

# 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 Ovid Technologies, Inc.

## The Journal of the American Medical Association (JAMA)

Archives of Dermatology  
Archives of Facial Plastic Surgery  
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 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.

Official Publication of the New England Surgical Society, Pacific Coast Surgical Association, 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 \$295 in the US; \$395 in the Americas; £245 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: Subscription Department, JAMA & Archives Journals, American Medical Association, Tower House, Sovereign Park, Market Harborough, Leicestershire LE15 9EF, England. Telephone: +44 (0)1858-438880. Fax: +44 (0)1858-434958.

**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 Reprint 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:**  
Gwen Chaffen  
Connie Manno  
**Electronic Editing Specialist:**  
Paul Frank  
**Assistant Electronic Editing Specialist:**  
Monica Mungle  
**Senior Copy Editors:**  
Erin M. Giannini  
Vickey Golden  
**Copy Editors:**  
Lauren B. Fischer  
Juana N. Llorens  
Rachel Novickas  
**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  
**Web Development Editor:** Keith Huff  
**Assistant Editor:** Nikhil Torsekar  
**Web Copy Editor:** Erin M. Giannini  
**Staff Assistant:** Marla A. Hall  
**Editorial Assistant:** Gemma Wall

### Production & Distribution Division

**Director:** Vanessa Hayden  
**Manager, Journal Manufacturing:**  
Diane Darnell  
**Journal Manufacturing Analyst:**  
Nona Malchin  
**Office Manager:** Karen Branham

**Advertising & Production  
Department**

**Production Specialist:** Terri Hanley  
**Print Production Analyst:** Carole Piszker  
**Manager, Advertising Services:**  
Carmela Ware  
**Manager, Production Services:**  
Susan Price  
**Supervisor, Production Services:**  
Betty Frigerio  
**Production Associates:**  
Mary Anne Donley  
Sarah Powell  
Denise Steinhauer  
Jo Anne Turner  
**Production Assistant:**  
Susan Chiara

### Distribution

**Distribution Manager:** Paul Gasiecki  
**Distribution Analyst:**  
Michelle Robinson

### Advertising

**National Sales Manager:**  
Peter G. Messina  
**AMA Classified Advertising Department:**  
Thalia Moss, 800-262-2260.



### 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:** Robert Herling  
**Subscriber Services Manager:**  
Susan Stoken  
**Circulation Systems Manager:**  
Alfred Tomaselli  
**Circulation Specialists:**  
Reginald Jordan  
Kathryn Osten

### Circulation Development Department

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

### Licensing & Permissions Department

**Director:** Norman Frankel  
**Permissions:** Rhonda Bailey

### Electronic Production Department

**Director:** Karen Adams-Taylor  
**Manager, Composition:** Karl Elvin  
**Electronic Production Specialists:**  
Rebecca Aiken  
Brenda Chandler-Grayner  
Amy Evers  
Fred Furtner  
Mary Ann Kuranda  
Sandra Lopez  
**Manager, Graphics:** Charl Richey  
**Electronic Imaging Specialists:**  
Joe Amft  
Noel Chaparro  
Carolyn Hall  
Maria Kowalkowski  
Chris Meyer  
JoAnne Weiskopf  
**Manager, Proofreading:**  
David Antos  
**Proofreaders:**  
Daniel James  
Teresa H. Omiolek  
Mary Kay Tinerella  
Barbara Wojtowicz  
Agnes A. Zarkadas  
**Manager, Database & New Media:**  
Mary Ellen Johnston  
**Indexer:** Bruce McGregor  
**New Media Specialists:**  
Clifford O. Barrett  
Gail Barrett  
Joel Brammeier  
Regina Brownlee  
La'son J. Diggs  
Melanie Parenti  
Angela Smits  
**Production Assistant:** Ruth Sprague

**Advertising Office:**  
J. P. Cahill & Associates,  
341 S Waiola Ave, La Grange,  
IL 60525 (708) 352-0322.

# ARCHIVES OF SURGERY

SEPTEMBER 2000 VOLUME 135, NUMBER 9 PAGES 1001-1128

## 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.

### EDITORIAL

**Archives Express** 1015  
*Claude H. Organ, Jr, MD*

ARCHIVES EXPRESS

### PAPERS

**Prolonged Cold Ischemia Time Obviates the Benefits of 0 HLA Mismatches in Renal Transplantation** 1016  
*Crystine M. Lee, MD;*  
*Jonathan T. Carter;*  
*Edward J. Alfrey, MD;*  
*Nancy L. Ascher, MD, PhD;*  
*John P. Roberts, MD;*  
*Chris E. Freise, MD*

**The Spectrum and Cost of Complicated Gallstone Disease in California** 1021  
*Robert E. Glasgow, MD;*  
*Michael Cho;*  
*Matthew M. Hutter, MD;*  
*Sean J. Mulvihill, MD*

**Invited Critique** 1027  
*Jack Pickleman, MD*

**Laparoscopic Roux-en-Y Gastric Bypass for Morbid Obesity: Technique and Preliminary Results of Our First 400 Patients** 1029  
*Kelvin D. Higa, MD;*  
*Keith B. Boone, MD;*  
*Tienchin Ho, MD;*  
*Orland G. Davies, MD*

**Transplantation of Adult Living Donor Kidneys Into Infants and Small Children** 1035  
*Patrick J. Healey, MD;*  
*Ruth McDonald, MD;*  
*John H. T. Waldhausen, MD;*  
*Robert Sawin, MD;*  
*David Tapper, MD*

**Anticoagulation of Children Undergoing Cardiopulmonary Bypass Is Overestimated by Current Monitoring Techniques** 1042  
*John T. Owings, MD;*  
*Marc E. Pollock, MD;*  
*Robert C. Gosselin, MT;*  
*Kevin Ireland, RN, CCP;*  
*Jonathan S. Jahr, MD;*  
*Edward C. Larkin, MD*

American Medical Association

Physicians dedicated to the health of America



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

**Robert L. Kennett**  
Vice President, Publishing

**Peter L. Payerli**  
Publisher

**E. Ratcliffe Anderson, Jr, MD**  
Executive Vice President,  
Chief Executive Officer

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

Copyright 2000 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.

**Simplified Admission Criterion  
for Predicting Severe Complications  
of Gallstone Pancreatitis**

Kelly Meek, MD;  
Katayoun Toosie, MD;  
Bruce E. Stabile, MD;  
Magdi Elbassir, MD;  
Zuri Murrell, MD;  
Roger J. Lewis, MD, PhD;  
Lin Chang, MD;  
Christian de Virgilio, MD

**Effect of an Esophageal Bougie  
on the Incidence of Dysphagia Following  
Nissen Fundoplication: A Prospective,  
Blinded, Randomized Clinical Trial**

Emma J. Patterson, MD;  
Daniel M. Herron, MD;  
Paul D. Hansen, MD;  
Najib Ramzi, MSc;  
Blayne A. Standage, MD;  
Lee L. Swanström, MD

**A 100% 2-Year Graft Survival Can Be  
Attained in High-Risk 15-kg or Smaller  
Infant Recipients of Kidney Allografts**

Maria T. Millan, MD;  
Minnie M. Sarwal, MD, PhD;  
Kevin V. Lemley, MD, PhD;  
Peter Yorgin, MD;  
Pamela Orlandi, RN;  
Samuel So, MD;  
Steven Alexander, MD;  
Oscar Salvatierra, Jr, MD

1048

**Primary Duodenal Adenocarcinoma:  
A 40-Year Experience**

Nova M. Ryder, MD;  
Clifford Y. Ko, MD;  
Oscar J. Hines, MD;  
Beat Gloor, MD;  
Howard A. Reber, MD

1070

1055

**Cinematic Nuclear Scintigraphy Reliably  
Directs Surgical Intervention for  
Patients With Gastrointestinal Bleeding**

Brian B. O'Neill, MD; Jessica E. Gosnell, MD;  
Robert J. Lull, MD; William P. Schecter, MD;  
Johannes Koch, MD;  
Robert A. Halvorsen, MD;  
Hobart W. Harris, MD, MPH

1076

1063

**Is Specimen Mammography Beneficial?**

David N. Bimston, MD;  
Gregory G. Bebb, MD;  
Lawrence D. Wagman, MD

1083

**Invited Critique**

Douglas Reintgen, MD

1089

**Patterns of Recurrence  
in Anal Canal Carcinoma**

Moshe Faynsod, MD;  
Hernan I. Vargas, MD;  
Jorge Tolmos, MD;  
Vikram M. Udani;  
Sunil Dave; Tracey Arnell, MD;  
Bruce E. Stabile, MD;  
Michael J. Stamos, MD

1090

**ARCHIVES**  
OF  
**SURGERY**

*Editor:*

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

*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  
**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  
**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  
**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  
**Bernard I. 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

**INVITED LECTURE**

- Medical Education and Practice: End of Century Reflections** 1096  
*Haile T. Debas, MD*

**PAPER**

- Selective Lymphoscintigraphy: A Necessary Adjunct to Dye-Directed Sentinel Node Biopsy for Breast Cancer?** 1101  
*J. Michael Guenther, MD;*  
*J. Craig Collins, MD;*  
*George Barnes, Jr, MD;*  
*Theodore X. O'Connell, MD*

**ORIGINAL ARTICLE**

- Long-term Metabolic Results After Pancreatic Resection for Severe Chronic Pancreatitis** 1106  
*Thierry Berney, MD, MSc;*  
*Tatiana Rüdüsühli, MD;*  
*José Oberholzer, MD;*  
*Aileen Caulfield, MD;*  
*Philippe Morel, MD*

**CLINICAL OBSERVATION**

- Handheld Gamma Probe Localization of Accessory Splenic Tissue in Recurrent Idiopathic Thrombocytopenic Purpura** 1112  
*David T. Finkelde, MBBS, FRACS;*  
*Rodney J. Hicks, MD, FRACP;*  
*Max Wolf, MBBS, FRCPA, FRACP;*  
*Michael A. Henderson, MD, FRACS*

**CORRESPONDENCE AND BRIEF COMMUNICATIONS**

- Inadequate Proof of Adverse Outcome Due to the Use of Fluconazole in Critically Ill Patients** 1114  
*Stijn I. Blot, RN, MA; Eric A. Hoste, MD;*  
*Koenraad H. Vandewoude, MD;*  
*Francis A. Colardyn, MD*

- In Reply** 1114  
*Thomas R. Rocco, MD; H. Hank Simms, MD*

- Comment on Surgical Anatomy** 1115  
*John E. Skandalakis, MD, PhD*

**SURGICAL REMINISCENCES**

- Good Cheer! Surgical Memoirs** 1116  
*Robb H. Rutledge, MD*

**MOMENTS IN SURGICAL HISTORY**

- Trephination: How Did They Do It?** 1119  
*Ira M. Rutkow, MD, MPH, DrPH*

**DEPARTMENTS**

- Surgical Anatomy** 1105  
**ARCHIVES CME** 1121  
**Classified Advertising** 1123  
**Index to Advertisers** 1128

**Instructions for Authors—**  
See January 2000 issue, page 100, or visit the Web site at <http://www.archsurg.com>.

**About the Cover**

Presidential Address, Society of University Surgeons, February 13, 1958. *Surgery*. 1958;44:1.