CLINICAL NEUROSCIENCES

A-344 Room C, 10/16/2000 2:00 PM - 4:00 PM (PS)
Noninvasive Monitoring of the Human Microcirculation during General Anesthesia with a New Technique for Intravital Microscopy *Mathias Redlin, MD; Joachim Werner, MD; Helmut Habazettl, PhD; Axel R. Pries, PhD; Hermann Kuppe, PhD, Institute of Anesthesiology, Deutsches Herzzentrum Berlin, Berlin, Germany.* The microcirculation in cardiac surgery patients was monitored with a new intravital microscope.

A-345 Room C, 10/16/2000 2:00 PM - 4:00 PM (PS)
Intrathoracic Blood Volume Index (ITBVI) by Single Thermodilution - Sensitivity for Cardiac Preload Monitoring *Daniel A. Reuter, M.D.; Thomas W. Felbinger, M.D.; Karl Moerstedt, M.D.; Erich Kilger, M.D.; Alwin E. Goetz, M.D.,Ph.D., Department of Anesthesiology, University of Munich, Munich, Germany.* Measurement of ITBVI by single thermodilution is a sensitive parameter to monitor preload changes under volume loading.

A-346 Room C, 10/16/2000 2:00 PM - 4:00 PM (PS)
Non-Invasive Single Beat Estimation of Ejection Fraction (EF) as an Index of Ventricular Mechano-Energetic Performance *Hidetoshi Sakano, M.D.; Kazuko Hayashi, M.D.; Masaru Sugimachi, M.D.,Ph.D.; Kenji Shigemi, M.D.,Ph.D.; Yoshifumi Tanaka, M.D.,Ph.D., Anesthesiology, Kyoto Prefectural University of Medicine, Kyoto, Japan.* EF is well monitoed beat by beat using a non-invasive Ees/Ea estimation method.

A-347 Room C, 10/16/2000 2:00 PM - 4:00 PM (PS)
Optimizing Intraoperative Volume Management during Coronary Bypass Surgery *Chen Shi, MD; Lisa S. Morse, MD; Linda K. Douning, MD; Lei Chi, MD; Michael E. Jessen, MD, Anesthesiology and Pain Management, The University of Texas Southwestern Medical Center, Dallas, TX, United States.* Intraoperative volume management based on data from an esophageal doppler monitor may improve outcomes in coronary surgery.

A-348 Room C, 10/16/2000 2:00 PM - 4:00 PM (PS)
Comparison of the Vasotrac BP Monitor with the Arm Cuff Methods *Maja Sostaric, M.D.; Thomas Hartmann, M.D.; Michael Zimpfer, M.D.; Marius Poliac, Ph.D.; Kumar Belani, M.D., Anesthesiology and Intensive Care, University of Vienna, Vienna, Austria.* The Vasotrac BP monitor was significantly more comfortable than the traditional cuff methods despite providing continual BP and pulse waveform information.

A-349 Room C, 10/16/2000 2:00 PM - 4:00 PM (PS)
The Clinical Significance of Routine TEE in Patients Undergoing CABG with Normal LV Function *Lian K. Ti, MMed; G.B. Mackensen, MD; Hilary P. Grocott, MD; B.G. Phillips-Bute, PhD; Joseph P. Mathew, MD, Anesthesiology, Duke Medical Center, Durham, NC, United States.* In CABG patients with normal LV function, TEE commonly diagnoses unsuspected pathology, suggesting that routine TEE may be beneficial.

Clinical Neuroscience: Cerebral Blood Flow, Metabolism, & Cerebral Protection

A-350 Room C, 10/17/2000 9:00 AM - 11:00 AM (PS)
Cerebral Pressure Autoregulation in Comatose Patients with Brain Injury *Jacques A. Berre, MD; Jean-Jacques Moraine, PT, PhD; Christian A. Melot, MD, PhD,MSciBio, Intensive Care, Erasme University Hospital, Brussels, Belgium.* Jugular thermodilution CBF was measured during phenylephrine infusion in 34 brain-injured patients. Impaired autoregulation was observed in 7 patients and has no prognostic value.

A-351 Room C, 10/17/2000 9:00 AM - 11:00 AM (PS)
Cerebral Blood Flow Velocity Response to Intravenous Magnesium Sulfate in Patients Following Subarachnoid Hemorrhage *Randall P. Brewer, MD; Augusto Parra, MD; John Lynch, MD; Vani Chilukuri, MD; Cecil Borel, MD, Anesthesiology, Duke University, Durham, NC, United States*

A-352 Room C, 10/17/2000 9:00 AM - 11:00 AM (PS)
Morphine Pharmacokinetics in Human Brain Varies with the Degree of Tissue Injury in Patients with Severe Brain Trauma *Per Ederoth, MD; Karin Tunblad; Rene Bouw; Johan Lundberg, MD. PhD; Carl-Henrik Nordstrom, MD, PhD, Department of Anestesiology and Intensive Care, University Hospital, Lund, Sweden.* Morphine pharmacokinetics with microdialysis may reflect the degree of human brain trauma.

A-353 Room C, 10/17/2000 9:00 AM - 11:00 AM (PS)
Nitroglycerin and Prostaglandin E1 Do Not Impair Cerebral Dynamic Autoregulation *Hiroshi Endoh, M.D.; Tadayuki Honda, M.D.; Satomi Ohashi, M.D.; Koki Shimoji, M.D., Emergency & Cirtical Care Medicine and Anesthesiology, Niigata University School of Medicine, Niigata, Japan.* Cerebral dynamic autoregulation was preserved during nitroglycerin- or prostaglandin E1- induced hypotension.

A-354 Room C, 10/17/2000 9:00 AM - 11:00 AM (PS)
Angiotensin IV Attenuates Hypoxia/Ischemia-Induced Neuronal Apoptosis *Lisa W. Faberowski, MD; Mohan K. Raizada, PhD; Colin Sumners, PhD, Anesthesiology, Children's Hospital, Boston, MA, United States.* Neuronal cell cultures pretreated with AT4 were exposed to hypoxia/ischemia(HI)for 30 -90 min. Examination at 48 hours using TUNEL demonstrated AT4 attenuation(~100%) of HI induced apoptosis.

A-355 Room C, 10/17/2000 9:00 AM - 11:00 AM (PS)
Sympathoneural and Adrenomedullary Responses to Cold Stress in Awake Humans *Steven M. Frank, MD; Patricia Satitpunwaycha, MD; Simon R. Bruce, MD; Courtney S. Holmes; David S. Goldstein, MD, PhD, Clinical Neurocardiology Section, National Institutes of Health, Bethesda, MD, United States.* Mild hypothermia elicits concomitant activation of the sympathoneural and adrenomedullary systems in awake humans.

A-356 Room C, 10/17/2000 9:00 AM - 11:00 AM (PS)
Prostaglandin E_1 but Not Corticosteroid Increases Intraradicular Blood Flow after Lumbar Discectomy *Makoto Fukusaki, M.D.; Hiroshi Miyoshi, M.D.; Koji Sumikawa, M.D., Anesthesia, Nagasaki Rosai Hospital, Sasebo, Japan.* Intravenous infusion of low-dose prostaglandin E_1 but not corticosteroid significantly increased intraradicular blood flow after lumbar discectomy.