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# ARCHIVES

OF

# Surgery

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No. 6

JUNE 1991

**PAPERS READ BEFORE THE 71ST ANNUAL MEETING  
OF THE NEW ENGLAND SURGICAL SOCIETY,  
NEWPORT, RI, SEPTEMBER 14 TO 16, 1990**

## PRESIDENTIAL ADDRESS

### Who Is Responsible for Progress?

677

John F. Burke, MD, Boston, Mass

## PAPERS

### Donor Limb Vascular Events Following Femoro-Femoral Bypass Surgery

681

A Veterans Affairs Cooperative Study, Boston, Mass

- Most donor limb symptoms of claudication were masked arterial insufficiency present in the limb and became apparent as the recipient limb improved.

### Patterns of Venous Insufficiency in Patients With Varicose Veins

687

Lawrence M. Hanrahan, MD; Gregory J. Kechejian, MD;  
Paul R. Cordts, MD; Agustin A. Rodriguez, MD;  
Clifford A. Araki, PhD; Wayne W. LaMorte, MD, PhD;  
James O. Menzoian, MD, Boston, Mass

- The pathologic appearance of varicose veins is heterogeneous; surgical therapy should be directed at the specific pattern of incompetence.

### An Extensive Experience With Postoperative Pain Relief Using Postoperative Fentanyl Infusion

692

Bruce B. Chien, MD; Richard G. Burke, MD;  
Dana J. Hunter, RPh, Bangor, Me

- This technique of postoperative pain control is safe and provides excellent results.

### A Pilot Study of Sphincter-Sparing Management of Adenocarcinoma of the Rectum

696

Glenn Steele, Jr, MD, PhD; Paul Busse, MD, PhD;  
Mark S. Huberman, MD; Jean M. LeClair, RN;  
Z. Myron Falchuk, MD; Robert J. Mayer, MD;  
Albert Bothe, Jr, MD, Boston, Mass;  
Thanjavur S. Ravikumar, MD, New Haven, Conn;  
Michael Stone, MD; J. Milburn Jessup, MD, Boston, Mass

- Resection of distal rectal adenocarcinoma with sphincter preservation, and adjuvant therapy when appropriate, achieved local and distal control equal to abdominoperineal resection.

**Invited Commentary:** L. Peter Fielding, MB, FRCS, Waterbury, Conn

*Continued on page 667.*

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# ARCHIVES

## Prognosis After Initial Recurrence of Cutaneous Melanoma

703

Jay S. Markowitz, MD; Lisa A. Cosimi;  
Robert W. Carey, MD; Sewon Kang, MD;  
Catherine Padyk, MBA; Arthur J. Sober, MD;  
A. Benedict Cosimi, MD, Boston, Mass

- Anatomic site, thickness, pathologic type, and disease-free interval were unrelated to survival; significant factors included site of initial metastases, stage of disease, and completeness of initial therapy.

## Transesophageal Echocardiography: Preliminary Results in Patients With Traumatic Aortic Rupture

711

Michael B. Sparks, MD; Kenneth W. Burchard, MD;  
Charles A. S. Marrin, MB; Christian H. G. Bean, MD;  
William C. Nugent, Jr, MD; Jonathan F. Plehn, MD, Hanover, NH

- Transesophageal echocardiography is a useful diagnostic technique in rupture of the descending aorta.

## Sequential Interleukin 2 and Interleukin 2 Receptor Levels Distinguish Rejection From Cyclosporine Toxicity in Liver Allograft Recipients

717

Mary Ann Simpson, MD; Tonia M. Young-Fadok, MD;  
Peter N. Madras, MD; Richard B. Freeman, MD;  
Roy A. Dempsey, PhD; David Shaffer, MD;  
David Lewis, MD; Roger L. Jenkins, MD;  
Anthony P. Monaco, MD, Boston, Mass

- Serial measurements of interleukin 2 levels provide a reliable assessment of the immunologic status of the allograft.  
**Invited Commentary:** Jeremiah G. Turcotte, Ann Arbor, Mich

## A Flexible Approach to Infrapopliteal Vein Grafts in Patients With Diabetes Mellitus

724

Frank B. Pomposelli, Jr, MD; Stephen J. Jepsen, MD;  
Gary W. Gibbons, MD; David R. Campbell, MD;  
Dorothy V. Freeman, MD; Barbara M. Gaughan, RN;  
Arnold Miller, MD; Frank W. LoGerfo, MD, Boston, Mass

- There were no significant differences in patency on the basis of in situ and ex situ vein grafts (93.2% vs 89.7%) or on the basis of inflow site.

## Mammographic Localization and Biopsy of Nonpalpable Breast Lesions: A 5-Year Study

730

William R. Thompson, MD; J. Robert Bowen, MD;  
Brian A. Dorman, MD; Victor E. Pricolo, MD;  
Thomas K. Shahinian, MD;  
Clarence H. Soderberg, Jr, MD, Providence, RI

- A malignancy rate of 24% was achieved with needle localization of nonpalpable mammographically detected breast lesions; the malignancy rate rose sharply from the fourth to the fifth decade of life.

## Biliary Patency Imaging After Endoscopic Retrograde Sphincterotomy With Gallbladder In Situ: Clinical Impact of Nonvisualization

738

Ryan F. Holbrook, MD; Francine L. Jacobson, MD, MPH;  
Roger T. Pezzuti, MD; Douglas A. Howell, MD, Portland, Ore

- Nonvisualization HIDA scans after ERS have no clinical significance in patients with cholelithiasis but predict the need for cholecystectomy.

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# ARCHIVES

## ORIGINAL ARTICLES

### Monitoring Functional Patency of Percutaneous Transluminal Angioplasty 743

Edward V. Kinney, MD; Dennis F. Bandyk, MD;  
Mark W. Mewissen, MD; Debra Lanza, RN;  
Thomas M. Bergamini, MD; Elliot O. Lipchik, MD;  
Gary R. Seabrook, MD; Jonathan B. Towne, MD, Milwaukee, Wis

- When the degree of residual stenosis is severe (>50%), further restenosis and clinical failure is predicted; with a residual restenosis of <50%, the success rate was 80% at 2 years.

### Primary Resection and Anastomosis in Obstructed Descending Colon due to Cancer 748

S. G. Tan, MBBS, FRCS(Glasg); R. Nambiar, MBBS, FRCS, FRCS(Edin), FRACS;  
A. Rauff, MBBS, MS, FRCS; S. S. Ngoi, MBBS, FRCS(Edin);  
H. S. Goh, BSc(Hons), MBBS, FRCS, Singapore

- Intraoperative bowel irrigation permits one-stage resection and anastomosis with safety.

### High Rate of Portal Thrombosis After Splenectomy in Patients With Esophageal Varices and Idiopathic Portal Hypertension 752

Akira Eguchi, MD; Makoto Hashizume, MD;  
Seigo Kitano, MD; Kazuo Tanoue, MD;  
Hiroya Wada, MD; Keizo Sugimachi, MD, Fukuoka, Japan

- Decreased portal blood flow is closely linked to portal thrombosis after splenectomy in patients with IPH.

### Barrier Efficiency of Surgical Gowns: Are We Really Protected From Our Patients' Pathogens? 756

Jeffrey W. Smith, MS, MPH,  
Ronald Lee Nichols, MS, MD, New Orleans, La

- Only surgical gowns with impervious plastic reinforcement offer complete protection.  
**Invited Commentary:** Gordon L. Telford, MD,  
Edward J. Quebbeman, MD, PhD, Milwaukee, Wis

### Timing of Invasive Procedures in Therapy for Primary and Secondary Spontaneous Pneumothorax 764

Ronald Andreas Schoenenberger, MD;  
Walter Emil Haefeli, MD; Philipp Weiss, MD;  
Rudolf Fritz Ritz, MD, Basel, Switzerland

- The early use of invasive procedures is advocated for spontaneous pneumothorax after 48 hours of persistent gas leak to minimize hospital stay and reduce recurrence rate.  
**Invited Commentary:** D. Demetriades, MD, PhD, Johannesburg, South Africa

### Liver Viability After Ischemia-Reperfusion 767

Agustin A. Rodriguez, MD; Wayne W. LaMorte, MD, PhD;  
Lawrence M. Hanrahan, MD; Susan R. Hopkins;  
J. Conor O'Keane, MD; Riad Cachecho, MD;  
Erwin F. Hirsch, MD, Boston, Mass

- Reperfusion of the ischemic liver in rats can result in a significant degree of irreversible damage; biochemical and morphologic markers are useful in studying cell injury following ischemia and reperfusion.

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**Effect of Bile on Growth, Peritoneal Absorption, and Blood Clearance of *Escherichia coli* in *E coli* Peritonitis** 773

Roland Andersson, MD, PhD; Claes Schalén, MD, PhD; Karl-Göran Tranberg, MD, PhD, Lund, Sweden

- The noxious effect of bile in *E coli* peritonitis is enhanced by impaired peritoneal absorption of bacteria and impaired local host defense.

**Lateral Thoracotomy for the Automatic Implantable Defibrillator** 778

A. David Slater, MD; Igor Singer, MD; Christodulos Stavens, MD; Michael J. Springer, MD; Laman A. Gray, Jr, MD, Louisville, Ky

- A muscle-sparing lateral thoracotomy is favored for automatic implantable cardioverter defibrillator insertion, particularly if there has been a previous intrapericardial procedure.

## CLINICAL NOTES

**Recurrent Spontaneous Intrahepatic Hemorrhage From Peliosis Hepatis** 782

Sharon R. Hayward, MD; Charles E. Lucas, MD; Anna M. Ledgerwood, MD, Detroit, Mich

**Angelchik Prosthesis Complicates Treatment of Adenocarcinoma in Barrett's Esophagus** 784

J. David Richardson, MD, Louisville, Ky  
Invited Commentary: David L. Nahrwold, MD, Chicago, Ill

**Myointimal Hyperplasia as a Result of Balloon-Catheter Thromboembolectomy** 786

Mark A. McGurrin, MD, Tampa, Fla; John L. Driscoll, MD, Bay Pines, Fla; Kenneth B. Seifert, MD, Stephen G. Brantley, MD, Tampa, Fla; F. Joseph Dagher, MD, Bay Pines, Fla; William M. Blackshear, Jr, MD, Tampa, Fla

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