas A. Kerr, MD, PhD;
Robin A. Conwit, MD

CONTROVERSIES IN NEUROLOGY

New Drugs: Which Should Be Included in the Formulary? Epilepsy: All New Drugs Should Be Included 272
Serge J. C. Pierre-Louis, MD, MPH

Restrictions on the Availability of Antiepileptic Drugs 273
Donna C. Bergen, MD

New Antiepileptic Drugs: Should All Be Made Available? 275
Vladimir Hachinski, MD, DSc

HISTORY OF NEUROLOGY: SEMINAL CITATION

Wilson's Disease 276
Wendy M. Robertson, MD

BOOK REVIEWS

A Compendium of Neuropsychological Tests, 2nd ed 278
Janice Nici, PhD

Memory in Neurodegenerative Disease: Biological, Cognitive, and Clinical Perspectives 279
Doug Johnson-Greene, PhD, ABPP

Movement Disorders in Neurology and Neuropsychiatry, 2nd ed 279
William C. Koller, MD, PhD

Neurology in Tropics 279
Matthew Menken, MD

Case Studies in Neuropsychological Rehabilitation 280
Richard J. Caselli, MD

LETTERS TO THE EDITOR

Solvent Toxicity and Cognition Impairment 282
William E. Morton, MD, DrPH

In Reply 282
Ronald C. Petersen, PhD, MD;
Emre Kokmen, MD

REGULAR DEPARTMENTS

This Month in Archives of Neurology 167

Corrections 240, 281

Calendar 283

ARCHIVES CME 284

Classified Advertising 288

Index to Advertisers 292

Instructions for Authors—
See January 2000 issue, page 145, or visit the Web site at www.archneurol.com.