

CONTENTS

EDITORIAL VIEWS

- Lipid Solubility, Pharmacokinetics, and the EEG: Are You Better Off Today Than You Were Four Years Ago? 221
Carl C. Hug, Jr.
- The Health of Operating Room Personnel. 226
Richard I. Mazze and John H. Lecky
- The Assessment of Diaphragmatic Contractility. 229
P. T. Macklem
- New Dimensions of the Respiratory System. 230
Kai Rehder, Peter D. Cameron, and Sebastian Krayer

ORIGINAL ARTICLES

- EEG Quantitation of Narcotic Effect: The Comparative Pharmacodynamics of Fentanyl and Alfentanil. 234
James C. Scott, Katherine V. Ponganis, and Donald R. Stanski
- Effects of Aminophylline on Diaphragmatic Dysfunction after Upper Abdominal Surgery. 242
B. Dureuil, J. M. Desmots, B. Mankikian, and P. Prokocimer
- Functional Residual Capacity, Thoracoabdominal Dimensions, and Central Blood Volume during General Anesthesia with Muscle Paralysis and Mechanical Ventilation. 247
G. Hedenstierna, Å. Strandberg, B. Brismar, H. Lundquist, L. Svensson, and L. Tokics
- Inhibition and Stimulation of Enflurane Metabolism in the Rat Following a Single Dose or Chronic Administration of Ethanol. 255
Eugene J. Pantuck, Carol B. Pantuck, Dene E. Ryan, and Allan H. Conney
- Continuous-plus-on-demand Epidural Infusion of Morphine for Postoperative Pain Relief by Means of a Small, Externally Worn Infusion Device. 263
J. Chrubasik and K. Wiemers
- The Response of the Feline Cerebral Circulation to PaCO₂ during Anesthesia with Isoflurane and Halothane and during Sedation with Nitrous Oxide. 268
John C. Drummond and Michael M. Todd

(Continued on page 5)

CONTENTS

(Continued from page 3)

- Helium Retards Endotracheal Tube Fires from Carbon Dioxide Lasers. 274
Annette G. Pashayan and Joachim S. Gravenstein
- Left Ventricular Performance Monitored by Radionuclide Cardiography during Induction of Anesthesia. 278
Bent Chraemmer-Jørgensen, Poul Flemming Høilund-Carlsen, Jens Marving, and Jan Fog Pedersen
- Pulmonary and Systemic Hemodynamic Responses to Ketamine in Infants with Normal and Elevated Pulmonary Vascular Resistance. 287
Paul R. Hickey, Dolly D. Hansen, G. Mark Cramolini, Robert N. Vincent, and Peter Lang
- Effects of Epidural Anesthesia on Catecholamines, Renin Activity, and Vasopressin Changes Induced by Tilt in Elderly Men. 294
Claude Ecoffey, Alain Edouard, Wojcich Pruszczyński, Evelyne Taly, and Kamran Samii
- High-frequency Small-volume Ventilation in Anesthetized Humans. 298
Matthew Crawford and Kai Rehder
- Mutagenicity of Inhaled Anesthetics in *Drosophila melanogaster*. 305
Yashdev R. Kundomal and Jeffrey M. Baden

REVIEW ARTICLE

- Midazolam: Pharmacology and Uses. 310
J. G. Reves, Robert J. Fragen, H. Ronald Vinik, and David J. Greenblatt

SPECIAL ARTICLES

- Health Experiences of Operating Room Personnel. 325
Julie E. Buring, Charles H. Hennekens, Sherry L. Mayrent, Bernard Rosner, E. Robert Greenberg, and Theodore Colton
- Robert Liston's Letter to Dr. Francis Boott: Its Reappearance after 135 Years. 331
Richard H. Ellis

LABORATORY REPORTS

- MAC for Halothane, Enflurane, and Isoflurane in the New Zealand White Rabbit: And a Test for the Validity of MAC Determinations. 336
John C. Drummond

(Continued on page 7)

CONTENTS

(Continued from page 5)

- Halothane, Isoflurane, and Enflurane MAC in Pregnant and Nonpregnant Female and Male Mice and Rats. 339
Richard I. Mazze, Susan A. Rice, and Jeffrey M. Baden

- Effects of Peripheral Vasoconstriction on the Blood Pressure in the Finger, Measured Continuously by a New Noninvasive Method (The Finapres®). 342
J. C. Dorlas, J. A. Nijboer, W. T. Butijn, G. M. A. van der Hoeven, J. J. Settels, and K. H. Wesseling

CLINICAL REPORTS

- The Hemodynamic Effects of Nimodipine in Patients Anesthetized for Cerebral Aneurysm Clipping. 346
Edward H. Stullken, Jr., Francis J. Balestrieri, Donald S. Prough, and J. M. McWhorter

- Epidural Blockade for Cesarean Section Comparing Lidocaine Hydrocarbonate and Lidocaine Hydrochloride. 348
Colm P. Cole, Graham H. McMorland, James E. Axelson, and Leonard C. Jenkins

- Preanesthetic Evaluation of a Patient with Pathologic Q Waves Following Subarachnoid Hemorrhage. 351
Jon C. White, Stephen D. Parker, and Mark C. Rogers

- Intraoperative Defibrillator Failure. 354
G. Bashein and Donald B. Williams

- A New Pressure-sensitive Laryngoscope. 356
Gabor B. Racz and Forrest B. Allen

- Intrathecal Morphine Tolerance: Use of Intrathecal Clonidine, DADLE, and Intraventricular Morphine. 358
Dennis W. Coombs, Richard L. Saunders, Daniel Lachance, Seddon Savage, Thorir S. Ragnarsson, and Lawrence E. Jensen

- Extracorporeal Circulation in a Patient with Heparin-induced Thrombocytopenia. 363
Jill Palmer Smith, Joseph T. Walls, Mary S. Muscato, E. Scott McCord, Eugene R. Worth, Jack J. Curtis, and Donald Silver

- Cardiac Dysrhythmias Associated with Chemical Peeling with Phenol. 366
Mark A. Warner and James V. Harper

(Continued on page 9)

CONTENTS

(Continued from page 7)

CORRESPONDENCE

- Coronary Artery Spasm and ST-Segment Depression. 368
Andre M. De Wolf and Yoo Goo Kang
- A Manometer to Measure Demand Valve Reference Pressure. 369
Michael J. Banner and Philip G. Boysen
- Technique of Avoiding Esophageal Burns. 370
F. Robert Weis, Jr., and Roger E. Kaiser
- Delayed Onset of Laryngospasm-induced Pulmonary Edema in an Adult Outpatient. 370
Steven A. Glasser and Janet N. Siler
- Narcotic Analgesia—Ceiling Effect. 371
B. Kay
- High Oxygen Saturation Does Not Always Indicate Arterial Placement of Catheter during Internal Jugular Venous Cannulation. 372
Aliasghar Aghdami and Robert Ellis
- Securing the Epidural Catheter. 373
Martin Brown and Paul Rein
- Decreasing the Incidence of Upper Airway Bleeding when Using a Large-size Nasotracheal Tube. 374
L. Quintin, M. Ghignone, P. Odelin, R. Trinquier, L. Ruynat, and B. Du Gres
- A Technique for Avoiding Inadvertent Intraarterial Placement of Large Bore Catheters. 375
Mitchell Zebrowski and James E. Duckett
- Nitrous Oxide Acts Directly at the Mu Opioid Receptor. 375
M. A. Gillman and F. J. Lichtigfeld
- Oxygen- and Suction-equipped Laryngoscope Blade. 376
Edward A. Loeser
- Ventricular Fibrillation during Thermodilution Cardiac Output Determination. 376
Robert I. Katz, Edward D. Teller, and Paul J. Poppers
- A Complication of Multipurpose Pacing Pulmonary Artery Catheterization via the External Jugular Vein Approach. 377
Dan Lawson and Lawrence G. Kushins

(Continued on page 11)

CONTENTS

REPORTS OF SCIENTIFIC MEETINGS	(Continued from page 9) 379
CLASSIFIED ADS	49
INDEX TO ADVERTISERS	95

GUIDE TO AUTHORS

The Guide for Authors is published in the January and July issues. Please refer to the Guide for the preparation of any material for submission to ANESTHESIOLOGY.

ANESAV is a code word ("coden") used by the Chemical Abstract Service to identify the journal.
