

ARCHIVES OF SURGERY

The ARCHIVES OF SURGERY is a member of the consortium of AMA journals listed below. The complete text of all AMA journals is available online from Dialog Information Services and Information Access Company.

The Journal of the American Medical Association (JAMA)

Archives of Dermatology
Archives of Family Medicine
Archives of General Psychiatry
Archives of Internal Medicine
Archives of Neurology
Archives of Ophthalmology
Archives of Otolaryngology—Head & Neck Surgery
Archives of Pathology & Laboratory Medicine
Archives of Pediatrics & Adolescent Medicine
Archives of Surgery

The ARCHIVES OF SURGERY (ISSN 0004-0010) is published monthly by the American Medical Association, 515 N State St, Chicago, IL 60610, and is an official publication of the Association. The ARCHIVES OF SURGERY reaches more than 19 000 readers in over 69 countries each month. Periodicals postage paid at Chicago, IL and at additional mailing offices. GST registration number 12622 5556 RT. Canada Post International Publications Mail (Canadian Distribution) Sales Agreement No. 319309.

Printed in the USA.

Official Publication of the New England Surgical Society, Pacific Coast Surgical Association, Surgical Infection Society, Western Surgical Association.

SUBSCRIPTION RATES—The personal subscription rates for the ARCHIVES OF SURGERY are \$145 for 1 year (12 issues) in the United States and US possessions; \$195 in the Americas; £125 outside the Americas. The institution rates for 1 year are \$245 in the US; \$345 in the Americas; £195 outside the Americas. Special rates for residents and medical students are available. Address all subscription communications to: Subscriber Services Center, American Medical Association, PO Box 10946, Chicago, IL 60610-0946. Phone: (800) 262-2350. Fax: (312) 464-5831. E-mail: ama-subs@ama-assn.org. For mailing addresses outside the United States and US possessions, see International Subscription Information.

CHANGE OF ADDRESS—POSTMASTER, send all address changes to ARCHIVES OF SURGERY, c/o Subscriber Services, American Medical Association, 515 N State St, Chicago, IL 60610. Please notify us of address change at least 6 weeks in advance to ensure uninterrupted service. Include both old and new addresses, a recent

mailing label, and new ZIP code. For mailing addresses outside the United States and US possessions, see International Subscription Information.

SUBSCRIBER SERVICES—For information about subscribing to any of the AMA publications, change of address, missing issues, or purchasing back issues, please contact Subscriber Services Center, American Medical Association, PO Box 10946, Chicago, IL 60610-0946, or call (800) 262-2350 or (312) 670-SUBS (670-7827) between 8:30 AM and 4:30 PM CST. Fax: (312) 464-5831. E-mail: ama-subs@ama-assn.org. For mailing addresses outside the United States and US possessions, see International Subscription Information.

INTERNATIONAL SUBSCRIPTION INFORMATION—Subscriptions outside the United States and US possessions are served according to geographic region. Please address correspondence to the following 2 offices based on delivery address: (1) For delivery in North America, Central America, and South America, contact Subscriber Services, AMA, PO Box 10946, Chicago, IL 60610-0946. Phone: (312) 670-7827. Fax: (312) 464-5831. E-mail: ama-subs@ama-assn.org. (2) For delivery outside the Americas contact JAMA & Archives Journals, Reader Services Centre, PO Box 299, London WC1H 9TD, England. Phone: +44 (0)171-383-6270. Fax: +44 (0)171-383-6402. E-mail: jama-archives@dial.pipex.com.

REPRINTS—Authors place their reprint order at the time the edited typescript is reviewed and should allow 4 to 6 weeks for delivery following publication. Requests for individual reprints should be sent directly to the author at the address shown in the article.

For bulk reprint orders for distribution by commercial organizations, please contact Wanda Bartolotta, 500 Fifth Ave, #2210, New York, NY 10110. Phone: (212) 354-0050. Fax: (212) 354-1169. E-mail: wanda_bartolotta@ama-assn.org. For reprint orders in limited quantities for distribution by educational organizations and for author reprints, please contact Joseph R. Rekas, 515 N State St, Chicago, IL 60610. Phone: (312) 464-4594. Fax: (312) 464-4849.

WORLD WIDE WEB ADDRESS—<http://www.ama-assn.org>.

SURGERY HOME PAGE—<http://www.ama-assn.org/surgery>.

PERMISSIONS—Contact Ada Jimenez-Walker, Permissions Assistant, 515 N State St, Chicago, IL 60610. Phone: (312) 464-2513.

ADVERTISING PRINCIPLES—Each advertisement in this issue has been reviewed and complies with the principles governing advertising in AMA scientific 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.

Publication Staff
Offices: 515 N State St
Chicago, IL 60610

Editorial Processing Department,
Archives Journals

Director: Paula Glitman
Manager: Vicky Golden
Freelance Manager: Diane L. Cannon
Freelance Coordinator: Connie Manno
Electronic Editing Specialist:
Paul Frank

Assistant Electronic Editing Specialist:
Monica Mungle

Senior Copy Editor:
Brenda Gregoline

Editorial Assistant: Celina Canchola

**Scientific Information and
Multimedia Group**

Administrative Assistant: Helga Fritz

New Media Editorial Office

Editorial Director, New Media:
William M. Silberg

Associate Editor: Marty Suter

Assistant Editors:
Deborah Flapan
Neil Shankman

Staff Assistant: Marla A. Hall

Production & Distribution Division

Manager, Budgets & Costs:
Bonnie Van Cleven

Publishing Manufacturing Analyst:
Diane Darnell

Office Manager: Karen Branham

Senior Secretary: Shannon Epplett

**Advertising & Production
Department**

Director: Karen Adams-Taylor
Manager, Advertising Services:
Carole Piszker

Manager, Production Services:
Susan Price

Production Associates:

Debbie Camp
Betty Frigerio
Mari Guizzetti
Sarah Powell
Jennifer Reiling
Chad Sanderson
Jo Anne Turner
Carmela Ware

Distribution

Distribution Manager:
Paul Gasiecki

Senior Traffic Control Specialist:
Michael McGraw

Traffic Control Specialist:
Victoria Buckner

Electronic Production Department

Director: Linda Knott

Manager, Composition: Phil Arko

Electronic Production Operators:

Brenda Chandler
Amy Evers
Mary Ann Kuranda
Sandra Lopez

Graphics Manager: Charl Richey

Graphics Operators:

Joe Amft
JoAnne Weiskopf
Alicja Wojcik-Dunn

Manager, Proofreading:

Teresa H. Omiotek

Proofreaders:

David Antos
Daniel James
Mary Kay Tinerella
Barbara Wojtowicz

Production Assistant: Ruth Sprague

Manager, Database & New Media:

Mary Ellen Johnston

Indexer: Kathy Gaydar

Database Assistants:

Gail Barrett
La'son J. Diggs
Melanie Parenti

Specialty Journal Division Office

Assistant to the Publisher:
Christine Hearne

**Circulation & Content
Marketing Division**

Administrative Assistant:
Millette Jackson-Bates

Circulation Processing Department

Director: Beverly Martin

Circulation Development Department

Director: Bina Oza

Licensing & Permissions Department

Director: Norman Frankel

Permissions: Ada Jimenez-Walker

International Coordinator: Sharon Ali

Reprints

Reprint Coordinator: Joseph Rekas



ARCHIVES OF SURGERY

www.ama-assn.org/surgery

VOL 133 NO. 7, JULY 1998

MISSION STATEMENT

To promote the art and science of surgery by publishing relevant peer-reviewed clinical and basic science information to assist the surgeon in optimizing patient care. The *Archives of Surgery* will also serve as a forum for the discussion of issues that involve ethics, teaching, surgical history, and socioeconomic concerns.

*Approved by the Editorial Board, *Archives of Surgery*, July 19, 1996.

ORIGINAL ARTICLES

Minimally Invasive Surgery for Zenker Diverticulum: Analysis of Results in 95 Consecutive Patients 695

Alberto Peracchia, MD; Luigi Bonavina, MD; Surendra Narne, MD; Andrea Segalin, MD; Laura Antoniazzi, MD; Giorgio Marotta, MD

Invited Commentary 700
Glyn G. Jamieson, MD

Surgery vs Endoscopy as Primary Treatment in Symptomatic Patients With Suspected Common Bile Duct Stones: A Multicenter Randomized Trial 702

Bertrand Suc, MD; Jean Escat, MD; Daniel Cherqui, MD; Gilles Fourtanier, MD; Jean-Marie Hay, MD; Abe Fingerhut, MD; Bertrand Millat, MD; for the French Associations for Surgical Research

Enhancement of Gastric Emptying of Solids by Erythromycin in Patients With Roux-en-Y Gastrojejunostomy 709

John Petrakis, MD, PhD; John Sophocles Vassilakis, MD, PhD; Nikolaos Karkavitsas, MD, PhD; George Tzovaras, MD, PhD; Emmanuel Epanomeritakis, MD; John Tsiaoussis, MD, PhD; Evaghelos Xynos, MD, PhD

Improvement in Survival With Peptidyl Membrane Interactive Molecule D4B Treatment After Burn Wound Infection 715

Richard L. Gamelli, MD; Li-Ke He, MD; Hong Liu, MD; John D. Ricken, BS

Neoadjuvant Chemoradiotherapy for Esophageal Cancer: Is It Worthwhile? 722

Wael Z. Tamim, MD; Robert S. Davidson, MD; Robert M. Quinlan, MD; Michael A. O'Shea, MB, BCh; Richard K. Orr, MD; Richard S. Swanson, MD

American Medical Association

Physicians dedicated to the health of America



Copyright 1998 by the American Medical Association. All rights reserved. Reproduction without permission is prohibited.

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

Lynn Jensen, PhD
Chief Operating Officer &
Interim Executive Vice President

George D. Lundberg, MD
Editor in Chief, Scientific
Information and Multimedia

Robert L. Kennett
Interim Senior Vice President,
Publishing & Business Services

Peter L. Payerli
Publisher

Vanessa Hayden
Director, Production &
Distribution Division

Cheryl Iverson
Director, Editorial Processing
Division

James A. Skowrenski
Director, Circulation &
Content Marketing Division

Geoffrey A. Flick
Manager, Marketing Services

Advertising Office: J. P. Cahill & Associates, 341 S Waiola Ave, La Grange, IL 60525 (708) 352-0322. **AMA Classified Advertising Department:** Thalia Moss, 800-262-2260.

| | | | |
|--|-----|--|-----|
| Changes in Knot-Holding Capacity of Sliding Knots In Vivo and Tissue Reaction <i>Zeina Babetty, MS; Aykut Sümer, PhD; Sabri Altıntaş, PhD; Sabri Ergüney, MD; Süha Göksel, MD</i> | 727 | Prolonged Overexpansion of Extracellular Water in Elderly Patients With Sepsis <i>Andrew T. H. Cheng, MB, ChB; Lindsay D. Plank, DPhil; Graham L. Hill, MD</i> | 745 |
| Small Polypoid Lesions of the Gallbladder: Differential Diagnosis and Surgical Indications by Helical Computed Tomography <i>Hiroyoshi Furukawa, MD; Tomoo Kosuge, MD; Kazuaki Shimada, MD; Junji Yamamoto, MD; Yae Kanai, MD; Kiyoshi Mukai, MD; Ryoko Iwata, MD; Kyosuke Ushio, MD</i> | 735 | Mortality in Burned Children With Acute Renal Failure <i>Marc G. Jeschke, MD; Robert E. Barrow, PhD; Steven E. Wolf, MD; David N. Herndon, MD</i> | 752 |
| Prophylactic Iron Supplementation After Roux-en-Y Gastric Bypass: A Prospective, Double-blind, Randomized Study <i>Robert E. Brolin, MD; Joseph H. Gorman, MD; Robert C. Gorman, MD; Andrew J. Petschenik, MD; Lisa B. Bradley, MS, RD; Hallis A. Kenler, RD, PhD; Ronald P. Cody, PhD</i> | 740 | The Clinical Implications of Hypophosphatemia Following Major Hepatic Resection or Cryosurgery <i>Joseph F. Buell, MD; Adam C. Berger, MD; Jeffrey S. Plotkin, MD; Paul C. Kuo, MD; Lynt B. Johnson, MD</i> | 757 |
| | | Efficacy of Cytotoxic Agents for the Prevention of Laparoscopic Port-Site Metastases <i>Susan J. Neuhaus, MBBS; David I. Watson, MBBS, FRACS; Tanya Ellis, BSc; Thomas Dodd, MBBS; Allan M. Rofo, PhD; Glyn G. Jamieson, MS, FRCS, FRACS</i> | 762 |

ARCHIVES OF SURGERY

Editor:

Claude H. Organ, Jr, MD
University of California—Davis,
East Bay
1411 E 31st St
Oakland, CA 94602

Associate Editor:

Patrick L. Twomey, MD
San Francisco, Calif

Section Editor, Operative Techniques:

Jack Pickleman, MD
Chicago, Ill

Consultant in Surgical History:

Ira M. Rutkow, MD, MPH, DrPH
Freehold, NJ

Editorial Assistant:

Margaret M. Kosiba
Alameda, Calif

Editorial Board

Timothy R. Billiar, MD
Pittsburgh, Pa
Irshad H. Chaudry, PhD
Providence, RI
Laurence Y. Cheung, MD
Kansas City, Kan
Karen E. Deveney, MD
Portland, Ore
Clive S. Grant, MD
Rochester, Minn
Alden H. Harken, MD
Denver, Colo
J. Michael Henderson, MD
Cleveland, Ohio
Eddie L. Hoover, MD
Buffalo, NY
Joseph A. Ignatius, MD
San Francisco, Calif
Danny O. Jacobs, MD, MPH
Boston, Mass
Stephen F. Lowry, MD
New York, NY
Ronald V. Maier, MD
Seattle, Wash
Thomas A. Mustoe, MD
Chicago, Ill
Gerald W. Peskin, MD
Oakland, Calif

Charles L. Rice, MD
Chicago, Ill
John P. Roberts, MD
San Francisco, Calif
Joel J. Roslyn, MD
Philadelphia, Pa
Grace S. Rozycki, MD
Atlanta, Ga
G. Thomas Shires, III, MD
Dallas, Tex
Mark L. Silen, MD, MBA
St Louis, Mo
Bruce E. Stabile, MD
Torrance, Calif
Lester F. Williams, Jr, MD
Nashville, Tenn

International Advisory Board

Licinio Angelini, MD
Rome, Italy
P. C. Bornman, MB, ChB, MMed (Surg)
Cape Town, South Africa
Leigh W. Delbridge, MD
Sydney, NSW, Australia

S. T. Fan, MB, BS, MS
Hong Kong, China
Ch. Herfarth, MD
Heidelberg, Germany
Graham L. Hill, MD, ChM, FRACS, FRCS
Auckland, New Zealand
Kazutomo Inoue, MD
Kyoto, Japan
Jin-Pok Kim, MD
Seoul, Korea
Raj Mohan Nambiar, MBBS
Singapore
Hector Orozco, MD
Mexico City, Mexico
Professor Sir Robert Shields, DL, MD, DSc
Liverpool, England

Former Editors

Dean Lewis, MD
1920-1940
Waltman Walters, MD
1941-1942; 1946-1961
Lester Dragstedt, MD
1943-1945
J. Garrett Allen, MD
1962-1969
Richard Warren, MD
1970-1976
Arthur Baue, MD
1977-1988

| | |
|--|-----|
| Preoperative Chemoembolization of Hepatocellular Carcinoma: A Comparative Study | 767 |
| <i>François Paye, MD;</i> | |
| <i>Pascal Jagot, MD;</i> | |
| <i>Valérie Vilgrain, MD;</i> | |
| <i>Oliver Farges, MD, PhD;</i> | |
| <i>Dominique Borie, MD;</i> | |
| <i>Jacques Belghiti, MD, PhD</i> | |

BASIC SCIENCE FOR SURGEONS

| | |
|---|-----|
| Apoptosis: Programmed Cell Death | 773 |
| <i>Nai-Kang Kuan BS;</i> | |
| <i>Edward Passaro, Jr, MD</i> | |

SURGICAL REMINISCENCES

| | |
|---------------------------|-----|
| A Tale of Two Wars | 776 |
| <i>Karen Deveney, MD</i> | |

BOOK REVIEWS

| | |
|---|-----|
| On Call Surgery | 777 |
| <i>J. E. Gosnell, MD</i> | |
| Atlas of Laparoscopic Surgical Technique | 777 |
| <i>Norman B. Halpern, MD</i> | |
| Endovascular Skills: Guidewires, Catheters, Arteriography, Balloon Angioplasty, Stents | 778 |
| <i>Victor M. Bernhard, MD</i> | |
| Textbook of Laparoscopy | 779 |
| <i>Galen V. Poole, MD</i> | |
| Surgical and Dental Instrument Catalogues From the Civil War Era: Snowden and Brother (1860) and John Weiss and Son (1863) | 779 |
| <i>F. W. Blaisdell, MD</i> | |

CORRESPONDENCE AND BRIEF COMMUNICATIONS

| | |
|---|-----|
| Preoperative Angiography for Gastrointestinal Bleeding | 781 |
| <i>Hunter H. McGuire, Jr, MD</i> | |
| The International Medical Graduate in US Academic General Surgery: Is the Truth Out? | 781 |
| <i>Muhammed Ashraf Memon, MBBS, DCh, FRCSI, FRCS(Edin), FRCS(Eng); Breda Memon, RN</i> | |
| In Reply | 782 |
| <i>Gerard V. Aranha, BS, FACS, FRCSC</i> | |

MOMENTS IN SURGICAL HISTORY

| | |
|--|-----|
| The Medical and Surgical History of the War of the Rebellion, 1861-1865 | 783 |
|--|-----|

DEPARTMENTS

| | |
|---------------------------------|-----|
| Surgical Anatomy | 720 |
| Instructions for Authors | 784 |
| Calendar | 793 |
| Products and Services | 794 |
| Classified Advertising | 795 |
| Index to Advertisers | 799 |

Cover Quotation

The statement appearing on the cover was made by William Halsted (Surgical tetany and the parathyroids. JAMA. 1907;XLIX:1243-1244).

Claude H. Organ, Jr, MD
Editor