

Editor: George D. Lundberg, MD
Deputy Editor: M. Therese Southgate, MD
Senior Editors: John D. Archer, MD, Helene M. Cole, MD, Bruce B. Dan, MD
Senior Contributing Editor: Drummond Rennie, MD
Contributing Editors: Charles B. Clayman, MD, Lawrence D. Grouse, MD, PhD, Lester S. King, MD, Harriet S. Meyer, MD, Carlotta M. Rinke, MD
Statistical Editor: Naomi Vaisrub, PhD
Morris Fishbein Fellow: Don Riesenber, MD
Medical News—Editor: Phil Gunby; **Associate Editors:** Kimberly Glasbrenner, Marsha F. Goldsmith, Charles Marwick (Washington, DC), Beverly Merz; **Assistant Editor:** Chris Anne Raymond, PhD
Associate Editor: Roxanne K. Young
Assistant Editors: Charlene Breedlove, Sharon Iverson (Letters to the Editor), Elizabeth Knoll
Editorial Services Manager: Martha Carney
Production Manager: Marlene M. Hinsch
Assistant Production Manager: John R. Sayban
Editorial Processing Manager: Cheryl Iverson
Assistant Editorial Processing Manager: Paula Giltman
Permissions and Graphic Design: Dennis J. Shipley
Production Supervisors: Lori A. Barba (Copy Editing), Thomas J. Handrigan (Illustrations), Elizabeth Petrikenas (Proofreading), John R. Sayban (Advertising), Mary C. Steermann (Editorial), Jo Anne Weiskopf (Layout)
Copy Editing: Vickey Golden (Free-lance Coordinator), Daniel Halibey, Patricia A. Predey, James Zrimsek
Proofreading: Patricia Coyne, Lisette Sabbach, Barbara Wojtowicz
Senior Production Assistants: Karen Branham, Diane Darnell, Jerri Hall-Gortowski, Debra Lucas, Terese Noto, Susan Price, Ellen Yoshihara
Production Assistant: Darlene E. Filipis
Illustrations and Layout: Donna Hagler, Mary Planek-Vanco, Janice Techter, Sandra Williams
Cover Editor: M. Therese Southgate, MD
Editorial Coordinator: Cathy Watkins
Editorial Supervisor: Cassandra Johnson
Editorial Assistants: Mary Cannon, Michele Knutsen, Mary Ann Lilly, Rosemary Navarro, Annette Nunnally, Ethel Pinkston, Theresa Raines, Elsa Rigoni, Diane Theriault
Senior Secretary: Shirley Goins
Indexing: Norman Frankel (Supervisor), Mary Kay Tinerella, Pam Wood

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

JAMA, THE JOURNAL of the American Medical Association (ISSN 0098-7484), is published four issues per month by the American Medical Association, 535 N Dearborn St, Chicago, IL 60610. Phone (312) 645-5000. Cable address "Medic" Chicago.

SUBSCRIPTION RATES—The subscription rate per year for members of the AMA is \$2 included in the annual membership dues. The subscription rate per year for nonmembers is \$52 for one year, \$90 for two years in the United States and US possessions; in all other countries, one year, \$68; two years, \$110 (add \$30 surcharge to each one-year subscription and \$60 surcharge to each two-year subscription for air delivery to the United Kingdom and Europe only). Rates to medical students and residents, \$26 for one year, \$45 for two years in the United States and US possessions. Rates for subscriptions for delivery to Australia, Bangladesh, India, Japan, Nepal, New Zealand, South Korea, and Sri Lanka are available through respective exclusive agents. Address all subscription communications to American Medical Association, Circulation and Fulfillment Division, 535 N Dearborn St, Chicago, IL 60610. Phone: (312) 280-7154.

CHANGE OF ADDRESS—POSTMASTER, send all address changes to Caryl L. Wertheimer, Director of Fulfillment, 535 N Dearborn St, Chicago, IL 60610. Notification of address change must be made at least six weeks in advance; include both old and new addresses, a recent mailing label, and your new zip code.

Second-class postage paid at Chicago and additional mailing office.

JAMA[®] Registered in the US Patent and Trademark Office.

Copyright © 1986 by the American Medical Association



THE COVER

Édouard Manet, *Christ Mocked* 1395
M. T. Southgate, MD, Chicago

MEDICAL NEWS & PERSPECTIVES 1397

Decades After Polio Epidemics, Survivors Report New Symptoms . . . Polio Survivors Spurred Rehabilitation Advances

FROM ADAMHA 1406

LEADS FROM THE MMWR 1415

INSTRUCTIONS FOR AUTHORS 1425

AMA INSIGHTS 1431

REFERENCE DIRECTORIES

US Meetings, March 7; Foreign Meetings, Jan 10; Organizations of Medical Interest, Jan 24/31; State Associations and Exams and Licensure, Jan 17; AMA Officials, Oct 4

LETTERS 1435

Plus ça Change, Plus C'est les Mêmes HMOs F. P. Rescigno, MD, Glen Ridge, NJ . . .
Diagnosis-Related Groups and Severity of Illness R. E. Thompson, MD, Elmhurst, Ill, R. L. Mullin, MD, New Haven, Conn . . .
Thrombotic Thrombocytopenic Purpura With Colitis in an Elderly Woman A. E. Lichtin, MD, L. E. Silberstein, MD, A. D. Schreiber, MD, Philadelphia . . .
Which Tablets? Why Horns? A. E. Goldminz, MD, Carlsbad, NM, W. McDaniel, MD, Lexington, Ky . . .
Re: Predictive Value of a Positive Test C. Fung, MD, J. Lo, MD, Chicago, G. C. Critchfield, MD, Detroit, D. P. Connelly, MD, PhD, Minneapolis, P. R. Billings, MD, PhD, Boston, M. Bernstein, MD, Seattle . . .
Caffeine and Benign Breast Disease M. F. Jacobson, PhD, B. F. Liebman, MS, Washington, DC, F. Lubin, E. Ron, Y. Wax, Tel-Hashomer, Israel . . .
Anisocoria From Jimsonweed D. L. Savitt, MD, J. R. Roberts, MD, E. G. Slegel, PharmD, Cincinnati . . .
Recurrent Syncopal Episodes E. Sfedu, MD, Philadelphia . . .
Cowboys Ain't Milkboys J. A. Churchill, MD, Johnson City, Tenn, R. E. Niederhofer, Huron, Ohio

ORIGINAL CONTRIBUTIONS

Diagnostic and Prognostic Significance of the IgM Antibody to the Hepatitis Delta Virus 1443

P. Farci, MD, Cagliari, Italy; J. L. Gerin, PhD, Rockville, Md; M. Aragona, MD, Turin, Italy; I. Lindsey, MD, London; O. Crivelli, PhD, Turin, Italy; A. Balestrieri, MD, Cagliari, Italy; A. Smedile, MD, Rockville, Md; H. C. Thomas, MD, London; M. Rizzetto, MD, Turin, Italy

Self-induced Vomiting and Laxative and Diuretic Use Among Teenagers 1447

J. D. Killen, PhD; C. B. Taylor, MD; M. J. Telch, PhD; K. E. Saylor, ScM; D. J. Maron, MD; T. N. Robinson, Stanford, Calif

Feedback Reduces Test Use in a Health Maintenance Organization 1450

D. M. Berwick, MD, MPP, K. L. Cottin, MPH, Boston

SPECIAL COMMUNICATION

On the Physical Death of Jesus Christ 1455

W. D. Edwards, MD; W. J. Gabel, MDiv; F. E. Hosmer, MS, AML, Rochester, Minn

TOWARD OPTIMAL LABORATORY USE

Education and the Physician's Office Laboratory 1464

P. M. Fischer, MD, Augusta, Ga; L. A. Addison, MLT(ASCP), Chapel Hill, NC; E. W. Koneman, MD, Chicago; J. Crowley, MS, MT(ASCP), Augusta, Ga

BRIEF REPORTS

The Effect of Antacids on the Absorption of Simultaneously Ingested Iron 1468
 M. A. O'Neil-Cutting, SM, W. H. Crosby, MD, Washington, DC

Miniature Battery Foreign Bodies in Auditory and Nasal Cavities 1470
 K. T. Kavanagh, MD, Memphis, T. Litovitz, MD, Washington, DC

LANDMARK ARTICLE

The Use of a New Apparatus for the Prolonged Administration of Artificial Respiration 1473
 P. Drinker, CHE, C. F. McKhann, MD, Boston

LANDMARK PERSPECTIVE

The Iron Lung 1476
 P. A. Drinker, PhD, Boston, C. F. McKhann III, MD, New Haven, Conn

EDITORIALS

Medical News: New Perspectives 1481
 P. Gunby, Chicago

Medical News: Opportunities and Dangers 1481
 A. Soffer, MD, Park Ridge, Ill

A PIECE OF MY MIND

The State of the Art 1488
 A. R. Feinstein, MD, New Haven, Conn

DOMESTIC ABSTRACTS 1490

QUESTIONS AND ANSWERS 1500

Adverse Reactions to Diphtheria-Tetanus-Pertussis Immunization M. T. Stein, MD, San Diego . . . **Penicillin Desensitization** P. P. VanArsdel, Jr, MD, Seattle . . . **Branchial Cleft Anomalies** A. Nahum, MD, San Diego, G. B. Healy, MD, Boston . . . **Electroconvulsive Therapy for Patient With Cardiac Pacemaker** C. A. Pearlman, MD, Boston

BOOKS 1505

The Inner World of American Psychiatry, 1890-1940 (Grob) Reviewed by G. H. Pollock, MD, PhD, Chicago . . . **Textbook of Anaesthesia** (Smith, Aitkenhead, eds) Reviewed by S. I. Samuels, MD, Stanford, Calif . . . **Emergency Psychiatry** (Bassuk, Birk, eds) Reviewed by E. P. Benedek, MD, Ann Arbor, Mich . . . **The Surgical Neonate** (Filston, Izant, Jr) Reviewed by R. J. Touloukian, MD, New Haven, Conn . . . **The Essentials of Forensic Medicine** (Polson, Gee, Knight) Reviewed by M. G. Bohrod, MD, Rochester, NY . . . **New Vaccine Development** (Committee on Issues and Priorities for New Vaccine Development) Reviewed by A. M. Prince, MD, New York . . . **Office Surgery for Family Physicians** (Pories, Thomas) Reviewed by D. Breitwieser, MD, Indianapolis . . . **Scientific Basis of Obstetrics and Gynaecology** (Macdonald, ed) Reviewed by A. G. Charles, MD, Chicago . . . **Illustrated Encyclopedia of Dermatology** (Fry, Wojnarowska, Shihrad) Reviewed by P. C. Anderson, MD, Columbia, Mo . . . **Books Received**

OBITUARIES 1513

CLASSIFIED ADVERTISING 1515

CME Corner 1528

INDEX TO ADVERTISERS 1528

AMA Officers

President: Harrison L. Rogers, Jr, MD*; **President-Elect:** John J. Coury, Jr, MD*; **Immediate Past President:** Joseph F. Boyle, MD; **Secretary-Treasurer:** George L. Collins, Jr, MD*; **Speaker, House of Delegates:** James E. Davis, MD; **Vice-Speaker, House of Delegates:** John L. Clowe, MD

AMA Trustees

David J. Brailer (student); Lonnie R. Bristow, MD; Rufus K. Broadaway, MD; George L. Collins, Jr, MD* (Secretary); Ronald M. Davis, MD (resident); John H. Dawson, MD; William S. Hotchkiss, MD* (Chairman); Robert E. McAfee, MD; Alan R. Nelson, MD* (Vice-Chairman); Joseph T. Painter, MD*; John J. Ring, MD*; Raymond Scalettar, MD; Jerald R. Schenken, MD; John Tupper, MD

*Executive Committee

EDITORIAL BOARD

- Kenneth A. Arndt, MD**
Boston
- Byron J. Bailey, MD**
Galveston, Tex
- Arthur E. Baue, MD**
St Louis
- Donald J. Dalessio, MD**
La Jolla, Calif
- Cecilia M. Fenoglio, MD**
Albuquerque
- William H. Foegen, MD**
Atlanta
- Renee C. Fox, PhD**
Philadelphia
- Daniel X. Freedman, MD**
Los Angeles
- Vincent A. Fulginiti, MD**
Tucson
- Morton F. Goldberg, MD**
Chicago
- Marilyn Heins, MD**
Tucson
- Edward C. Hill, MD**
San Francisco
- James F. Holland, MD**
New York
- King K. Holmes, MD, PhD**
Seattle
- Harold G. Jacobson, MD**
Bronx, NY
- Robert J. Joynt, MD**
Rochester, NY
- Carol Kasper, MD**
Los Angeles
- Richard L. Landau, MD**
Chicago
- Daniel J. McCarty, MD**
Milwaukee
- William W. McLendon, MD**
Chapel Hill, NC
- Arno G. Motulsky, MD**
Seattle
- Robert E. Rakel, MD**
Houston
- Domeena C. Renshaw, MD**
Chicago
- Martha M. Sarasua, MD, PhD**
Charleston, SC
- Alfred Soffer, MD**
Park Ridge, Ill
- Robert M. Veatch, PhD**
Washington, DC

Executive Vice-President: James H. Sammons, MD
Senior Deputy Executive Vice-President: James S. Todd, MD

Assistant Executive Vice-President for Business: Richard A. Noffke

Vice-President, Scientific Information: George D. Lundberg, MD

Vice-President, Publishing and Marketing: John T. Baker

Director, Publication Production and Printing Division: Norman D. Richey

General Sales Manager; Director, Advertising Sales and Promotion Services Division: D. Joseph Dennehy

Director, Circulation-Fulfillment Division: Lee A. Parent

Director, Promotion and Western Sales: Thomas J. Carroll

Director, Advertising Services: Raymond Christian

ADVERTISING OFFICES: Eastern: 600 Third Ave, Suite 700, New York, NY 10016 (Manager: Robert C. Corcoran [212-867-6640]; Representatives: Bill Tice, Cliff Vanderhoof); Midwest/Farwest: 535 N Dearborn St, Chicago, IL 60610 (Manager: Thomas J. Carroll [312-280-7182]; Representative: Daniel T. Mjolsness); Classified Advertising: Delores Boudent (312-280-7190)

ADVERTISING PRINCIPLES—Advertisements in this issue have been reviewed to comply with the principles governing advertising in AMA 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.