

VOLUME 12, NUMBER 6 • NOVEMBER–DECEMBER 1999

The Journal
of the
American Board
of
Family Practice



Management of Hepatitis C

Adolescent Risk Behavior

Outcomes of Congestive Heart Failure

Teaching Information Mastery

Assessment of Cost-Effective Analyses



The Journal of the American Board of Family Practice

Editor

John P. Geyman, MD
Seattle, WA

Executive Editor

Paul R. Young, MD
Lexington, KY

Associate Editors

Alfred O. Berg, MD
Seattle, WA

Paul Brucker, MD
Philadelphia, PA
G. Gayle Stephens, MD
Birmingham, AL

Editorial Board

Alvah R. Cass, MD
Galveston, TX
Larry Culpepper, MD
Pawtucket, RI
Paul S. Frame, MD
Cohocton, NY
Larry Green, MD
Denver, CO
James C. Puffer, MD
Los Angeles, CA
Howard Rabinowitz, MD
Philadelphia, PA
Janet Realini, MD
San Antonio, TX
David C. Slawson, MD
Charlottesville, VA
Eric M. Wall, MD
Portland, OR

Editorial

Advisory Board

John Beck, MD
Los Angeles, CA
Arthur Donovan, MD
Los Angeles, CA
Robert Fletcher, MD
Philadelphia, PA
Shervert H. Frazier, MD
Belmont, MA
Norman Gant, MD
Dallas, TX
Denis Pereira Gray, MD
Exeter, England
A. Dale Gullede, MD
Boise, ID
Thomas K. Oliver, Jr., MD
Chapel Hill, NC
Edmund Pellegrino, MD
Washington, DC
Donald I. Rice, MD
Toronto, Canada
Jerome F. Wiot, MD
Cincinnati, OH

VOLUME 12, NUMBER 6

NOVEMBER–DECEMBER 1999

CONTENTS

ORIGINAL ARTICLES

- Current Care of Hepatitis C Positive Patients by Primary Care Physicians in an Integrated Delivery System **427**
David E. Nicklin, Christopher Schultz, Colleen M. Brensinger, and James P. Wilson
- Adolescent Risk Behavior and the Influence of Parents and Education **436**
Brent V. Nelson, Troy H. Patience, and David C. MacDonald
- Teaching Information Mastery: Creating Informed Consumers of Medical Information **444**
David C. Slawson and Allen F. Shaughnessy

CLINICAL REVIEW

- Meconium Aspiration Syndrome: Pathophysiology and Prevention **450**
Mary Celeste Klingner and Jerry Kruse

MEDICAL PRACTICE

- Congestive Heart Failure Clinical Outcomes Study in a Private Community Medical Group **467**
Louis A. Civitarese and Nicholas DeGregorio
- Balanitis Xerotica Obliterans and its Differential Diagnosis **473**
Isaac M. Neuhaus and Robert A. Skidmore

EVIDENCE-BASED CLINICAL PRACTICE

- Weighing the Economic Evidence: Guidelines for Critical Assessment of Cost-Effectiveness Analyses **477**
Scott D. Ramsey and Sean D. Sullivan

BRIEF REPORTS

- Warfarin and Ciprofloxacin Interaction: Case Report and Controversy **486**
Debbie C. Byrd, Samuel E. Gaskins, Amy M. Parrish, and Lucius B. Freeman

The Journal of the American Board of Family Practice



VOLUME 12, NUMBER 6

NOVEMBER-DECEMBER 1999

CONTENTS

Continued

- Diabetes Insipidus: An Unusual Cause of Urinary Frequency During Pregnancy **489**
Darryl Potyk and Danielle Towne
- Tuberculous Meningitis: The Successful Use of Delayed Corticosteroids in Treatment and Polymerase Chain Reaction (PCR) in Diagnosis **492**
Patricia Lopez-Po and Suresh J. Antony

REFLECTIONS IN FAMILY PRACTICE

- Just Another House Call **495**
Glenn D. Miller

EDITORIAL

- Role of the Primary Care Physician in the Diagnosis and Management of Hepatitis C Virus Infection **497**
David H. Spach

- BOARD NEWS** **501**

- CORRESPONDENCE** **504**

- BOOK REVIEWS** **506**

- VOLUME 12 SUBJECT INDEX** **512**

- VOLUME 12 AUTHOR INDEX** **520**

- CLASSIFIED ADVERTISING**

JABFP (Journal of the American Board of Family Practice) (ISSN 0893-8652) is published six times a year in January, March, May, July, September, and November by the American Board of Family Practice, 2228 Young Drive, Lexington, KY 40505 with printing services provided by Cadmus Journal Services, 940 Elkridge Landing Road, Linthicum, MD 21090-2908. Annual subscription rates: Institutions: \$60.00; Physicians: \$35.00; Residents/Students: \$20.00. For more information please refer to the Information for Readers page. Second-class postage paid at Lexington, KY, and additional mailing offices. POSTMASTER: Send address changes to ABFP, 2228 Young Drive, Lexington, KY 40505.

© Copyright 1999 by the American Board of Family Practice. All rights reserved. The *Journal* does not hold itself responsible for statements made by any contributor. Statements or opinions expressed in the *Journal* reflect the views of the author(s) and not the official policy of the American Board of Family Practice.

INFORMATION FOR READERS

The Journal of the American Board of Family Practice

Official Publication of the American Board of Family Practice

EDITORS

John P. Geyman, MD, *Editor*
Paul R. Young, MD, *Executive Editor*
Alfred O. Berg, MD, *Associate Editor*
Paul Brucker, MD, *Associate Editor*
G. Gayle Stephens, MD, *Associate Editor*

EDITORIAL OFFICES

The Journal of the American Board of Family Practice

Department of Family Medicine
Box 354696

University of Washington
Seattle, WA 98195

Phone: (206) 685-3993

Fax: (206) 543-8911

John P. Geyman, MD, *Editor*

M. Claire Zimmerman, *Assistant Editor*

Virginia M. Gessner,

Senior Editorial Assistant

PUBLISHING OFFICES

American Board of Family Practice

2228 Young Drive

Lexington, KY 40505

Phone: (606) 269-5626

Fax: (606) 335-7501

Paul R. Young, MD,
Executive Editor

ADVERTISING OFFICES

The Walchli Tauber Group, Inc

112 W. Pennsylvania Avenue, Suite 201

Bel Air, MD 21014

Gary A. Walchli

Phone: (410) 420-0700

Fax: (410) 420-0711

E-mail: gary.walchli@gte.net

SUBSCRIPTION INFORMATION AND SERVICES

The Journal of the American Board of Family Practice is supplied free of charge to Diplomates and Residents of the American Board of Family Practice. For paid subscription information please contact:

John Breithaupt
JABFP Subscriptions
Cadmus Journal Services
940 Elkridge Landing Road
Linthicum, MD 21090-2908

SUBSCRIPTION RATES

	Domestic	International
Institutions	\$60.00	\$65.00
Physicians	\$35.00	\$45.00
Residents/Students	\$20.00	\$45.00

OTHER SUBSCRIPTION INFORMATION

Diplomates should make address changes on the form accompanying this issue and forward it to the Lexington, Ky, address.

All other subscribers should send their change of address to John Breithaupt at the Cadmus Journal Services address. Changes must be received at least 6 weeks in advance of the intended move. Please include the new address, old address, and expected date of change.

ISSUES NOT RECEIVED

Missing issues will be replaced for up to 3 months from the issue date without charge. Claims beyond the 3-month limit must be prepaid at the back-issue rates. Claims should be sent to the Subscription Department address on this page.

REPRINTS

Individual copies of articles are available from the authors upon request. If you wish to order bulk reprints (minimum orders of 100) please contact Cadmus Journal Services Reprints, 500 Cadmus Lane, Easton, MD 21601-0969. Phone (800) 257-7792, or fax (410) 822-0438.

COPYRIGHT

Material appearing in *The Journal of the American Board of Family Practice* is covered by copyright. Single copies for personal or internal use are allowed at no charge. Nonprofit institutions may make copies provided they obtain prior consent from *The Journal of the American Board of Family Practice*, Rights and Permissions Department, 2228 Young Drive, Lexington, KY 40505. Phone (606) 269-5626, or fax (606) 335-7501.

INDEXING

The Journal of the American Board of Family Practice is indexed in *Index Medicus*.

PRINTING SERVICES

The Journal of the American Board of Family Practice is set into type, printed, and distributed by Cadmus Journal Services, 940 Elkridge Landing Road, Linthicum, MD 21090-2908.

INFORMATION FOR AUTHORS

The Journal of the American Board of Family Practice welcomes for editorial review manuscripts that contribute to family practice as a clinical scientific discipline. High priority is given to reports of clinically relevant studies that have practical implications for improved patient care. Manuscripts are considered in relation to the extent to which they represent original work, their significance to the advancement of family medicine, and their interest to the practicing family physician. Some papers that are accepted by the *Journal* will be selected for an accompanying guest editorial or concurrent commentary by other invited authors addressing issues raised by the papers. The *Journal* publishes the following features:

Original Articles. Reports of original research, usually dealing with a clinical, health services, or other clinically relevant study.

Medical Practice. Scholarly articles that relate directly to clinical topics useful in everyday family practice, whether dealing with diagnostic or therapeutic roles of the family physician or reporting studies of what family physicians do in practice.

Clinical Review. In-depth reviews of specific clinical problems, disease entities, or treatment modalities; comprehensive and critical analysis of the literature is required (usual maximum length 5000 words).

Evidence-Based Clinical Practice. Articles addressing various evidence-based approaches to the diagnosis and management of common clinical problems in primary care. Papers are also welcome that report studies of cost-and-outcome assessment relevant to primary care practice.

Clinical Guidelines and Primary Care. Summaries of major clinical guidelines proposed by various specialty, governmental, or health care organizations, with critical commentary from a primary care perspective.

Family Practice and the Health Care System. Articles reporting studies and scholarly commentary on changing trends and patterns of care in family practice, primary care, and the health care system.

Health Policy. Articles relating to specific health policy issues from a national perspective, usually invited from individuals with extensive health policy experience.

Special Articles. Articles in other areas that may relate to the role of the family physician, education for family practice, or other subjects important to family practice as a clinical specialty.

Brief Reports. Short reports of pilot studies or case reports with a teaching point of clinical relevance (usual length 1000–1500 words).

Family Practice—World Perspective. Papers reporting developments related to the practice or education of family physicians in various countries around the world (usual length 1200–1800 words).

Reflections in Family Practice. Papers in narrative or essay format that illuminate qualitative aspects of family practice, including such areas as ethical issues, the physician-patient relationship, or the diverse roles of the family physician.

Editorial. Focused opinion or commentary that bears on an issue relevant to the field. May or may not accompany an original article in the same issue (usual length 1000–1500 words).

Letters to the Editor. Observations, opinion, or comment on topics under discussion in the journal, usually not to exceed 500 words.

Book Reviews. Books for review and book reviews should be sent to John P. Geyman, MD, Editor, *The Journal of the American Board of Family Practice*, Department of Family Medicine, School of Medicine, Box 354696, University of Washington, Seattle, WA 98195.

The following guidelines are in accordance with the "Uniform Requirements for Manuscripts Submitted to Biomedical Journals." The current edition was published in *N Engl J Med* 1997;336:309–15.

MANUSCRIPT SUBMISSION

Address all submissions to John P. Geyman, MD, Editor, *Journal of the American Board of Family Practice*, Department of Family Medicine, School of Medicine, Box 354696, University of Washington, Seattle, WA 98195.

Manuscripts containing original material are accepted for consideration with the understanding that neither the article nor any part of its essential substance, tables, or figures has been or will be published or submitted for publication elsewhere before appearing in the *Journal*. This restriction does not apply to abstracts

or press reports published in connection with scientific meetings. Copies of any possible duplicative manuscripts should be submitted to the editor along with the manuscript that is to be considered by the *Journal*. The *Journal* strongly discourages the submission of more than one article dealing with related aspects of the same study. In almost all cases, a single study is best reported in a single paper.

Submit an original and 3 copies of the complete manuscript, including text pages, legends, tables, references, and glossy prints of figures. The manuscript should be on 8 1/2 × 11-inch paper, double-spaced throughout, with 1-inch margins. Include a copy of the manuscript on a computer disk, and indicate which software program is used.

A covering letter should identify the person (with the address and telephone number) responsible for negotiations concerning the manuscript; the letter should make it clear that the final manuscript has been seen and approved by all authors. If authors acknowledge by name persons who provided important technical, advisory, or reviewer contributions, the corresponding author should sign the following statement: "I have obtained written permission from all persons named in the acknowledgment."

The *Journal* expects authors to take public responsibility for their manuscripts, including conception and design of the work, data analysis, writing, and review of the paper. Authors are expected to stand behind the validity of their data and, if asked by the editor, to submit the actual data for editorial review with the manuscript. In most instances authorship should be limited to 8 authors or fewer, all meeting the above criteria for authorship. Exceptions to these guidelines, especially those involving multisite collaborative research projects, should be discussed on a case-by-case basis with the editor.

The *Journal* also expects authors to disclose any commercial associations that might pose a conflict of interest in connection with the submitted article. Consultancies, stock ownership or other equity interests, patent-licensing arrangements, and other kinds of associations that might involve conflict of interest should be disclosed to the editor in a covering letter at the time of submission. Such information will be held in confidence while the paper is under review and will not influence the editorial decision. If the manuscript is accepted, the editor will discuss with

the authors how best to disclose the relevant information. Questions about this policy should be directed to the editor.

MANUSCRIPTS

Titles and Authors' Names

With the manuscript, provide a page giving the title of the paper; a running foot of fewer than 40 letter spaces; the name(s) of the author(s), including first name(s) and academic degree(s); the name of the department and institution in which the work was done; and the name and address of the author to whom reprint requests should be addressed. All funding sources supporting the work should be routinely acknowledged on the title page, as should all institutional or corporate affiliations of the authors. Two to four key words should be submitted with the manuscripts to be used for purposes of classification by subject. Use terms from the Medical Subject Headings from *Index Medicus* when possible.

Abstracts

Use another page to provide an abstract of not more than 200 words. This abstract should be factual, not descriptive, with its content appropriate to the type of paper. For original articles reporting results of studies, a four-paragraph format should be used labeled Background, Methods, Results, and Conclusions. These should briefly describe, respectively, the object of the study, the methods used, the major results, and the author(s) conclusions. Abstracts are not necessary for Brief Reports, Family Practice World Perspective, and Reflections papers.

Abbreviations

Except for units of measurement, abbreviations are discouraged. The first time an abbreviation appears, it should be preceded by the words for which it stands.

Drug Names

Generic names should, in general, be used. If an author so desires, brand names may be inserted in parentheses.

Inclusive Language

Sex bias should be avoided and gender-inclusive language used whenever possible.

References

References must be typed in double spacing and numbered consecutively as they are cited. References first cited in tables or figure legends must be numbered so that they will be in sequence with references cited in the text. The style of references is that of the *Index Medicus*. List all authors when there are 6 or fewer; when there are 7 or more, list the first

3, then "et al." Sample references are as follows:

Standard Journal Article

Morrow JD, Margolies GR, Rowland J, Roberts LJ 2nd. Evidence that histamine is the causative toxin of scombroid-fish poisoning. *N Engl J Med* 1991;324:716-20.

(Note that month and issue number are omitted when a journal has continuous pagination throughout a volume.)

Organization as Author

Clinical Experience Network (CEN). A large-scale, office-based study evaluates the use of a new class of nonsedating antihistamines. A report from CEN. *J Am Board Fam Pract* 1990;3:241-58.

Book

Rakel RE. Textbook of family practice. 4th ed. Philadelphia: WB Saunders, 1990.

Chapter in Book

Haynes RC Jr. Agents affecting calcification: calcium, parathyroid hormone, calcitonin, vitamin D, and other compounds. In: Gilman AG, Rall TW, Nies AS, Taylor P, editors. Goodman and Gilman's the pharmacological basis of therapeutics. 8th ed. New York: Pergamon Press, 1990.

Government Agency

Schwartz JL. Review and evaluation of smoking cessation methods: the United States and Canada, 1978-1985. Bethesda, MD: Department of Health and Human Services, 1987. (NIH publication no. 87-2940.)

Personal Communications

Numbered references to personal communications, unpublished data, and manuscripts either "in preparation" or "submitted for publication" are unacceptable (see "Permissions"). If essential, such material may be incorporated in the appropriate place in the text.

Tables

Type tables in double spacing on separate sheets, and provide a title for each. For footnotes, use the following symbols, in this sequence: *, †, ‡, §, ¶, **, ††, etc. Excessive tabular data are discouraged.

Illustrations

Figures should be professionally designed. Glossy, black-and-white photographs are requested. Symbols, lettering, and numbering should be clear, and these elements should be large enough to remain legible after the figure has been reduced to fit the width of a single column. The back of each figure should include the sequence number, the name of the author, and the proper orientation (eg, "top"), Do

not mount the figure on cardboard. Photomicrographs should be cropped to a width of 8 cm; and electron photomicrographs should have internal scale markers.

If you are preparing digital illustrations and want assistance and detailed instructions on how to prepare your artwork, please visit the Cadmus Journal Service Web site at cjs.cadmus.com/da/instructions.

If photographs of patients are used, either the subjects should not be identifiable or their pictures must be accompanied by written permission to use the figure. Permissions forms are available from the editor.

Legends for illustrations should be type-written (double-spaced) on a separate sheet and should not appear on the illustrations.

Color illustrations are used from time to time. Send both transparencies and prints for this purpose.

Permissions

Every effort (short of changing the patient data) should be made by the authors to protect the anonymity of patients (and relatives) in any published work. If identification is unavoidable, informed consent should be obtained and attached with the submitted letter; in the case of minors or incompetent patients, consent should be obtained from relatives or guardians.

Materials taken from other sources must be accompanied by a written statement from both author and publisher giving permission to the *Journal* for reproduction. Obtain permission in writing from at least one author of papers still in press, of unpublished data, and of personal communications.

REVIEW AND ACTION

Manuscripts are examined by the editorial staff and are usually sent to outside reviewers. Authors will remain anonymous to outside reviewers and vice versa. External statistical review will be accomplished where appropriate. Every effort will be made to complete the review process as expeditiously as possible.

Copyright Transfer Forms

Transfer of copyright to the *Journal* is requested upon acceptance of the material for publication. Copyright transfer is required of all materials to be published in the *Journal* including Letters to the Editor and Book Reviews.

Reprints

Authors will receive reprint information and rates when they are sent their page proofs. Reprints ordered at that time will be shipped about 2 weeks after the publication date.

Subspecialty Certification in Pain Management

The American Board of Physical Medicine and Rehabilitation (ABPMR) in conjunction with the American Boards of Anesthesiology (ABA) and Psychiatry and Neurology (ABPN) has announced plans to offer a Subspecialty Examination for Certification in Pain Management. This examination will be administered on September 9, 2000 by ABA at various locations. Diplomates of other Member Boards of the American Board of Medical Specialties (ABMS), which includes the American Board of Family Practice, may apply for admission to this process.

Pain management is defined as the medical discipline concerned with the diagnosis and treatment of the entire range of painful disorders. Because of the vast scope of the field, Pain Management is a multidisciplinary subspecialty. The expertise of several disciplines is brought together in an effort to provide the maximum benefit to each patient. Although the care of patients is heavily influenced by the primary specialty of physicians who subspecialize in Pain Management, each member of the pain treatment team understands the anatomical and physiological basis of pain perception, the psychological factors that modify the pain experience, and the basic principles of Pain Management.

Qualifications for Certification

All applicants for subspecialty certification in Pain Management must be current Diplomates in good standing of a member Board of the ABMS. Determination of acceptability for examination will be made according to the rules and regulations of the ABPMR. Additional requirements include:

1. All candidates for subspecialization in Pain Management must
 - provide documentation of a medical degree by submitting a copy of a diploma or certificate;
 - provide documentation of current certification by an ABMS Member Board;
 - provide a notarized copy of current, valid and unrestricted license to practice medicine or osteopathy in a United States licensing jurisdiction, Puerto Rico, or Canada;
 - fulfill the education requirement for subspecialization in Pain Management; and
 - satisfy the Pain Management examination requirement for Pain Management subspecialization.
2. The education requirement in Pain Management can be fulfilled by satisfying temporary criteria for the initial five-year period of Pain Management subspecialty certification.

In addition to general certification by an ABMS Member Board, the temporary criteria are:

- satisfactory completion of residency training required for general certification by an ABMS Member Board prior to July 1, 1998; *AND*
- satisfactory completion of 12 months (one year) of formal training in Pain Management acceptable for subspecialization in Pain Management, in addition to general certification by an ABMS Member Board; *OR*
- completion of the equivalent of 24 months (two years) of full-time practice in Pain Management acceptable for subspecialization. Credit will be granted only for Pain Management practice that occurs during the eight years immediately preceding the deadline for receipt of application to take the examination; *OR*
- exceptions to these temporary requirements that could be considered equivalent combinations of training and practice will be considered on an individual basis for subspecialization in Pain Management.

All physicians who apply for subspecialization in Pain Management after the 2003 examination will be required to complete one year of training in an ACGME-accredited Pain Management program.

Diplomates of the American Board of Family Practice interested in subspecialty certification in Pain Management should contact **The American Board of Physical Medicine and Rehabilitation, 21 First Street, SW, Suite 674, Rochester, MN 55902-3092, Phone 507-282-1776, Fax: 507-282-9242.** Applications will be available from ABPMR January 1, 2000 with a return deadline of February 15, 2000.