ASA ABSTRACTS

Respiration

A-1313  Room G, 10/17/2000 2:00 PM - 4:00 PM (PS)
Additional Work of Breathing with Laryngeal Mask Airway in Anesthetized Spontaneous Breathing Patients Gerardo Aguilar, MD; F. Javier Belda, MD, PhD; Antonio Gañán, MD; Martina Soro, MD, PhD; Francisco José Martí, MD, PhD; Anesthesiology and Critical Care, Hospital Clinico Universitario, Valencia, Spain

A-1314  Room G, 10/17/2000 2:00 PM - 4:00 PM (PS)
The Development of Novel Magnetic Resonance Imaging in the Normal Porcine Lung: Comparison with Standard Methods Margaret Aranda, MD; Rahim Rizi, PhD; Hiroto Hatabu, MD; Alvin Yamamoto, Baumgardner E. James, MD, Anesthesiology, University of Pennsylvania, Philadelphia, PA, United States. Novel 3He and gadolinium MRI techniques may be compared with anatomic SPECT and physiologic MIGET data.

A-1315  Room G, 10/17/2000 2:00 PM - 4:00 PM (PS)
Effect of Inhalational Versus Intravenous Anesthesia on Hypoxic Pulmonary Vasoconstriction J.F. Brichant, MD; S. Brimiotilde, MD; M. Demets, MD; M. Delcroix, MD, Laboratory of Pneumology, Catholic University of Louven, Louven, Belgium. Preservation of HPV is not a general characteristic of intravenous anesthetic agents whereas not all potent inhaled anesthetics inhibit HPV.

A-1316  Room G, 10/17/2000 2:00 PM - 4:00 PM (PS)
Prolonged Maximal Breath Oxygenation: Effects on End-Tidal Gases Suzarczak D. Chiratrui, MD; Usharani Nimmagadda, MD; Ninos J. Joseph, BS; M. Ramez Salem, MD; Mohammed El-Orbayy, MD, Dept Anesth, Illinois Masonic Med Ctr, Chicago, IL, United States. Neither 50 sec nor 1 min maximal breath oxygenation raises ETO2 to 90%. Prolonged maximal breathing decreases ETCO2 and may left-shift the O2/Hb dissociation curve.

A-1317  Room G, 10/17/2000 2:00 PM - 4:00 PM (PS)
Analysis of the Intrapulmonary Distribution of Ventilation and PO2 in Patients after Single-Lung Transplantation: A 3Helium-MR I Study Balthasar Eberle, MD; Klaus Markstaller, MD; Anselm Deninger, MS; Hans U. Kauczor, MD; Norbert Weiler, MD, Anesthesiology, J.G.U., Mainz, Germany. Data showed maldistributed ventilation and low PO2.

A-1318  Room G, 10/17/2000 2:00 PM - 4:00 PM (PS)
Minimal Inflation Volume for Adequate Filling of the Combitube Pharyngeal Balloon Luis A. Gaitiini, MD; Sonia J. Vaidia, MD; Mostafa Somri, MD; Millan Criator, MD; Bruce Ben-David, MD, Department of Anesthesiology, B’at’el Zion Medical Center, Haifa, Israel. For airway seal during spontaneous ventilation the Combitube pharyngeal balloon needs less air than recommended by the manufacturer.

A-1319  Room G, 10/17/2000 2:00 PM - 4:00 PM (PS)
Intrathcal Morphine Improves Forced Vital Capacity and Peak Expiratory Flow Rate after CABG Surgery Sheldon Goldstein, MD; Oscar B. Elbert, RRT; Enrique Pantin, MD; Kim Cocozello, RN, MSN; Vincent DeAngelis, MD, Anesthesiology, UMDNJ-Robert Wood Johnson Medical School, New Brunswick, NJ, United States. Patients who received ITM had larger FVC and PEFR post-CABG as compared to controls.

A-1320  Room G, 10/17/2000 2:00 PM - 4:00 PM (PS)
Protective Effects of Volatile Agents Against Methacholine-Induced Bronchosticthastion in Rats Walid Habre, MD; Ferenc Petai, PhD; Peter D. Sty, MD; Zoltan Hantos, PhD; Denis R. Morel, MD, Dept of Anesthesiology, Pharmacology and Intensive Care, University Hospitals of Geneva, Geneva, Switzerland. Isoflurane, sevoflurane, and desflurane are as effective as halothane in protecting airway constriction.

A-1321  Room G, 10/17/2000 2:00 PM - 4:00 PM (PS)
Halothane Inhibits Smooth Muscle Protein Phosphatase in Airway Smooth Muscle Motokiko Hanazaki, MD; Keith A. Jones, M.D.; David O. Warner, M.D., Department of Anesthesiology, Mayo Clinic and Foundation, Rochester, MN, United States. Halothane decreases calcium sensitivity in airway smooth muscle by indirectly increasing smooth muscle protein phosphatase activity.

A-1322  Room G, 10/17/2000 2:00 PM - 4:00 PM (PS)
Apnea Induces Bronchoconstriction by Vagal Mediated Reflexes in Dogs Kazuyoshi Hirota, MD; Shizuko Kabara, MD; Eiji Hashiba, MD; Yoshio Hashimoto, MD; Akitomo Matsuki, MD, Anesthesiology, University of Hiroasaki School of Medicine, Hirosaki, Aomori, Japan. Apnea produces vagally mediated bronchoconstriction.

A-1323  Room G, 10/17/2000 2:00 PM - 4:00 PM (PS)
Oxidative Stress Relaxes Airway Smooth Muscle by Novel Mechanisms Keith A. Jones, MD; Robert R. Lorenz; William J. Perkins, MD; David O. Warner, MD, Anesthesiology, Mayo Clinic and Foundation, Rochester, MN, United States. Hydrogen peroxide relaxes airway smooth muscle in part by directly inhibiting contractile proteins that do not regulate regulatory myosin light chain phosphorylation.

A-1324  Room G, 10/17/2000 2:00 PM - 4:00 PM (PS)
Primary Alcohols Mimic the Actions of Volatile Anesthetics on Airway Smooth Muscle Keith A. Jones, MD; Nicole E. Marshall; Kerri Griffin; William J. Perkins; David O. Warner, Anesthesiology, Mayo Clinic and Foundation, Rochester, MN, United States. Primary alcohols mimic the airway smooth muscle relaxing effect of volatile anesthetics by decreasing [Ca2+] and Ca2+ sensitivity.

A-1325  Room G, 10/17/2000 2:00 PM - 4:00 PM (PS)
Propofol Antagonizes Methacholine-Induced Bronchocstriction in Dogs with and without Wagamoty Shizuko Kabara, MD; Kazuyoshi Hirota, MD; Eiji Hashiba, MD; Hideki Yoshioka, MD; Akitomo Matsuki, MD, Anesthesiology, University of Hiroasaki School of Medicine, Hirosaki, Aomori, Japan. Propofol may directly relax methacholine-induced bronchoconstriction.

A-1326  Room G, 10/17/2000 2:00 PM - 4:00 PM (PS)
Inhaled Nitric Oxide Does Not Improve Oxygenation nor Reduce Rate of Desaturation during One-Lung Ventilation W. Karzat, MD; K. Schwarzkep, MD; F. Bloos, MD, PhD; U. Klein, MD, Department of Anesthesiology, University Hospital, Jena, Germany. During one lung ventilation and FiO2 at 0.3, 0.5 or 1.0, inhaled NO did not improve oxygenation or decrease frequency of arterial desaturation.