



TABLE OF CONTENTS

FROM THE EDITOR

Handheld computers are fun, sometimes even useful 819

"Be not the first by whom the new are tried,
Nor yet the last to lay the old aside."

J.D. CLOUGH

1-MINUTE CONSULT



Brief answers to specific clinical questions

Who should receive hepatitis A vaccine? 825

Vaccination is recommended for overseas travelers, children, older adults, transplant recipients, patients with chronic liver disease, and others at risk.

S.D. MAWHORTER

THE CLINICAL PICTURE

A 67-year-old woman with sudden onset of chest pain and dyspnea 828

Questions and answers on the visible signs of diseases.

D.H. LEWIS, L.A. CARDON, B.P. GRIFFIN, AND W.A. JABER

MEDICAL GRAND ROUNDS

Elusive syndromes: Treating the biologic basis of fibromyalgia and related syndromes 830

Fibromyalgia may have a stronger physiologic basis than previously thought, and its symptoms can be alleviated.

D.J. CLAUW



PATIENT
INFORMATION

Living with fibromyalgia 837

REVIEW

Information at hand: Using handheld computers in medicine 840

If you are not using a handheld computer in your practice yet, chances are you soon will.

P.J. EMBI

CONTINUED ON PAGE 822

■ The *Cleveland Clinic Journal of Medicine* is peer-reviewed and indexed in *Index Medicus*.

DEDICATED TO LIFELONG LEARNING

CLEVELAND CLINIC JOURNAL OF MEDICINE



JOHN D. CLOUGH, MD *Editor-in-Chief*
BRIAN F. MANDELL, MD, PHD *Deputy Editor*
LINDA K. HENGSTLER *Editor and Publisher*
PHILLIP E. CANUTO *Executive Editor*
RAY BORAZANIAN *Managing Editor*
DAVID A. HUDDLESTON *Manuscript Editor*
AMY SLUGG MOORE *Patient Education Editor*
BRUCE M. MARICH *Production Manager*
JOHN E. PRESSELLO *Art Director*
ROBERT J. DEMAREST *Medical Art Director*
JOSEPH A. PANGRACE *Medical Illustrator*
DAVID R. SCHUMICK *Medical Illustrator*
ERMA RICHARDSON *Department Coordinator*
IRIS OTERO *Editorial Assistant*
AUDRA HASKINS *Billing/Accounting/Reprints*

EDITORIAL ADVISORY BOARD

MUZAFFAR AHMAD, MD
WILMA FOWLER BERGFELD, MD
EMMANUEL L. BRAVO, MD
RAY W. GIFFORD, JR, MD
WILLIAM R. HART, MD
ERIC A. KLEIN, MD
FLOYD D. LOOP, MD
DOUGLAS S. MOODIE, MD
RICHARD H. NODAR, PHD
WILLIAM L. PROUDFIT, MD
WILLIAM C. SHELDON, MD
ERIC J. TOPOL, MD
HERBERT P. WIEDEMANN, MD

ASSOCIATE EDITORS

ALEJANDRO C. ARROLIGA, MD
AMJAD ALMAHAMEED, MD
DAVID BRONSON, MD
BEN H. BROUHARD, MD
WILLIAM D. CAREY, MD
WILLIAM A. CHILCOTE, MD
BRIAN A. CLARK, PHD, MD
BRIAN G. DONLEY, MD
GARY FRANCIS, MD
KATHLEEN FRANCO-BRONSON, MD
STEVEN M. GORDON, MD
BRIAN GRIFFIN, MD
GARY HOFFMAN, MD
BYRON J. HOOGWERF, MD
SYEDA R. INAMDAR, MD

MANI S. KAVURU, MD
MANDY C. LEONARD, PHARM
ANGELO A. LICATA, MD, PHD
DAVID L. LONGWORTH, MD
STEPHEN MAHONEY, MD
MAURIE MARKMAN, MD
ATUL C. MEHTA, MD
NEIL B. MEHTA, MD
FRANKLIN A. MICHOTA, MD
STEVEN NISSEN, MD
ROBERT M. PALMER, MD
NORMAN B. RATLIFF, MD
S. SETHU K. REDDY, MD
MARK ROTH, MD
DOUGLAS SEIDNER, MD
CATHY A. SILA, MD
HOLLY L. THACKER, MD
JAMES THOMAS, MD
DONALD G. VIDT, MD
WILLIAM S. WILKE, MD
MARC WILLIAMS, MD
JAMES B. YOUNG, MD
ZOBAIR YOUNOSSI, MD

CLEVELAND CLINIC FOUNDATION DIVISION OF EDUCATION

ANDREW J. FISHELEDER, MD
Chairman
PHILLIP R. GARD
Administrator

The *Cleveland Clinic Journal of Medicine* (ISSN 0891-1150) is published 12 times yearly by The Cleveland Clinic Foundation.

STATEMENTS AND OPINIONS expressed in the *Cleveland Clinic Journal of Medicine* are those of the authors and not necessarily of The Cleveland Clinic Foundation or its Board of Trustees.

AUTHOR DISCLOSURES: Current guidelines state that participants in CME activities should be made aware of any affiliation or financial interest that may affect an author's article as well as any discussion of off-label drug therapies. All authors, except those indicated with an asterisk and a footnote with the article, have disclosed that they do not have a conflict of interest or will not discuss off-label therapies.

SUBSCRIPTION RATES: U.S. and possessions: personal \$90; institutional \$113; single copy/back issue \$16. Foreign: \$113; single copy/back issue \$16. Institutional (multiple-reader rate) applies to libraries, schools, hospitals, and federal, commercial, and private institutions and organizations. Individual subscriptions must be in the names of, billed to, and paid by individuals.

POSTMASTER ADDRESS CHANGES: *Cleveland Clinic Journal of Medicine*, NA32, 9500 Euclid Avenue, Cleveland, OH 44195

SUBSCRIPTIONS, EDITORIAL, REPRINTS, BILLING/ACCOUNTING AND PRODUCTION: (same address as above) Phone (216) 444-2661 Fax (216) 444-9385 E-mail ccjm@ccf.org http://www.ccjm.org

ADVERTISING: Joseph Dennehy, Director, Sales and Marketing, 120 Castle Ridge Rd, Manhasset, NY 11030 • Phone (516) 365-8640 • Fax (516) 365-0587

AUTHORIZATION TO PHOTOCOPY items for internal or personal use is granted by the *Cleveland Clinic Journal of Medicine*, ISSN 0891-1150, published by The Cleveland Clinic Foundation, provided that the appropriate fee is paid directly to Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923 USA 978-750-8400. Prior to photocopying items for educational classroom use, please contact Copyright Clearance Center, Inc., at the address above. For permission to reprint material, please fax your request with complete information to the Reproduction department at CCC, fax (978) 750-4470. For further information visit CCC Online at http://www.copyright.com. To order bulk reprints, see above.



COPYRIGHT © 2001 THE CLEVELAND CLINIC FOUNDATION PRINTED IN U.S.A.



CONTINUED FROM PAGE 820

EDITORIAL

Handheld computers in medicine: The future is not here yet 854

Some problems need to be overcome before handheld computers become essential equipment in every physician's pocket.

C.M. HARRIS

REVIEW

Thrombotic thrombocytopenic purpura-hemolytic uremic syndrome: Diagnosis and treatment 857

Prompt recognition of the condition and initiation of plasma exchange treatment are critical.

J.N. GEORGE AND S.K. ESELY

VALVULAR HEART DISEASE UPDATE

New series: Valvular heart disease update 880

An update on the many recent changes in the diagnosis and treatment of valvular disease, focusing on the most common problems.

B.P. GRIFFIN

VALVULAR HEART DISEASE UPDATE

Current medical management of valvular heart disease 881

Drug therapy is important in the management of valvular heart disease, though often it does not alter the disease course or delay the need for surgery.

E. HAYEK AND B.P. GRIFFIN

IM BOARD REVIEW

A 65-year-old man with progressive shortness of breath 888

What is the cause of this patient's symptoms? A self-test on a clinical case.

H. JNEID, N.G. CORREIA, AND F.A. MICHOTA, JR.

DEPARTMENTS

Letter to the Editor 879

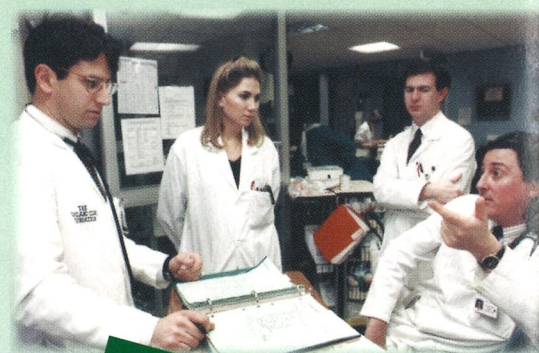
CME Credit Test 895



UPCOMING FEATURES

- Does your patient have lupus—or fibromyalgia?
- Adverse events: Managing the risk
- Recognizing and managing diabetic autonomic neuropathy
- Effect of statin drugs on osteoporosis
- Who should be tested for hereditary hemochromatosis?
- What to do about subclinical hypothyroidism
- Two important advances in chronic myelogenous leukemia
- Caring for patients with prosthetic heart valves
- How often does patent foramen ovale cause stroke?

■ VISIT OUR WEB SITE AT [HTTP://WWW.CCJM.ORG](http://www.ccjm.org)



DEDICATED TO LIFELONG LEARNING

CLEVELAND
CLINIC
JOURNAL OF
MEDICINE