

Anesthesiology

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Marilyn Green Larach

■ CLINICAL INVESTIGATIONS

- 5** False-negative Results with Muscle Caffeine Halothane Contracture Testing for Malignant Hyperthermia

Hyam Isaacs and Margaret Badenhorst

Caffeine halothane contracture testing resulted in false-negative results in four patients in whom documented episodes of malignant hyperthermia occurred.

- 10** Intraoperative Transesophageal Echocardiography for the Detection of Cardiac Preload Changes Induced by Transfusion and Phlebotomy in Pediatric Patients

David L. Reich, Steven N. Konstadt, Michael Nejat, Heather P. Abrams, and John Bucek

The manipulation of blood volume caused cardiac filling changes that were accurately monitored by transesophageal echocardiography in pediatric patients.

- 16** Subanesthetic Concentrations of Isoflurane Suppress Learning as Defined by the Category-Example Task

Ben S. Chortkoff, H. L. Bennett, and E. I. Eger II

Learning during subanesthetic concentrations of isoflurane is completely suppressed by less than 0.45 MAC isoflurane.

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23 The Pupillary Light Reflex: Effects of Anesthetics and Hyperthermia

Kumar G. Belani, Daniel I. Sessler, Merlin D. Larson, Michael A. Lopez, Denna E. Washington, Makoto Ozaki, Joseph McGuire, Benjamin Merrifield, and Marc Schroeder

Mild hyperthermia without anesthesia produces no important changes in pupillary responses, whereas mild hyperthermia during isoflurane or enflurane dilated the pupil and increased the light reflex amplitude; inhalation of 60% N₂O had no clinically important action on the light reflex.

28 The Interaction between Alcohol and the Residual Effects of Thiopental Anesthesia

J. Lance Lichtor, James P. Zacny, Dennis W. Coalson, David C. Flemming, Anna Uitvlugt, Jeffrey L. Apfelbaum, Bradford S. Lane, and Ronald A. Thisted

An intravenous injection of thiopental (5 mg/kg) causes psychomotor impairment that is potentiated by alcohol (0.7 g/kg) consumed 4 h later.

36 Cardiac Performance Preserved Despite Thiopental Loading

J. Gilbert Stone, William L. Young, Zvi S. Marans, Hoshang J. Khambatta, Robert A. Solomon, Craig R. Smith, Noeleen Ostapovich, Subhash C. Jamdar, and Jaime Diaz

Intraoperative thiopental loading for the protection of the brain during cardiopulmonary bypass surgery does not impede separation from bypass in patients with good ventricular function.

42 Pupillary Assessment of Sensory Block Level during Combined Epidural/General Anesthesia

Merlin D. Larson, Daniel I. Sessler, Makoto Ozaki, Joseph McGuire, and Marc Schroeder

Dilation of the pupil in response to noxious stimulation accurately predicts sensory block level during combined epidural/general anesthesia.

49 Dose-Response Pharmacology of Intrathecal Morphine in Human Volunteers

Peter L. Bailey, Steven Rhondeau, Patrick G. Schafer, Jeffrey K. Lu, Bryan S. Timmins, William Foster, Nathan L. Pace, and Ted H. Stanley

Intrathecal morphine (0.2–0.6 mg) in healthy, young adult male volunteers produced mild to severe respiratory depression and hypoxemia, which were detected by finger pulse oximetry and always corrected with supplemental nasal oxygen; but it did not produce changes in respiratory rate or sedation level.

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- 73** Effects of Isoflurane and Enflurane on Intracellular Ca^{2+} Mobilization in Isolated Cardiac Myocytes
Dixon W. Wilde, Bruce A. Davidson, Mitchell D. Smith, and Paul R Knight
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- 83** Positive End-expiratory Pressure Lowers the Risk of Laser-induced Polyvinylchloride Tracheal-tube Fires
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The recovery from opioid-induced cardiovascular and cerebral effects is faster after remifentanyl infusion than after alfentanil infusion in dogs.

- 114** Sympathetic Stimulation with Physostigmine Worsens Outcome from Incomplete Brain Ischemia in Rats

Jeffrey A. Schultz, William E. Hoffman, and Ronald F. Albrecht

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- 129** Halothane-Oxidant Interactions in the *Ex Vivo* Perfused Rabbit Lung: Fluid Conductance and Eicosanoid Production

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