

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 directly from AMA as well as the following aggregators: Dialog Information Services, Proquest, Ovid Technologies, Inc, Gale Research, and EBSCO.

The Journal of the American Medical Association (JAMA)
Archives of Dermatology
Archives of Facial Plastic Surgery
Archives of General Psychiatry
Archives of Internal Medicine
Archives of Neurology
Archives of Ophthalmology
Archives of Otolaryngology-Head & Neck Surgery
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 60610-0946, and is an official publication of the Association. The ARCHIVES OF SURGERY reaches more than 21 500 readers in over 71 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.

SUBSCRIPTION RATES—

| | Individual Print | Individual Print & Online | Individual Online Only |
|---------------|-------------------|----------------------------|-------------------------|
| US | \$175 | \$180 | \$140 |
| Americas | \$225 | \$235 | \$180 |
| Rest of World | £155 | £165 | £125 |
| | Institution Print | Institution Print & Online | Institution Online Only |
| US | \$325 | \$340 | \$260 |
| Americas | \$425 | \$445 | \$340 |
| Rest of World | £275 | £290 | £220 |

Rates for residents and medical students available.

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 the Americas, see below.

SUBSCRIPTION INFORMATION—Subscription inquiries for mailing addresses in the US and the Americas: For fastest service, direct inquiries regarding missing issues, address changes, subscription billing, subscription renewal, or back issue purchases as shown below: **AMA members**: Phone: 800-262-3211 between 8:30 AM-4:45 PM CST; Fax: 800-262-3221; E-mail: mcs@ama-assn.org. **Other physicians and non-physician customers**: Phone: 800-262-2350 or 312-670-7827 (same hours as above); Fax: 312-464-5831; E-mail: ama-subs@ama-assn.org. Mail inquiries should be directed to the Unified Service Center, American Medical Association, PO Box 10946, Chicago, IL 60610-0946. For mailing addresses outside the US and the Americas: Contact JAMA and Archives Journals, American Medical Association, Tower House, Sovereign Park, Market Harborough, Leicestershire LE15 9EF, UK. Phone: +44 (0) 1858-438880; Fax: +44 (0) 1858-434958; E-mail: ama@subscription.co.uk.

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, 2441 84th St, Brooklyn, NY 11214. Phone: (718) 946-7424. Fax: (718) 946-7372. E-mail: wanda_bartolotta@ama-assn.org. For reprint orders in limited quantities for distribution by educational organizations and for author reprints, please contact Reprints Coordinator, 515 N State St, Chicago, IL 60610. Phone: (312) 464-4594. Fax: (312) 464-4849.

PERMISSIONS—Contact Rhonda Bailey, 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.

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

SURGERY HOME PAGE—<http://www.archsurg.com>

Publication Staff

Offices: 515 N State St, Chicago, IL 60610

Editorial Processing Department

Division Director: Cheryl Iverson
Department Director: Paula Glitman
Copyediting Manager:
 Brenda Gregoline
Freelance Copyediting Manager:
 Diane L. Cannon
Freelance Copyediting Coordinators:
 Lauren B. Fischer
 Connie Manno
Editorial Systems Managers:
 Paul Frank
 Monica Mungle
Systems Programmer/Internet Specialist:
 J. D. Neff
Assistant Electronic Editing Specialist:
 Monica Mungle
Senior Copy Editor:
 Vickey Golden
Copy Editors:
 Juana N. Llorens
 Rachel Novickas
 Cheryl L. Tobey
 Rachel Bodzin Young
Editorial Assistant: Wanda Hill

Scientific Publications & Multimedia Applications

Assistant to the Editor: Helga Fritz

Scientific Online Resources

Director: Margaret Winker, MD
Electronic Media Department Director:
 Michelle Kurzynski
Associate Web Editors:
 Katherine Behar
 Erin M. Giannini
Web Office Manager: Marla A. Hall

Specialty Journal Division Office

Manager, Marketing Services:
 Geoffrey A. Flick
Assistant to the Publisher:
 Christine Hearne

Circulation & Content Marketing Division

Administrative Assistant:
 Millette Jackson-Bates

Circulation Processing Department

Director: Karen Howes
Circulation Systems Manager:
 Alfred Tomaselli
Circulation Specialists:
 Reginald Jordan
 Kathryn Osten
Assistant Application Administrator:
 Julie Burton

Circulation Development Department

Director: Bina Oza
Circulation Marketing Managers:
 Vida Damijonaitis
 Donna Goldman
 Michael McGraw
Circulation Marketing Specialist:
 Sandra Garzon

Licensing & Permissions Department

Director: Norman Frankel
Permissions: Rhonda Bailey

Production & Distribution Division

Directors: Karen Adams-Taylor,
 Paul Gasiecki, Vanessa Hayden
Managers: David Antos, Karen Branham,
 Debbie Camp, Diane Darnell,
 Karl Elvin, Betty Frigerio,
 Terri Hanley, Mary Ellen Johnston,
 Carole Piszker, Susan Price,
 Charl Richey, Carmela Ware
Production Assistant: Kristy Kambanis
Production Associates and Specialists
Advertising and Production Services:
 LaWanda Brown, Susan Chiara,
 Mary Anne Donley, Brian McCartney,
 Sarah Powell, Denise Steinhauer,
 Ellen Yoshihara
Composition: Rebecca Aiken,
 Brenda Chandler-Grayer, Amy Evers,
 Fred Furtner, Mary Ann Kuranda,
 Sandra Lopez
Database & New Media:
 Bruce McGregor (indexer),
 Clifford O. Barrett, Gail Barrett,
 Regina Brownlee, Rowena F. Dagang,
 John Marcinek, La'Son Diggs Sledge,
 Angela Smits
Distribution: Linda Alexander,
 Michelle Robinson
Graphics: Joe Amft, Noel Chaparro,
 Carolyn Hall, Maria Kowalkowski,
 Chris Meyer, JoAnne Weiskopf
Proofreading: Daniel James,
 Teresa H. Omiotek,
 Mary Kay Tinerella,
 Barbara Wojtowicz,
 Agnes A. Zarkadas

Advertising

Director, Advertising Sales:
 Peter G. Messina
AMA Classified Advertising Department:
 Thalia Moss, 800-262-2260
Advertising Office:
 J. P. Cahill & Associates
 341 S Watola Ave
 La Grange, IL 60525
 (708) 352-0322



ARCHIVES OF SURGERY

JANUARY 2002 VOLUME 137, NUMBER 1 PAGES 1-124

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.

SPECIAL ARTICLES

- Quality Care in Surgery** 13
Gerald W. Peskin, MD
- The POSSUM System of Surgical Audit** 15
Graham Paul Copeland, ChM
- The Comparative Assessment and Improvement of Quality of Surgical Care in the Department of Veterans Affairs** 20
Shukri F. Khuri, MD;
Jennifer Daley, MD;
William G. Henderson, PhD
- Quality Improvement in Cardiac Care** 28
Frederick L. Grover, MD;
Joseph C. Cleveland, Jr, MD;
Laurie W. Shroyer, PhD
- APACHE 1978-2001: The Development of a Quality Assurance System Based on Prognosis: Milestones and Personal Reflections** 37
William A. Knaus, MD
- Current Concepts in Nutritional Assessment** 42
David E. Carney, MD;
Michael M. Meguid, MD, PhD

- Outcome Report Cards: A Necessity in the Health Care Market** 46
Carol I. Ireson, RN, PhD;
Mary Ann Ford, MSN, CRRN-A;
Judith M. Hower, MS;
Richard W. Schwartz, MD, MBA

- Quality Measurement of Outcome in General Surgery Revisited: Commentary and Proposal** 52
Jeffrey H. Shuhaiber, MD

CLINICAL OBSERVATION

- Visceral Artery Pseudoaneurysms Following Pancreatoduodenectomy** 55
Eseroghene Otah, MD; Brian J. Cushin, MD;
Grigory N. Rozenblit, MD; Richard Neff, MD;
Kenneth E. Otah, MD; Avram M. Cooperman, MD

ORIGINAL ARTICLES

- To Stent or Not to Stent Bilioenteric Anastomosis After Iatrogenic Injury: A Dilemma Not Answered?** 60
Miguel Angel Mercado, MD; Carlos Chan, MD;
Héctor Orozco, MD; Gumaro Cano-Gutiérrez, MD;
Juan Manuel Chaparro, MD; Erick Galindo, MD;
Mario Vilatobá, MD; Gilberto Samaniego-Arvizu, MD

JAMA
&
ARCHIVES
JOURNALS
American Medical Association

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.

Copyright 2002 by the American Medical Association. All rights reserved.
Reproduction without permission is prohibited.

Catherine D. DeAngelis, MD, MPH
Editor in Chief, Scientific Publications
& Multimedia Applications

Nawin Gupta, PhD
Vice President, Publishing

Peter L. Payerli
Publisher

Cheryl Iverson
Managing Editor

Michael D. Maves, MD, MBA
Executive Vice President,
Chief Executive Officer

Robert A. Musacchio, PhD
Senior Vice President,
Publishing & Business Services

**Surgical Indications
in Idiopathic Splenomegaly**

John Alfred Carr, MD;
Muhammad Shurafa, MD;
Vic Velanovich, MD

Invited Critique

David W. McFadden, MD

**Prognostic Factors After
Pancreatoduodenectomy With Extended
Lymphadenectomy for Distal
Bile Duct Cancer**

Takanori Yoshida, MD;
Toshifumi Matsumoto, MD;
Atsushi Sasaki, MD; Yuji Morii, MD;
Masanori Aramaki, MD;
Seigo Kitano, MD

**Estradiol Administration Improves
Splanchnic Perfusion Following
Trauma-Hemorrhage and Sepsis**

Joachim F. Kuebler, MD;
Doraid Jarrar, MD;
Balazs Toth, MD; Kirby I. Bland, MD;
Loring Rue III, MD; Ping Wang, MD;
Irshad H. Chaudry, PhD

REVIEW

**Islet Yield Remains a Problem in Islet
Autotransplantation**

Charles P. Morrison, MRCS;
Simon A. Wemyss-Holden, FRCS;
Ashley R. Dennison, FRCS;
Guy J. Maddern, FRACS

64

68

69

74

80

ORIGINAL ARTICLES

**Use of Meperidine in Patient-Controlled
Analgesia and the Development
of a Normeperidine Toxic Reaction**

Thomas T. Simopoulos, MD; Howard S. Smith, MD;
Christine Peeters-Asdourian, MD; Donald S. Stevens, MD

**The Value of Partial Splenic
Autotransplantation in Patients With
Portal Hypertension: A Prospective
Randomized Study**

Hongwei Zhang, MD; Jisheng Chen, MD;
Gernot M. Kaiser, MD; Obetien Mapudengo, MD;
Jie Zhang, MD; Michael S. Exton, PhD;
Erwei Song, MD, PhD

**Intrahepatic Recurrences of
Hepatocellular Carcinoma After
Hepatectomy: Analysis Based
on Tumor Hemodynamics**

Masato Sakon, MD; Hiroaki Nagano, MD;
Shoji Nakamori, MD; Keizo Dono, MD;
Koji Umeshita, MD; Takamichi Murakami, MD;
Hironobu Nakamura, MD; Morito Monden, MD

**A 1-Stage Surgical Treatment for
Postherniorrhaphy Neuropathic Pain:
Triple Neurectomy and Proximal End
Implantation Without Mobilization of the Cord**

Parviz K. Amid, MD, FACS

Invited Critique

Lloyd M. Nyhus, MD

**ARCHIVES
OF
SURGERY**

Editor:

Claude H. Organ, Jr, MD
University of California–San
Francisco, East Bay
1411 E 31st St
Oakland, CA 94602
archivesofsurgery@earthlink.net

Associate Editor:

CME Section Editor:
Gerald W. Peskin, MD
Oakland, Calif

Section Editor, Operative Techniques:

Jack Pickleman, MD
Chicago, Ill

Consultant in Surgical History:

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

Web Editor:

Grace S. Rozycki, MD
Atlanta, Ga

Editorial Assistant:

Margaret M. Kosiba
Emeryville, Calif

Editorial Board

Timothy R. Billiar, MD
Pittsburgh, Pa
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
David S. Mulder, MD
Montreal, Quebec

Thomas A. Mustoe, MD
Chicago, Ill
J. Patrick O'Leary, MD
New Orleans, La
Mark L. Silen, MD, MBA
Portland, Ore
Bruce E. Stabile, MD
Torrance, Calif
Robert W. Thompson, MD
St Louis, Mo
Steven D. Wexner, MD
Fort Lauderdale, Fla
Lester F. Williams, Jr, MD
Nashville, Tenn

International Advisory Board

Licinio Angelini, MD
Rome, Italy
Leigh W. Delbridge, MD
Sydney, NSW, Australia
S. T. Fan, MB, BS, MS
Hong Kong, China
Ch. Herfarth, MD
Heidelberg, Germany

Kazutomo Inoue, MD
Kyoto, Japan
Jin-Pok Kim, MD
Seoul, Korea
Raj Mohan Nambiar, MBBS
Singapore
Hector Orozco, MD
Mexico City, Mexico
Bernard F. Ribeiro, MB, BS, FRCS
London, 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

ARCHIVES OF SURGERY

OPERATIVE TECHNIQUES

- Modified Radical Mastectomy With Knife Technique** 105
Valerie L. Staradub, MD;
Monica Morrow, MD

BOOK REVIEWS

- Minimally Invasive Abdominal Surgery** 111
David Easter, MD
- Clinical Nutrition: Parenteral Nutrition** 111
Malcolm K. Robinson, MD

SPECIAL FEATURE

- Image of the Month** 113
Juan C. Duchesne, MD;
Michele A. Mittelbronn, MD;
Lee T. Nesbitt, Jr, MD;
Eugene A. Woltering, MD

MOMENTS IN SURGICAL HISTORY

- Ferdinand Campbell Stewart's Surgical Travel Guide** 115
Ira M. Rutkow, MD, MPH, DrPH

DEPARTMENTS

- Reviewers for 2001** 9
- This Month in Archives of Surgery** 10
- Readership Poll** 14
- Surgical Anatomy** 112
- ARCHIVES CME** 116
- Calendar** 118
- Classified Advertising** 120
- Index to Advertisers** 124
- Products and Services** C3

Instructions for authors are available on our Web site: <http://www.archsurg.com>. If you do not have access to the Web, contact Margaret Kosiba at (510) 437-4940.