

INFECTION CONTROL



EDITORIAL

Of Soap and Semmelweis

Charles S. Bryan, MD

ORIGINAL ARTICLES

Susceptibility to Varicella-Zoster Virus Among Adults at High Risk for Exposure

Sherman J. Alter, MD; Jeanne A. Hammond, RN;
Carol J. McVey, BS; Martin G. Myers, MD

Is Primary Cytomegalovirus Infection an Occupational Hazard for Obstetric Nurses?

A Serological Study

Lawrence I. Hatherley, MD, FRACGP, MRCS, LRCP

Wound Infection After Cesarean Section

Hedvig Pelle, MD; Ole B. Jepsen, MD; Severin O. Larsen, MSc; Jens Bo, MD;
Flemming Christensen, MD; Anne Dreisler, MD; Per J. Jørgensen, MD;
Annette Kirstein, RN; Morten Kjøller, MD; Aksel Lange, MD; Kjeld Laursen, MD;
Carsten N.A. Nickelsen, MD; Mogens Osler, MD; Helen Rasmussen, MD

A Hospital Cafeteria-Related Food-Borne Outbreak Due to *Bacillus cereus*: Unique Features

Larry M. Baddour, MD; Sheila M. Gaia, RN; Ronald Griffin; Richard Hudson, PhD

SPECIAL SECTIONS

Topics in Clinical Microbiology: The JK Diphtheroids

Paul E. Schoch, PhD; Burke A. Cunha, MD

Product Commentary: Infection Control Software for Microcomputers

Susan H. Troxler, RN, MPH



The top bar for antibacterial effectiveness.

Dial demonstrated superior effectiveness against other bar soaps in microbiological tests, both *in vivo* and *in vitro*. *In vitro*, Dial

IN VITRO MICROBIOLOGICAL AVAILABILITY TEST



ANTIBACTERIAL EFFECTIVENESS
Length of bar is inversely proportional to the bacterial count.

proved itself to be nearly five times more effective than its leading competitor in antibacterial efficacy. Maybe that's why more hospitals have chosen Dial than any other bar soap.

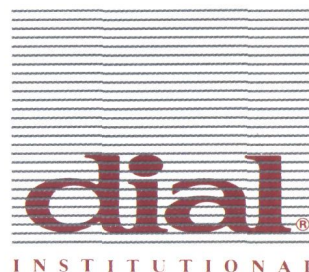
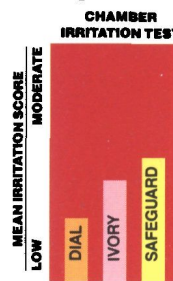
Made by an advanced technique that makes the active ingredient 3, 4, 4'-trichlorocarbonyl more effective; Dial helps remove patient-acquired microorganisms, inhibits the growth of pathogenic organisms some of which are associated with nosocomial infection, and provides residual antibacterial action.

Dial not only provides superior

©The Dial Corporation 1986

bacteriostatic protection, but is formulated to treat skin gently, even with frequent use. Results of studies using the soap chamber test show that Dial is mild.

If your hospital isn't already using Dial, now is the time to choose superior antibacterial effectiveness in a bar soap as mild as an antibacterial soap can be. For more information and study references on Dial, call for our brochure: Toll-free, 1/800/528/0849.



Information for Authors

Manuscripts should consist of new material based on infection control activities within a health care facility or in the community, from the US or abroad. All clinical research must have been conducted in accordance with guidelines on the protection of human subjects as established by the US Department of Health and Human Services. Articles are accepted with the understanding that they are contributed solely to *INFECTION CONTROL* and have not been published previously except in abstract form. Authors will be requested to sign a standard release of copyright form. The journal will cover the general topics of environmental monitoring, surveillance, prevention, immunization, regulation, education, and research related to infection control.

All manuscripts should be submitted in quadruplicate (with duplicates of figures and tables), typewritten on one side on 8½ × 11-inch paper, double-spaced with generous margins. The author should keep a complete copy of the manuscript.

The organization of the paper should be as follows: title page; abstract; introduction; methods; results; discussion; acknowledgments; references; tables; figures and figure legends. The main sections and subdivisions should be indicated by side headings flush with the left margin and two lines above the text. The Arabic numbering system should be used.

Clinical Trials: The Editor requests that authors reporting the results of clinical trials describe clearly the following: 1) eligibility criteria; 2) whether or not subjects were admitted before allocation to one of the study groups; 3) the method of randomization; 4) whether the study was "masked," what specific information was masked and whether subjects, clinicians and evaluators were all masked; 5) the method used to identify treatment complications; 6) an explanation and analysis of subjects lost to follow-up; 7) statistical methods employed; and 8) information which led to the determination of the size of the study groups and the expected differences between groups.

Rapid Publication: A request for rapid publication must be stated in the cover letter and manuscripts should not exceed ten double-spaced, typewritten pages. Such papers will be published within three to four months of acceptance. No comments will accompany rejected papers, but manuscripts may be resubmitted under the normal publication procedures.

Readers' Forum: Brief communications are encouraged of approximately four to six typewritten pages containing information which does not represent a formal study. They may reflect opinions, hypotheses, or impressions related to infection control or summarize unusual experiences in the field.

Title Page: A separate title page should include the following: title of manuscript; author(s); laboratory or institution of origin with city and state; acknowledgment of grant support; address to be used for reprint requests. An abbreviated title, to be used as a running head, should be included. This should not exceed four words. A preliminary report or abstract should be credited by use of a footnote to the title.

Abstract: The abstract, not to exceed 150 words, should summarize the significant information in the paper and be understandable without reference to the text. The use of abbreviations should be avoided.

Tables: Tables should be double-spaced, each on a separate page, and self-contained. Do not use vertical lines or ditto marks. The table number should be typed flush left, with the table title beneath it. Symbols for footnotes are listed below. Abbreviations used in a table should be explained at the bottom of the table after the footnotes.

Figures: Two sets of unmounted glossy prints should be enclosed in separate envelopes. Indicate lightly on the back margin of each figure the number, name of author, and top. Illustration costs in excess of \$50 must be defrayed by the author.

Photographs: Two copies of each photograph should be submitted. Any identifiable human subject must sign a release form before the photograph can be used. Radiographs and other black-and-white material should be submitted as unmounted glossy print, 5" × 7" size preferred. A separate identification label should be pasted on each print; do not write directly on the print or use paper clips or staples. Photomicrographs or other color materials should be submitted as color transparencies. Actual magnification and staining method should be given where appropriate; electron photomicrographs should have internal scale markers.

Legends: Legends should be double-spaced, each on a separate page.

References: References should be double-spaced, and should be cited consecutively in the text with superscript numbers outside punctuation. A reference to a paper "in press" may be included. Citations such as "in preparation," "submitted for publication," "unpublished data," and "personal communication" should be given in parentheses in the text only. At the end of each article, references should be listed in the numerical order in which they appear in the text. No more than three authors should be listed for each citation; authors after the third should be designated "et al." Abbreviations of the names of the journals should conform to the *Index Medicus*. Journal titles should be cited as they existed at the time of publication. Unlisted journals should not be abbreviated. Authors are responsible for bibliographic accuracy.

Articles: Annunziato D, Goldblum LM: Staphylococcal scalded skin syndrome: A complication of circumcision. *Am J Dis Child* 1978; 132:1187-1188.

Books: Hoeprich PD: *Infectious Diseases*, ed 2. New York, Harper & Row Pubs Inc, 1977, p 169.

Contributions to Books: Schaffner W: Psittacosis: Ornithosis, parrot fever, in Beeson PB, McDermott W, Wyngaarden JB (eds): *Cecil Textbook of Medicine*, ed 15. Philadelphia, WB Saunders Co, 1979, pp 336-338.

Footnotes: Footnotes to the text and tables should be as few as possible. Each should be typed at the foot of the appropriate page, separated from the text or table by a horizontal line. Designate footnotes by the following symbols in this order: *, †, ‡, **, ††, ‡‡.

Abbreviations and Nomenclature: Abbreviations should conform to the *American Medical Association Manual for Authors and Editors*, published by Lange Medical Publications, Los Altos, California. Abbreviations should be kept to a minimum, preferably confined to the tables. Symbols for units of measurement (eg, mm, ml) should not be followed by periods. Chemical or generic names of drugs are preferred. A proprietary name may be given only after it is preceded by the chemical name the first time it appears. Unfamiliar terms and abbreviations must be defined when first used.

Reviews: Each manuscript will be reviewed by the Editor and at least one other Editorial Board member. Authors will be notified as soon as possible regarding the acceptability of their manuscripts.

Galley: Galley prints will be sent to the author for approval before the article is printed.

Reprints: The senior author will be sent five complimentary copies of the issue in which the article appears. An order form showing the price for reprints will be sent with the complimentary copies of the issue.

Mail Manuscripts to:

Richard P. Wenzel, MD, Editor
INFECTION CONTROL
SLACK Incorporated
6900 Grove Road
Thorofare, New Jersey 08086
609/848-1000
800/257-8290



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

- Of Soap and Semmelweis** 445
Charles S. Bryan, MD

Original Articles

- Susceptibility to Varicella-Zoster Virus Among Adults at High Risk for Exposure** 448
Sherman J. Alter, MD; Jeanne A. Hammond, RN; Carol J. McVey, BS; Martin G. Myers, MD

- Is Primary Cytomegalovirus Infection an Occupational Hazard for Obstetric Nurses? A Serological Study** 452
Lawrence I. Hatherley, MD, FRACGP, MRCS, LRCP

- Wound Infection After Cesarean Section** 456
Hedvig Pelle, MD; Ole B. Jepsen, MD; Severin O. Larsen, MSc; Jens Bo, MD; Flemming Christensen, MD; Anne Dreisler, MD; Per J. Jørgensen, MD; Annette Kirstein, RN; Morten Kjølner, MD; Aksel Lange, MD; Kjeld Laursen, MD; Carsten N.A. Nickelsen, MD; Mogens Osler, MD; Helen Rasmussen, MD

- A Hospital Cafeteria-Related Food-Borne Outbreak Due to *Bacillus cereus*: Unique Features** 462
Larry M. Baddour, MD; Sheila M. Gaia, RN; Ronald Griffin; Richard Hudson, PhD

Special Sections

- Topics in Clinical Microbiology: The JK Diphtheroids** 466
Paul E. Schoch, PhD; Burke A. Cunha, MD

- Product Commentary: Infection Control Software for Microcomputers** 470
Susan H. Troxler, RN, MPH

Departments

- | | | | |
|--------------------------------|-----|-------------------------------|-----|
| Information for Authors | 437 | Classified Marketplace | 473 |
| Letters to the Editor | 443 | Calendar of Events | 474 |

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.

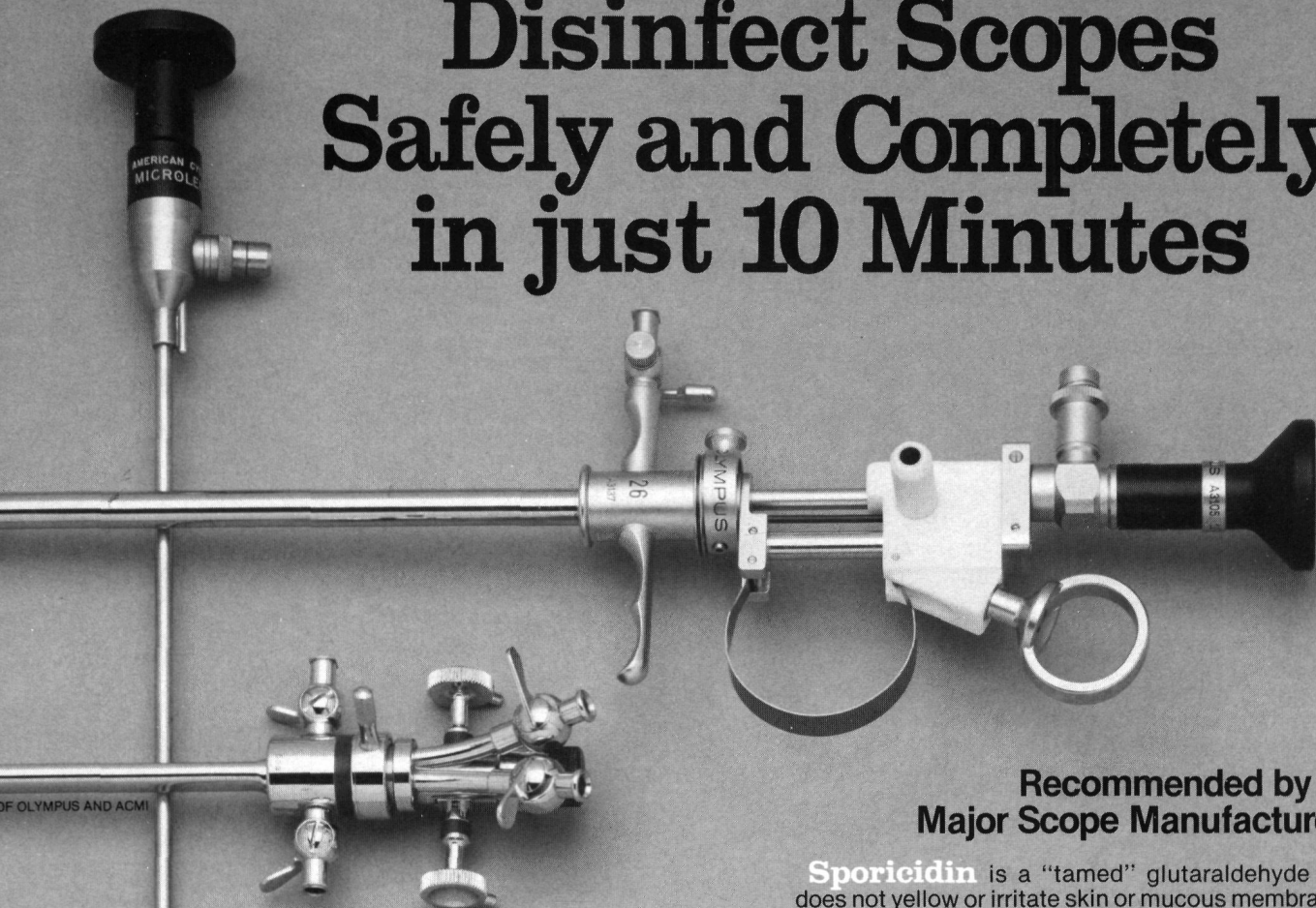
Copyright 1986: All rights reserved. No part of this publication may be reproduced without written permission from the publisher.

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—\$35.00; Two years—\$60.00; Three years—\$75.00. Institutional: One year—\$50.00; Two years—\$75.00; Three years—\$90.00; all other countries: \$15.00 additional each year. Single copies of current issues may be obtained for \$5.00, United States and possessions; \$8.00 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*.

Disinfect Scopes Safely and Completely in just 10 Minutes



**Recommended by All
Major Scope Manufacturers**

Sporicidin is a "tamed" glutaraldehyde that does not yellow or irritate skin or mucous membranes.

Sporicidin is safe for delicate instruments and it will not cloud lenses or clog air/water channels.

Sporicidin (1:16) is tuberculocidal, bactericidal, fungicidal & virucidal (including Herpes I & II, Influenza A₂ and Polio I).

**In a C.D.C. study,
Sporicidin (diluted 1:16)
inactivated the
Hepatitis B Virus***



Sporicidin[®]
COLD STERILIZING SOLUTION
An exclusive glutaraldehyde formula

*Journal of Clinical Microbiology, Vol. 18, No. 3, P. 535. To determine whether the HBV could be inactivated by intermediate to high-level disinfectants, five chimpanzees were each challenged with an inoculum treated with a different germicidal chemical. Researchers observed that the small amount of direct data, although not conclusive, will have to suffice until a laboratory culture method is developed.

Proof Comes from 15 Years of Research and Clinical Use

"In 5000 procedures the cystoscopes were used directly from the Sporicidin soak; there were no known incidents of iatrogenic infection or post-operative irritation. Sporicidin is safe and effective in 10 minutes."

Urology, Vol. 23, No. 2, 1984

"After 3 years and 4001 procedures (laparoscopy, cystoscopy and colonoscopy), we observed
(1) no post-operative tissue irritation or infection
(2) no lens clouding or endoscope damage
(3) preferred by our staff."

Journal Of The Operating Room
Research Institute, Vol. 3, No. 8, 1983

"Sporicidin . . . was both more stable and more active against test spores than . . . Cidex and Cidex-7."

Infección Control, Vol. 1, No. 2, 1980

These and other studies available upon request.



EDITOR

Richard P. Wenzel, MD
Charlottesville, Virginia

ACTING EDITOR 1985-1986

Dieter H.M. Gröschel, MD
Charlottesville, Virginia

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



SLACK Incorporated
6900 Grove Road
Thorofare, New Jersey 08086

Publisher

Richard N. Roash

Associate Publisher

Eric M. Baloff

Executive Editor

Donna Carpenter

Associate Editor

Joseph J. Hoffman

Assistant Editor

Jane F. Martens

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

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

Donald A. Goldman, MD
Boston, Massachusetts

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

William J. Ledger, MD
New York, New York

Barbara McArthur, RN, PhD
Detroit, Michigan

Rob Roy MacGregor, MD
Philadelphia, Pennsylvania

C. Glen Mayhall, MD
Richmond, Virginia

Ronald Lee Nichols, MD
New Orleans, Louisiana

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

Robert J. Shannon, MSPH
Boston, Massachusetts

Walter E. Stamm, MD
Seattle, Washington

Charles W. Stratton, MD
Nashville, Tennessee

George H. Talbot, MD
Philadelphia, Pennsylvania

Timothy R. Townsend, MD
Baltimore, Maryland

William M. Valenti, MD
Rochester, New York

James Veazey, MD
Albany, New York

Kathy J. Wydra, RN
Geneva, 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

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



NOW AVAILABLE IN TWO SIZES!

What's
Red and Yellow
and Used
All Over?

monoject[®]

**SHARPS
CONTAINER**

Used sharps are virtually everywhere in a medical environment. Finally, there's a system for handling these sharps that maximizes protection, maximizes convenience, and minimizes space requirements. It's called Monoject SHARPS CONTAINER and it not only promises a better way, it delivers. For complete information, write Dept. A.J.

Sherwood
MEDICAL

ST LOUIS, MO 63103 U.S.A.

© 1986
SHERWOOD
MEDICAL