Anesthesiology V93, No 3A, Sep 2000

## **EQUIPMENT MONITORING AND ENGINEERING TECHNOLOGY**

A-562 Room A, 10/17/2000 9:00 AM - 11:00 AM (PS) Catalytic Decomposition of Nitrous Oxide Yuichi Kanmura, M.D.; Yasutake Teraoka; Norio Miura; Noboru Yamazoe, Department of Anesthesiology and Critical Care Medicine, Kagoshima University Faculty of Medicine, Kagoshima, Japan. The possibility of catalytic decomposition of N<sub>2</sub>O was investigated to prevent the greenhouse effect of scavenged N<sub>2</sub>O.

A-563 Room A, 10/17/2000 9:00 AM - 11:00 AM (PS) Nitrous Oxide and Endotracheal Tube Cuff Pressure Gary J. Kanter, MD; Larry D. Robbins, DO, Department of Anesthesiology, Baystate Medical Center and the Tufts University School of Medicine, Springfield, MA, United States. Nitrous oxide increases endotracheal tube cuff pressures (etcp) dramatically in a time-dependent manner. This may be a mechanism responsible for post-operative trachiitis.

A-564 Room A, 10/17/2000 9:00 AM - 11:00 AM (PS) Clinical Evaluation of the Laryngeal Tube or LT in Adult Patients Julie Lecomte, MD; Sylvie Brehm-Arnold, MD; Bernard Goubaux, MD; Olivier Langeron, MD; Anne-Marie Cros, MD, Department of Anesthesia IV, Hopital Pellegrin-Enfants, Bordeaux, France. This study evaluated the laryngeal tube in 33 adults. Insertion was easy and resulted in a clear airway in 29 cases, with no respiratory incident.

A-565 Room A, 10/17/2000 9:00 AM - 11:00 AM (PS) Cross-Interferences of Volatile Anesthetic Agents on the Measurement of O2 Utilizing an Optical Fiber Sensor Based on Luminescence Quenching Norbert Lutter, MD; Thomas Boehme, PbD; Matthias Lau, PbD, Dept Anesth, Univ of Erlangen-Nuremberg, Erlangen, Germany. Taking into account the accuracy of the reference monitor only negligible effects on the optical oxygen sensor was found.

A-566 Room A, 10/17/2000 9:00 AM - 11:00 AM (PS) Infrared Analyzer for a Nondiverting Multigas Arrangement Norbert Lutter, MD; Stephan Junger, MSc; Juergen Schuettler, MD, Dept Anesth, Univ of Erlangen-Nuremberg, Erlangen, Germany. A multi-wavelength infrared sensor was designed and realized in order to rapidly and accurately determine CO, CO<sub>2</sub>, CH<sub>4</sub>, and H<sub>2</sub>O in a mainstream environment.

A-567 Room A, 10/17/2000 9:00 AM - 11:00 AM (PS) A Comparison between Resident's Handwritten Anesthesia Records and Computerized Data Ali Mchaourab, MD; Toni D. Ubrich, MS; M. Saeed Dhamee, MD, Anesthesiology, Medical College of Wisconsin, Milwaukee, WI, United States. Correlation of resident's handwritten records compared to computer-stored information is good for some variables and needs improvement in others.

A-568 Room A, 10/17/2000 9:00 AM - 11:00 AM (PS) What Really Happens When the Wrong Agent Is Poured into a Modern Vaporizer? Shireen Mobiuddin, M.D.; Frank E. Block, Jr., M.D., Anesthesiology, University of Arkansas for Medical Sciences, Little Rock, AR, United States. We created vaporizer mixtures of isoflurane, sevoflurane, and desflurane. There was no desflurane overdose, even at 26 deg C. Mixtures are unlikely to cause injury.

A-569 Room A, 10/17/2000 9:00 AM - 11:00 AM (PS) Dexamethasone Suppresses Exhaled Nitric Oxide Formation in a Hemorrhagic Shock Model Omer Nasiroglu, MD; Chun-Jen Huang, MD; Ikram Haque, MD; Jeffrey W. Skimming, MD, Anesthesiology & Pediatrics, University of Florida, Gainesville, Exhaled nitric oxide concentrations were more sensitive to hemorrhagic shock-induced injury than either circulating or urinary nitrate/nitrite concentrations.

A-570 Room A, 10/17/2000 9:00 AM - 11:00 AM (PS) Air Bubbles Worsen Flow Irregularities in Syringe Pump Infusion Systems Thomas A. Neff, MD; Gabriele Schulz, MD; Joachim Fischer, MD; Oskar Baenziger, MD; Markus Weiss, MD, Anesthesia and Intensive Care, University Children's Hospital, Zurich, Switzerland. Air enclosed in syringes of infusion pump systems remarkably worsen flow irregularities during vertical displacement.

A-571 Room A, 10/17/2000 9:00 AM - 11:00 AM (PS) No Compound A Formation during In Vitro Closed Circuit Sevoflurane Administration and Amsorb<sup>R</sup> as New CO<sub>2</sub> Absorbent Georges Rolly, PbD; Linda F.M. Versichelen, MD; Michel M.R.F. Struys, PbD; Marie Paule L.A. Bouche, Pha; Eric P. Mortier, DSC, Anesthesia, Ghent University Hospital, Gent, Belgium. No Comp A during in vitro closed circuit sevoflurane and Amsorb

A-572 Room A, 10/17/2000 9:00 AM - 11:00 AM (PS) Diagnosis in Real and Simulated Environments: Do We Look At Different Things? F.J. Seagull; Y. Xiao; R.P. Dutton; D. Downey; M. Jaberi, U Maryland, Baltimore, MD,. We compared eye scanning patterns during anesthesia in real and simulated airway management. In the simulator compared to reality, less time was spent observing the patient and more viewing monitors.

A-573 Room A, 10/17/2000 9:00 AM - 11:00 AM (PS) Assessment of Inflatable Axillary Support System on Dependent Shoulder in the Lateral Decubitus Position Nigel E. Sharrock, MB, CbB; Alejandro Gonzalez Della Valle, MD; Patricio Salonia-Ruzo, MD; Eduardo A. Salvati, MD, Hospital for Special Surgery, New York, NY, United States. Inflatable axillary support device significantly reduces pressure on the dependent shoulder compared to other axillary support systems.

A-574 Room A, 10/17/2000 9:00 AM - 11:00 AM (PS) Humidity of Outflow Gas from the Canister Predicts Soda Lime Dryness Marina Soro, MD,PhD; Antonio Guillen, MD; F. Javier Belda, MD,PhD; Amparo Perez-Solaz, MD; Gerardo Aguilar, MD, Anesthesiology and Critical Care, Hospital Clinico Universitario, Valencia, Spain

A-575 Room A, 10/17/2000 9:00 AM - 11:00 AM (PS) Detection of Patent Foramen Ovale through Pulse Oxymetry with Provocative Maneuvers Mikhail R. Sukernik, MD; Bessie Kachulis, MD; Berend Mets, MD; Elliott Bennett-Guerrero, MD, Anesthesiology, Columbia University, New York, NY, United States. We compared pulse oxymetry to contrast TEE for PFO detection. Sensitivity and specificity of \$\dig \text{SpO2}\$ with cough was 27%/83%.