CLINICAL NEUROSCIENCES

A-399 Room 301, 10/17/2000 2:00 PM - 3:30 PM (PD)
Operative Changes Effecting Incidence of Perioperative Stroke (IPS) Using Cerebral Oximetry (CO) and Aortic Ultrasonography (AU) *T.M. Schmabl, M.D., Cardiovascular Surgery, SLMC, Milwaukee, WI, United States.* Based on the findings of CO and AU, operative and/or perfusion techniques were changed in an effort to avoid PS. This effected a five-fold decrease in IPS and a savings of $1,500,000.

A-400 Room 301, 10/17/2000 2:00 PM - 3:30 PM (PD)
Cerebral Embolization during Cardiac Surgery: The Impact of Aortic Atheroma Burden *Georg B. Mackensen, MD; Lian K. Ti, MD; Hilary P. Grocott, MD; Barbara Phillips-Bute, PhD; Mark F. Newman, MD, Anesthesiology, Duke University, Durham, NC, United States.* We demonstrate an association between the number of cerebral emboli and aortic atheroma burden in patients undergoing CABG surgery.

A-401 Room 301, 10/17/2000 2:00 PM - 3:30 PM (PD)
Apolipoprotein E4 Increases Atheroma Burden in Cardiac Surgical Patients *Lian K. Ti, MMed; Georg B. Mackensen, MD; Hilary P. Grocott, MD; Barbara G. Phillips-Bute, PhD; Joseph P. Mathew, MD, Anesthesiology, Duke University Medical Center, Durham, NC, United States.* The presence of apoE4, independent of age, is associated with an increase in aortic atheroma burden in cardiac surgery.

A-402 Room 301, 10/17/2000 2:00 PM - 3:30 PM (PD)
Decreased $PjvO_2$ during CPB upon Cooling with Arterial Hypocarbia *Wei-Ping Cheng, M.D.; Maria Rosa Marino, M.D.; Nancy Nussmeier, M.D, Cardiovascular Anesthesia, Texas Heart Institute, Houston, TX, United States.* Using pH-stat measurements during CPB, $PjvO_2$ ↓'ed with cooling as $PaCO_2$ ↓'ed. With rewarming, although $PaCO_2$ ↑'ed, $PjvO_2$ again ↓'ed, suggesting mismatched flow/metabolism.

A-403 Room 301, 10/17/2000 2:00 PM - 3:30 PM (PD)
Brain Specific S-100 Protein during and after Cardiopulmonary Bypass *Yasuyuki Kakihana, M.D.; Haruhiko Yamada, M.D.; Masataka Nakamura, M.D.; Youichirou Nakano, M.D.; Yuichi Kanmura, M.D., Division of Intensive Care Medicine, Kagoshima University Hospital, Kagoshima, Japan.* S-100 protein seems to be a sensitive marker of brain injury during CPB.

Clinical Neuroscience: Monitoring Hemodynamic Function & Coagulation

A-404 Room 302, 10/18/2000 2:00 PM - 3:30 PM (PD)
Reproducibility of Regional Wall Motion Analysis during Intraoperative Low Dose Dobutamine Stress Echocardiography (DSE) in CABG Surgery *Frank W. Dupont, MD; Solomon Aronson, MD, FACC, FCCP; Anita M. Fisher; Melinda Drum, PhD, Anesthesia & Critical Care, University of Chicago, Chicago, IL, United States.* The reproducibility of intraoperative low dose DSE is comparable to ambulatory stress echocardiography.

A-405 Room 302, 10/18/2000 2:00 PM - 3:30 PM (PD)
Pulmonary Artery Catheters Produce Eccentric Tricuspid Valvular Regurgitation *Steven V. Sherman, M.D.; John F. Butterworth, M.D.; Daniel J. Kennedy, M.D.; Michael H. Wall, M.D.; Robert F. Brooker, M.D., Department of Anesthesiology, Wake Forest University School of Medicine, Winston-Salem, NC, United States.* Pulmonary artery catheters produce eccentric tricuspid valvular regurgitation as assessed by TEE.

A-406 Room 302, 10/18/2000 2:00 PM - 3:30 PM (PD)
Transesophageal Atrial and Ventricular Pacing Using an Octapolar Sheet Electrode *Fredrik Hesselvik, MD PhD; Mauricio Gonzalez, MD; Rafael Ortega, MD; Eric Pierce, MD; Oz Shapira, MD, Department of Anesthesiology, Boston University Medical Center, Boston, MA, United States.* An adhesive sheet with metal foil electrodes, attached to a TEE probe, studied in anesthetized patients. V-pacing feasible in all.

A-407 Room 302, 10/18/2000 2:00 PM - 3:30 PM (PD)
Oxygen Saturation Measurements in Canine Blood after Hemoglobin glutamer-200 (bovine) (HBOC) infusion: In-Vitro Validation of the Nova CO-Oximeter *F. Lurie, M.D., Ph.D.; J.S. Jahr, M.D.; B. Driessen, D.V.M., Ph.D.; Z. Tang, M.D.; R. Louie, Anesthesiology, UC Davis, Sacramento, CA,.* The NOVA CO-Oximeter is an accurate analyzer for measurement of oxygen saturation after HBOC infusion in canine blood.

A-408 Room 302, 10/18/2000 2:00 PM - 3:30 PM (PD)
Reliability of Plasma Hemoglobin Concentration Measurement Using the HemoCue®, a Point of Care Hemoglobin Photometer, after Infusions of a Hemoglobi n-Based Oxygen Carrier (HBOC) *F. Lurie, M.D., Ph.D.; J.S. Jahr, M.D.; J.M. Davis; Z. Umarova; B. Driessen, D.V.M., Ph.D., Anesthesiology, UC Davis, Sacramento, CA,.* The $HemoCue^R$ is accurate in determining plasma hemoglobin after HBOC infusion in varying concentrations

A-409 Room 302, 10/18/2000 2:00 PM - 3:30 PM (PD)
Postoperative Blood Loss and Re-Exploration Following CPB: Heparin Management with an Protamine Titration Assay Versus an ACT-Guided Regimen *Andreas Koster, MD; Marian Kukucka, MD; Hermann Kuppe, MD, PhD, Anesthesiology, Deutsches Herzzentrum Berlin, Berlin, Germany.* Anticoagulation during CPB with the Hepcon HMS reduced re-exploration and blood loss when compared with an ACT regimen.

A-410 Room 302, 10/18/2000 2:00 PM - 3:30 PM (PD)
Comparison of Thromboelastographic Parameters Using Arterial Vs Venous Blood Samples *Heather E. Manspeizer, M.D.; Mayuko Imai, M.D.; Robert J. Frumento, M.S., M.P.H.; Berend Mets, M.D., Ph.D; Elliott Bennett-Guerrero, M.D., Anesthesiology, Columbia University College of P & S, New York, NY, United States.* TEG values were assessed in arterial vs venous blood samples. There were significant differences in the R, K, α angle and MA.

A-411 Room 302, 10/18/2000 2:00 PM - 3:30 PM (PD)
TEG® R-time is Directly Related to Hiridin Concentration in Whole Blood Following Stimulation with the Snake Venom Ecarin *Steve von Kier, FIPT; Cathy Wade, BSc; David Royston, FRCA, Anaesthesia, Royal Brompton and Harefield NHS Trust, Harefield, United Kingdom.* Blood hiridin levels are accurately assessed by TEG® r-time. Results obtained rapidly at the bedside allow improved patient management.