

INFECTION CONTROL



EDITORIAL

Risk Management: An Epidemiologic Approach
R. Michael Massanari, MS, MD

ORIGINAL ARTICLES

Prospective Microbiologic Surveillance in Control of Nosocomial Methicillin-Resistant *Staphylococcus aureus*
Thomas J. Walsh, MD; David Vlahov, MS, RN; Sharon L. Hansen, PhD;
Edda Sonnenberg, MPH, RN; Rima Khabbaz, MD;
Thomas Gadacz, MD; Harold C. Standiford, MD

Outbreak Due to Methicillin- and Rifampin-Resistant *Staphylococcus aureus*: Epidemiology and Eradication of the Resistant Strain From the Hospital
Cynthia M. Bitar, RN, BS; C. Glen Mayhall, MD;
V. Archer Lamb, MS, MT(ASCP); Thomas J. Bradshaw, BS;
Alice C. Spadora, RN, BS; Harry P. Dalton, PhD

Methicillin-Resistant *Staphylococcus aureus* in a Nursing Home
Gregory A. Storch, MD; Jan L. Radcliff, RN, BSN;
Patricia L. Meyer, RN, MPH; James H. Hinrichs, MD

***Staphylococcus aureus* Colonization and Infection After Discharge From a Term Newborn Nursery**
Elaine E.L. Wang, MDCM, FRCP(C); Diane Elder, ART, CIC;
Norma Mishkel

SPECIAL SECTIONS

Readers' Forum: "The Coccus-Conscious" or "The Conscious Careful"
Albert F. Brown, MD; Joan L. Otterman, RN, BSN, CIC

Clinical Pharmacology of Antibiotics: Beta-Lactamase Inhibitors: Another Approach to Overcoming Antimicrobial Resistance
Richard H. Parker, MD; Mark Eggleston, PharmD



WHAT'S THE BEST HANDWASH/SCRUB? HANDS UP OR HANDS DOWN IT'S

HIBICLENS[®]

(CHLORHEXIDINE GLUCONATE)

It is well established that hand-washing is the most important single procedure in preventing transmission of hospital-acquired infections. HIBICLENS, the only proven antiseptic/antimicrobial, is the best agent available for both personnel handwashing and surgical scrubbing. HIBICLENS

provides the most immediate and prolonged protection against infection, with the best bactericidal "kill rate." And to encourage skin cleansing among hospital personnel, HIBICLENS offers cosmetic acceptability coupled with an excellent safety profile. Gentle to the skin, HIBICLENS is virtually

nonirritating and nonsensitizing, with a low potential for toxicity.

Available as both a liquid and impregnated in a disposable Sponge/Brush, HIBICLENS remains the single most effective antiseptic/antimicrobial skin cleanser for use throughout the hospital.

THE BEST ANTISEPTIC/ANTIMICROBIAL SKIN CLEANSER

INFECTION CONTROL

Table of Contents

Editorial

- Risk Management: An Epidemiologic Approach** 3
R. Michael Massanari, MS, MD

Original Articles

- Prospective Microbiologic Surveillance in Control of Nosocomial Methicillin-Resistant *Staphylococcus aureus*** 7
Thomas J. Walsh, MD; David Vlahov, MS, RN; Sharon L. Hansen, PhD; Edda Sonnenberg, MPH, RN; Rima Khabbaz, MD; Thomas Gadacz, MD; Harold C. Standiford, MD
- Outbreak Due to Methicillin- and Rifampin-Resistant *Staphylococcus aureus*: Epidemiology and Eradication of the Resistant Strain From the Hospital** 15
Cynthia M. Bitar, RN, BS; C. Glen Mayhall, MD; V. Archer Lamb, MS, MT(ASCP); Thomas J. Bradshaw, BS; Alice C. Spadora, RN, BS; Harry P. Dalton, PhD
- Methicillin-Resistant *Staphylococcus aureus* in a Nursing Home** 24
Gregory A. Storch, MD; Jan L. Radcliff, RN, BSN; Patricia L. Meyer, RN, MPH; James H. Hinrichs, MD
- Staphylococcus aureus* Colonization and Infection After Discharge From a Term Newborn Nursery** 30
Elaine E.L. Wang, MDCM, FRCP(C); Diane Elder, ART, CIC; Norma Mishkel

Special Sections

- Readers' Forum: "The Coccus-Conscious" or "The Conscious Careful"** 34
Albert F. Brown, MD; Joan L. Otterman, RN, BSN, CIC
- Clinical Pharmacology of Antibiotics: Beta-Lactamase Inhibitors: Another Approach to Overcoming Antimicrobial Resistance** 36
Richard H. Parker, MD; Mark Eggleston, PharmD

Departments

- Information for Authors** 41 **Classified Marketplace** 44
Calendar of Events 43

The ideas and opinions expressed by contributing authors do not necessarily reflect those of the editors or publisher.

Publisher: Infection Control (ISSN-0195-9417) is published monthly by SLACK Incorporated, 6900 Grove Road, Thorofare, New Jersey 08086. Telephone: (609) 848-1000.

Copyright 1987: All rights reserved. No part of this publication may be reproduced without written permission from the publisher.

Subscriptions. Requests should be addressed to the publisher (except Japan). In Japan, contact Woodbell Scope Incorporated, Mansui Bldg., 9-18, Kanda Surugadai 2-chome, Chiyoda-ku, Tokyo 101, Japan. Subscription rates in the US and possessions: Individual: One year—\$40.00; Two years—\$66.00; Three years—\$94.00. Institutional: One year—\$55.00; Two years—\$92.00; Three years—\$128.00; Canada: \$15.00 additional each year; all other countries: \$25.00 additional each year. Single copies of current issues may be obtained for \$7.00, United States and possessions; \$13.00 all other countries.

Change of address: Notice should be sent to the publisher six weeks in advance of effective date. Include old and new addresses with zip codes. The publisher cannot accept responsibility for undelivered copies. Second-class postage is paid at Thorofare, New Jersey 08086. **Postmaster:** Send address changes to SLACK Incorporated, 6900 Grove Road, Thorofare, NJ 08086.

As of Volume 1, Number 1, INFECTION CONTROL is listed in *Index Medicus*, *Current Contents—Clinical Practice*, *Hospital Literature Index*, and *Cumulative Index to Nursing and Allied Health Literature*.

EDITOR

Richard P. Wenzel, MD
Iowa City, Iowa

SENIOR ASSOCIATE EDITOR

William Schaffner, MD
Nashville, Tennessee

ASSOCIATE EDITORS

Sue Crow, RN, MSN
Shreveport, Louisiana

John E. McGowan, Jr., MD
Atlanta, Georgia

Dennis G. Maki, MD
Madison, Wisconsin

EDITORIAL STAFF UNIVERSITY OF IOWA

William J. Hausler, Jr., PhD
Iowa City, Iowa

R. Michael Massanari, MS, MD
Iowa City, Iowa

Michael Pfaller, MD
Iowa City, Iowa



SLACK Incorporated
6900 Grove Road
Thorofare, New Jersey 08086

Publisher

Richard N. Roash

Associate Publisher

Eric M. Baloff

Executive Editor

Donna Carpenter

Assistant Editor

Dawn A. Zwick

Circulation Manager

Kevin J. Fenton

Advertising Manager

Randall Roash

Advertising

Sales Representative

Wayne M. McCourt

Advertising Sales

Coordinator

Betty Martz

Classified

Advertising Representative

Donna M. Coles

EDITORIAL ADVISORY BOARD

Robert C. Aber, MD
Hershey, Pennsylvania

Paul Arnow, MD
Chicago, Illinois

Charles S. Bryan, MD
Columbia, South Carolina

John P. Burke, MD
Salt Lake City, Utah

Mary Castle, RN, MPH
Berkeley, California

Marie B. Coyle, PhD
Seattle, Washington

Burke A. Cunha, MD
Mineola, New York

Richard E. Dixon, MD
Trenton, New Jersey

Leigh G. Donowitz, MD
Charlottesville, Virginia

Mark Eggleston, PharmD
Washington, DC

Harvey A. Elder, MD
Loma Linda, California

Bruce Farber, MD
Pittsburgh, Pennsylvania

Martin S. Favero, PhD
Atlanta, Georgia

Peter C. Fuchs, MD, PhD
Portland, Oregon

Richard A. Garibaldi, MD
Farmington, Connecticut

Angella Goetz, RN, MNEd
Pittsburgh, Pennsylvania

Donald A. Goldmann, MD
Boston, Massachusetts

Dieter H.M. Gröschel, MD
Charlottesville, Virginia

Peter A. Gross, MD
Hackensack, New Jersey

Karen Hadley, RN, MPH
New Orleans, Louisiana

David K. Henderson, MD
Bethesda, Maryland

Peter N.R. Heseltine, MD
Los Angeles, California

Cyrus C. Hopkins, MD
Boston, Massachusetts

Allen B. Kaiser, MD
Nashville, Tennessee

Donald L. Kaiser, DrPH
Charlottesville, Virginia

Elaine Larson, PhD
Cabin John, Maryland

Harold Laufman, MD, PhD
New York, New York

Barbara McArthur, RN, PhD
Detroit, Michigan

Rob Roy MacGregor, MD
Philadelphia, Pennsylvania

C. Glen Mayhall, MD
Richmond, Virginia

Patti J. Miller, MS
Charlottesville, Virginia

Harry C. Nottebart, Jr., JD, MD
Richmond, Virginia

James E. Peacock, Jr., MD
Winston-Salem, North Carolina

Frank S. Rhame, MD
Minneapolis, Minnesota

William A. Rutala, PhD, MPH
Chapel Hill, North Carolina

William E. Scheckler, MD
Madison, Wisconsin

Walter E. Stamm, MD
Seattle, Washington

Charles W. Stratton, MD
Nashville, Tennessee

Richard L. Sweet, MD
San Francisco, California

George H. Talbot, MD
Philadelphia, Pennsylvania

Timothy R. Townsend, MD
Baltimore, Maryland

James Veazey, MD
Albany, New York

FOREIGN ADVISORY BOARD

Graham Ayliffe, MD, FRCPath.
Birmingham, England

Professor G. Berencsi
Szeged, Hungary

David Birnbaum, MPH
Sidney, British Columbia, Canada

Professor Jaap Dankert
Groningen, Netherlands

Professor Dr. F. Daschner
Freiburg, West Germany

Lars O. Kallings, MD
Stockholm, Sweden

Professor W.B. Kędzia
Sieroca, Poland

Professor A.P. Krasilnikov
Minsk, USSR

Professor Dr. W. Marget
Munich, West Germany

**Jonathan L. Meakins, MD,
FRCSC, FACS**
Montreal, Canada

Bertil Nyström, MD
Huddinge, Sweden

Ian Phillips, MA, MD, MRCPATH.
London, England

Samuel Ponce de Leon, MD
Mexico City, Mexico

Hans Reber, MD
Basel, Switzerland

Professor Gerald Reybrouck
Leuven, Belgium

Manfred L. Rotter, MD, DipBact
Vienna, Austria

Theodore Sacks, MD
Jerusalem, Israel

Dr. Bernhard M. Thimm
Federal Republic of Germany

Professor Dr. med. H.P. Werner
Mainz, West Germany

Professor Dr. W. Weuffen
Greifswald, German Democratic
Republic