

PAPERS READ BEFORE THE 97TH ANNUAL MEETING OF THE WESTERN SURGICAL ASSOCIATION, ST LOUIS, MO, NOVEMBER 14 TO NOVEMBER 15, 1989—PART II

- Duodenal Villous Tumors** 961
 Kevin J. Bjork, MD; Chad J. Davis, MD; David M. Nagorney, MD; Peter Mucha, Jr, MD, Rochester, Minn
 • Villous tumors of the duodenum without invasive cancer can be successfully managed by submucosal excision or segmental resection; invasive cancer mandates radical resection.
- Invited Commentary:** Robert E. Hermann, MD, Cleveland, Ohio
- Clinical Use of 24-Hour Gastric pH Monitoring vs O-diisopropyl Iminodiacetic Acid (DISIDA) Scanning in the Diagnosis of Pathologic Duodenogastric Reflux** 966
 Hubert J. Stein, MD; Ronald A. Hinder, MD, PhD; Tom R. DeMeester, MD; Beth-Anne Lloyd, MD; Karl H. Fuchs, MD; Stephen E. A. Attwood, MD; Naresh C. Gupta, MD, Omaha, Neb
 • Twenty-four hour pH monitoring is superior to DISIDA scanning in identifying duodenogastric reflux as a cause of foregut symptoms.
- Gastrointestinal Lymphoma: A Case for Primary Surgical Resection** 972
 Mark S. Talamonti, MD; Lillian G. Dawes, MD; Raymond J. Joehi, MD; David L. Nahrwold, MD, Chicago, Ill
 • Surgical resection of gastrointestinal lymphomas is recommended when tumor excision is feasible and the patient is a reasonable risk.
- Invited Commentary:** Edward M. Copeland III, MD, Gainesville, Fla
- Current Diagnosis and Treatment of Pheochromocytoma in Children** 978
 Michael G. Caty, MD; Arnold G. Coran, MD; Michael Geagen; Norman W. Thompson, MD, Ann Arbor, Mich
 • In children with pheochromocytoma, MIBG scan provides accurate localization of adrenal and extra-adrenal tumors.
- Unilateral Neck Exploration for Primary Hyperparathyroidism** 982
 Robert J. Lucas, MD; Robert J. Welsh, MD; John L. Glover, MD, Royal Oak, Mich
 • Unilateral exploration is recommended based on preoperative ultrasound localization when primary hyperparathyroidism is due to a single adenoma.
- Invited Commentary:** Chiu-an Wang, MD, Boston, Mass
- Perioperative Stroke Risk in 173 Consecutive Patients With a Past History of Stroke** 986
 Jeffrey Landercasper, MD; Barbara J. Merz, MD; Thomas H. Cogbill, MD; Pamela J. Strutt, RN; Richard H. Cochrane, MD; Richard A. Olson, MD; Richard D. Hutter, MD, La Crosse, Wis
 • Cerebral infarction, unlike myocardial infarction, is not dependent on time lapse from the previous infarct.
- Single-Lumen vs Double-Lumen Catheters for Total Parenteral Nutrition: A Randomized, Prospective Trial** 990
 Beverly H. Johnson, RN, Eric B. Rypins, MD, Long Beach, Calif
 • Strict limitations on nonnutritional use of double-lumen TPN catheters resulted in infection rates indistinguishable from that in single-lumen catheters.
- A Comparative Study of Intraoperative Angioscopy and Completion Arteriography Following Femorodistal Bypass** 997
 B. Timothy Baxter, MD; Robert J. Rizzo, MD; William R. Flinn, MD; Carol N. Almgren; Walter J. McCarthy, MD; William H. Pearce, MD; James S. T. Yao, MD, PhD, Chicago, Ill
 • Angioscopy was more accurate than completion arteriography in this study but offered minimal information on graft patency distally or use of antithrombotic therapy.
- Initial Trial of Argon Ion Laser Endarterectomy for Peripheral Vascular Disease** 1007
 John Eugene, MD; Richard A. Ott, MD; Yvon Baribeau, MD; Stephen J. McColgan, MD; Michael W. Berns, PhD; G. Robert Mason, MD, PhD, Irvine, Calif
 • Laser endarterectomy has a patency of 88% at one year; indications for its use need clearer definition.

The ARCHIVES OF SURGERY (ISSN 0004-0010) is published monthly by the American Medical Association, 535 N Dearborn St, Chicago, IL 60610, and is an official publication of the Association. Second-class postage paid at Chicago, IL 60610, and at additional mailing office.

SUBSCRIPTION RATES—The subscription rates for the ARCHIVES OF SURGERY are as follows: \$56 for one year, \$97 for two years in the United States and US possessions; all other countries, one year, \$66; two years, \$117 for surface delivery. For expedited air delivery to most countries, add \$15 surcharge for one year subscription, \$30 for two years. (Rates for subscriptions for delivery to Japan or South Korea are available through exclusive agents—contact the publisher.) **Special rates for residents and medical students in the United States and US possessions are available.** Address inquiries to the American Medical Association, Circulation

and Fulfillment Division, 535 N Dearborn St, Chicago, IL 60610. Phone: (312)280-7168.

CHANGE OF ADDRESS—POSTMASTER, send all address changes to the ARCHIVES OF SURGERY, Attention: Subscription Department, 535 N Dearborn St, Chicago, IL 60610. Notification of address change must be made at least six weeks in advance, include both old and new addresses, a recent mailing label, and your new zip code.

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.

CONTENTS—Continued

Intraoperative Autotransfusion in Vascular Surgery **1012**
 Daniel J. Reddy, MD; C. J. Ryan, MD; Alexander D. Shepard, MD; Christine C. Johnson, PhD;
 Joseph P. Elliott, Jr, MD; Roger F. Smith, MD; Calvin B. Ernst, MD, Detroit, Mich
 • Use of autotransfusion in more than 300 patients appeared to be safe and reduced use of bank blood by up to 40%.

Complex Hemangiomas of Infants and Children: Individualized Management in 22 Cases **1017**
 Thomas R. Weber, MD; Robert H. Connors, MD; Thomas F. Tracy, Jr, MD; Patrick V. Bailey, MD, St Louis, Mo
 • Life-threatening hemangiomas can be successfully managed with individualization employing a variety of techniques.

Intra-arterial Floxuridine vs Systemic Fluorouracil for Hepatic Metastases From Colorectal Cancer: A Randomized Trial **1022**
 J. Kirk Martin, Jr, MD; Michael J. O'Connell, MD; Harry S. Wieand, PhD, Rochester, Minn; Robert J. Fitzgibbons, Jr, MD,
 James A. Mailliard, MD, Omaha, Neb; Joseph Rubin, MD, David M. Nagorney, MD, Rochester, Minn;
 Loren K. Tschetter, MD, Sioux Falls, SD; James E. Krook, MD, Duluth, Minn
 • Intra-arterial FUDR cannot be recommended for metastatic colorectal cancer to the liver.

Iatrogenic Injury to the Bile Duct: Who, How, Where? **1028**
 A. R. Moossa, MD, FRCS; A. David Mayer, MS, FRCS; Bruce Stabile, MD, La Jolla, Calif
 • Iatrogenic bile duct injuries continue because of small incisions, inadequate assistance, and lack of intraoperative cholangiography.

Pancreatitis After Endoscopic Retrograde Cholangiopancreatography **1032**
 Russell Stanten, MD, Charles F. Frey, MD, Davis, Calif
 • There was a 12.5% mortality in 24 patients with this iatrogenic disease.

Invited Commentary: Andrew L. Warshaw, MD, Boston, Mass

ORIGINAL ARTICLES

Clinical Assessment of Hemodynamic Values in Two Surgical Intensive Care Units: Effects on Therapy **1036**
 Giovanni Celoria, MD, Jay S. Steingrub, MD, Springfield, Mass; Maureen Vickers-Lahti, MBBS, Amherst, Mass;
 Daniel J. Dolson, MD, Springfield, Mass; Keith L. Stein, MD, Mitchell Fink, MD, Worcester, Mass; Paul Friedmann, MD, Springfield, Mass
 • Hemodynamic variables obtained from pulmonary artery catheterization improve the accuracy of bedside evaluation and lead to therapy alterations.

Oral Glutamine Accelerates Healing of the Small Intestine and Improves Outcome After Whole Abdominal Radiation **1040**
 V. Suzanne Klimberg, MD; Rabih M. Salloum, MD; Michael Kasper, MD; Donald A. Plumley, MD;
 David J. Dolson, MD; R. Dean Hautamaki, MD; William R. Mendenhall, MD; Frank C. Bova, PhD;
 Kirby I. Bland, MD; Edward M. Copeland III, MD; Wiley W. Souba, MD, ScD, Gainesville, Fla
 • Oral glutamine administration following abdominal radiation supports gut glutamine metabolism, improves mucosal morphometrics, and decreases morbidity and mortality associated with this abdominal radiation model.

Invited Commentary: Patrick L. Twomey, MD, Martinez, Calif

Massive Screening for Colorectal Cancer: A Single Institution's Public Commitment **1049**
 Nicholas J. Petrelli, MD; Michael Palmer, MD; Arthur Michalek, PhD; Lemuel Herrera, MD;
 Irving Mink, MS; Gayle Bersani, RN; K. Michael Cummings, PhD, Buffalo, NY
 • Three public screening programs by a single institution for colorectal lesions reveal that the results are reproducible in detecting premalignant polyps and cancer.

Invited Commentary: Ira J. Kodner, MD, St Louis, Mo

A New Method of Angiographic Runoff Evaluation in Femorodistal Reconstructions **1055**
 Sadettin Karacagil, MD; Bo Almgren, MD; Staffan Bowald, MD, PhD; Ingvar Eriksson, MD, PhD, Uppsala, Sweden
 • In patients undergoing femorodistal bypass, intraoperative postreconstruction angiography is the best indication of primary and secondary pedal arch integrity.

Sclerosing Cholangitis Induced by Formaldehyde Solution Injected Into the Biliary Tree of Rats **1059**
 Sidney Houry, MD, Paris, France; Odille Languille, MD, Clamart, France; Michel Huguier, MD, Paris, France;
 Jean-Pierre Benhamou, MD, Jacques Belghiti, MD, Clichy, France; Simon Msika, MD, Paris, France
 • The deleterious effect of sclerosing solutions on the biliary epithelium is due to their causticity; the intracystic injection of 2% formaldehyde should be abandoned.

Cardiovascular and Neurohumoral Responses Following Burn Injury **1065**
 Ralph L. Crum, MD; William Dominic, MD; John F. Hansbrough, MD; Steven R. Shackford, MD; Marvin R. Brown, MD, San Diego, Calif
 • Extreme elevations of plasma vasopressin contribute to the vascular complications of increased systemic vascular resistance and decreased cardiac output observed following burn injury.

Protective Effect of Recombinant Human Granulocyte Colony-Stimulating Factor Against Pneumococcal Infections in Splenectomized Mice **1075**
 James C. Hebert, MD; Michael O'Reilly; Richard L. Gamelli, MD, Burlington, Vt
 • Recombinant human granulocyte colony-stimulating factor may be a useful adjuvant for treating infections in individuals with immunologic dysfunctions other than neutropenia.

REGULAR DEPARTMENTS

Books **1079** **Classified Advertising** **1082**
Instructions for Authors **1073** **Index to Advertisers** **993**