## **Equipment: Airway Equipment, Anesthesia Machines, CO2 Absorption, & Pulse Oximeters**

A-548 Room A, 10/17/2000 9:00 AM - 11:00 AM (PS) Different Responses of Forehead and Finger Laser Doppler Flowmetry to Vasoconstrictive Stimuli Aymen A. Awad, M.D.; Wagih Ouda, M.D.; Mibai Podgoreanu, M.D.; Asbraf Gbobashy, M.D.; David G. Silverman, M.D., Anesthesiology, Yale University School of Medicine, New Haven, CT, United States. This study compared the changes in finger and forehead perfusion during the cold pressor test.

A-549 Room A, 10/17/2000 9:00 AM - 11:00 AM (PS) A Comparison of the Nellcor N-395 and Masimo SET Pulse Oximeters during Hypoxemia and Motion in Human Volunteers Steven J. Barker, Ph.D., M.D.; Scott E. Morgan, B.S., Anesthesiology, University of Arizona, Tucson, AZ, United States. We compared the Nellcor N-395 and Masimo SET pulse oximeters during motion and hypoxemia in volunteers. The performance of the Masimo was superior to that of the Nellcor.

A-550 Room A, 10/17/2000 9:00 AM - 11:00 AM (PS) Evaluation of the Connell Airway (CA) Tube: A Feasibility Study Elizabeth C. Bebringer, M.D.; Maria E.F. Shier, M.D.; Anthony M. Mullin, B.M.E.; Sara L. Clack, R.A., Anesthesiology, Veterans Affairs Healthcare System, Long Beach, CA, United States. The CA, a new airway device, was evaluated in ten patients undergoing monitored anesthesia care for surgeries requiring local or regional anesthesia.

A-551 Room A, 10/17/2000 9:00 AM - 11:00 AM (PS) Accuracy in the Measurement of Endogenous Nitric Oxide in the Mechanically Ventilated Patient Robert E. Black, BS; Tillmann Hein, MD; Michael A.E. Ramsay, MD; Mario T. Cancemi, BS; Kevin Lynch, RRT, Anesthesiology, Baylor University Medical Center, Dallas, TX, United States. Extending exhalation time when measuring NO in the intubated patient results in reproducible plateaus.

A-552 Room A, 10/17/2000 9:00 AM - 11:00 AM (PS) The Intubating Laryngeal Mask Provides a Better Airway than the LMA for the Novice during Resuscitation Andrew Choyce, FRCA; Michael M.S. Avidan, FCASA; Amina T. Shariff, FRCA; Maria Del Aguila, FRCA; Tina Chan, FRCA, Anaesthesia, King's College Hospital, Denmark Hill, London, United Kingdom. The ILM is superior to the LMA for emergency ventilation in the hands of the novice and was the preferred device.

A-553 Room A, 10/17/2000 9:00 AM - 11:00 AM (PS) Comparison of Wire Reinforced Tubes with Warmed Standard Tubes to Facillitate Fiberoptic Intubation Neil Roy Connelly, MD; Robert Kyle, DO; Jan Gotta, MD; Atrhur Calimarin, MD; Larry D. Robbins, DO, Anesthesiology, Baystate Medical Center, Springfield, MA, United States. When performing an elective FFB intubation, we recommend using a warmed standard TT.

A-554 Room A, 10/17/2000 9:00 AM - 11:00 AM (PS) When Pulse Oximeters Fail: Motion and Low Perfusion James E. Cooke, M.D., Anesthesiology, Emory University, Atlanta, GA, United States. An SpO2 Simulator was used to test 7 pulse oximeters for sensitivity to simulated motion and low perfusion. Masimo and TFT oximeters tolerated motion. Nellcor, HP and others did not. The TFT oximeter functioned at a lower signal strength than the others.

A-555 Room A, 10/17/2000 9:00 AM - 11:00 AM (PS) Increased Pulse Transit Time to the Foot Following Lumbar Epidural Anesthesia Elyad M. Davidson, MD; Yehuda Ginosar, BSc MBBS; Meir Nitzan, PhD, Anesthesiology, Hadassab University Hospital, Jerusalem, Israel. Lumbar epidural anesthesia is accompanied by decreased vascular resistance. The current study demonstrated increased pulse transit time to the toe following epidural anesthesia.

A-556 Room A, 10/17/2000 9:00 AM - 11:00 AM (PS) Pulse Oximetry Performance Can Affect Caregiver Time Utilization Charles G. Durbin, Jr, MD; Stephanie K. Rostow, RRT, Anesthesiology, University of Virginia, Charlottesville, VA, United States. Poor oximetry performance may increase caregiver workload and errors. In 48 CABG patients, Masimo SET® oximetry was more reliable and required significantly less caregiver attention.

A-557 Room A, 10/17/2000 9:00 AM - 11:00 AM (PS) A Modified Bronchus Blocker for One-Lung-Ventilation Joerg Ender, MD; Andreas Bury; Arno Diegeler, MD; Joerg Raumanns, MD; Andreas Petry, MD, Anesthesia and Intensive Care Medicine II, Heartcenter, University Leipzig, Leipzig, Germany. Comparison of a double-lumen-tube with a modified bronchus blocker for one-lung-ventilation regarding ventilation pressures and practical management.

A-558 Room A, 10/17/2000 9:00 AM - 11:00 AM (PS) Evaluation of the Effectiveness of Two Methods of Training for the Insertion of the Laryngeal Mask Airway David Z. Ferson, M.D.; Tbao P. Bui, M.D.; James F. Arens, M.D., Department of Anesthesiology, The University of Texas M. D. Anderson Cancer Center, Houston, TX, United States. Hands-on training of the LMA insertion technique offers better skill aquisition than the video training.

A-559 Room A, 10/17/2000 9:00 AM - 11:00 AM (PS) Near-Patient Determination of Mannitol for the Monitoring of Irrigating Fluid Absorption Hartmut Gebring, MD; Hendrik Graefe; Rolf Eichenauer, MD; Reiner Schafer, MD; Leif Dibbelt, MD, Department of Anesthesiology, Medical University, Luebeck, Germany

A-560 Room A, 10/17/2000 9:00 AM - 11:00 AM (PS) Performance Evaluation of a New Pulse Oximetry Technology during Physiological Artifacts Michael B. Jaffe, PhD, Novametrix, Wallingford, CT, United States. Testing of the Novametrix Model 2001 with MARSpO $_2$  and Ohmeda Model 2000 with Masimo SET under simulated physiological conditions with motion (Biotek 2P) showed accuracy to within  $\pm 2\%$  saturation and  $\pm 1$  beat/min for all tested settings.

A-561 Room A, 10/17/2000 9:00 AM - 11:00 AM (PS) Clinical Performance of the Cuffed Oropharyngeal Airway (COPA) during Orthopedic and Trauma Surgery in India Satish Jagadeeshan, MD; Vivian Pinto, MD; Thaejus Job, MD; Kumar Belani, MD, Anesthesiology and Intensive Care, Hospital for Orthopaedics, Sports Medicine, Arthritis and Trauma, Bangalore, Karnataka, India. In select cases the COPA is an economical and suitable ventilating device