A-330  Room C, 10/16/2000 2:00 PM - 4:00 PM (PS)  
Origin of the Impedance Cardiogram in Dogs Determined By Sonomicrometry John K. Hayes, Ph.D.; Jeffrey L. Peters, Ph.D., M.D.; Lee E. Baker, M.D.; Roman Plancinta, Anesthesiology, University of Utah, Salt Lake City, UT. Major source of the esophageal impedance signal and the determination of CO and SV was from aortic expansion and aortic blood flow.

A-331  Room C, 10/16/2000 2:00 PM - 4:00 PM (PS)  
Mixed Venous CO2 Does Not Need to Remain Constant during CO2 Rebreathing Cardiac Output Measurements Kai Kuck, Ph.D.; Dinesh G. Haryadi, Ph.D.; Lara M. Brewer, Joseph A. Orr, Ph.D., Anesthesiology, University of Utah Hospital, Salt Lake City, UT, United States. A new CO2 rebreathing method to estimate cardiac output does not require constant venous CO2 and improves estimation bias and precision.

A-332  Room C, 10/16/2000 2:00 PM - 4:00 PM (PS)  
Comparison of Quantitative Intraoperative Assessment of Regional Systolic Ventricular Function: Pulsed Tissue Doppler Imaging Vs. Percentage of Systolic Wall Thickening Marian Kukucza, MD; Joachim Erb, MD; Andreas Koster, MD; Hermann Kuppe, MD, Ph.D, Anesthesiology, Deutsches Herzzentrum Berlin, Berlin, Germany. PTDI was effective for RSVF assessment post-CAVB, implying that PTDI is more sensitive.

A-333  Room C, 10/16/2000 2:00 PM - 4:00 PM (PS)  
A New Pulse Contour Cardiac Output Algorithm Nick W. Linton, MEng; Robert A. Linton, MD FRCA, The Rayne Institute, St Thomas’ Hospital, London, United Kingdom. During cardiac surgery, there are rapid changes in cardiac output and systemic vascular resistance. A new pulse contour cardiac output algorithm has been developed, based upon recent studies of the arterial system.

A-334  Room C, 10/16/2000 2:00 PM - 4:00 PM (PS)  
Hemodynamic Monitoring during Cardiac Surgery: Improved Arterial Pressure Waveform Analysis - The PulseCO System Andreas Mappes, MD; Marcus Gruender, MD; Jens Lindert, MD; Hermann Kuppe, MD, Ph.D, Institute of Anesthesiology, Deutsches Herzzentrum Berlin, Berlin, Germany. A new technique for continuous beat-to-beat monitoring of CO and guiding of therapeutic intervention is described.

A-335  Room C, 10/16/2000 2:00 PM - 4:00 PM (PS)  
The Impact of Ringer's Lactate Solution Versus 0.9% Sodium Chloride in Cardiac Surgery on Blood Lactate Nathalie Massicotte; Raymond Martineau, MD; Andre Denault, MD, FRCPC; Sylvain Belisle, MD, FRCPC; Raymond Cartier, MD, Anesthesiology, Montreal Heart Institute, Montreal, QC, Canada. RL solution in cardiac surgery resulted in type B hyperlactatemia with no evidence of poor perfusion.

A-336  Room C, 10/16/2000 2:00 PM - 4:00 PM (PS)  
Pilot Study Examining the Role of the Esophageal Doppler Monitoring in Patients Undergoing Colon Resection Jeffrey P. Meyer, M.D.; Kapil K. Anand, M.D.; Todd W. Hancock, M.D.; Glen Hooker, M.D.; Michael A.E. Ramsay, M.D., Anesthesiology and Pain Management, Baylor Medical Center, Dallas, TX, USA. Cardiac output guided intra-operative fluid management may decrease hospital stay following colectomy.

A-337  Room C, 10/16/2000 2:00 PM - 4:00 PM (PS)  
Computer Enhanced Cardiac Surgery: Dyskinesias during Single Lung Ventilation Quantified by Tissue Doppler Stephan Mierulli, MD; Sigrid Kessler, MD; Wilhelm Roskopf, MD; Christian Bybahn, MD; Klaus Westphal, MD, PhD, Dept. of Anesthesiology, J.W. Goethe-University, Frankfurt, Germany. Dyskinesia during TECAB and single-lung ventilation can accurately be quantified by pulsed tissue doppler.

A-338  Room C, 10/16/2000 2:00 PM - 4:00 PM (PS)  
Atrial Septal Anceursms in Elderly Cardio-Vascular-Surgical Patients S.S. Moorthy, MD; T.G. Sharp, MD; P.H. Houck, MD; S.B. Kinsella, MD; B. Laurent, DO, Dept. of Anesthesiology, Indiana University and RLR VA Medical Center, Indianapolis, IN, United States. We studied 140 CV surgery patients by TEE for atrial septal aneurysm and found ten percent having the defect. Three had their ASA surgically corrected.

A-339  Room C, 10/16/2000 2:00 PM - 4:00 PM (PS)  
Impact of Right Coronary Stenosis on Assessment of Right Ventricular Function by Transesophageal Echocardiography Yoshihito Inami, MD; Yoshikazu Ishiguro, MD; Hirotsugu Saegusa, MD; Taka-bisa Goto, MD; Shojo Morita, MD, Anesthesiology, Teikyo University. Ichibaara Hospital, Ichibaara, Chiba, Japan. RCA Stenosis on Assessment of RV Function by TEE: Niimi Y/Teikyo/TEE is useful in pts without stenosis.

A-340  Room C, 10/16/2000 2:00 PM - 4:00 PM (PS)  
Transesophageal Echocardiographic Monitoring of Cardioplegia Delivery Takeshi Nomura, MD; Hideki Kaneko, MD; Takebisa Ozawa, MD; Makoto Asano, MD, Anesthesiology, Oji General Hospital, Tomakomai, Hokkaido, Japan. Our TEE study suggests aortic regurgitation(AR) may get more transiently at antegrade CP delivery. During CP administration, AR should be monitored by TEE.

A-341  Room C, 10/16/2000 2:00 PM - 4:00 PM (PS)  
Comparison of Cardiac Output Measurements by Thermomodulation & Oesophageal Doppler Using Transit Time Ultrasound as Reference in Cardiac Surgery Rachel A. O Farrell, MB, FCARCSI, Ingrid M. Brownie, MB, FFARCSI; Denis C. Moriarty, MB, FFARCSI, Frank Chambers, MB, FFARCSI, Dept. of Anaesthesia, Mater Hospital, Dublin, Ireland. Thermomodulation and oesophageal doppler inartically assess cardiac output compared to transit time ultrasound.

A-342  Room C, 10/16/2000 2:00 PM - 4:00 PM (PS)  
Accuracy of Ascending Aortic Pressure Derived from the Radiol Pulse during Anesthesia Alfredo L. Pauca, M.D.; Abnoud Qasem, S.M.C.; Neal D. Kon, M.D., Dept. of Anesthesiology, Wake Forest Univ. Sch. of Medicine, Winston-Salem, NC, United States. The present SphygnoCor system accurately estimates the aortic systolic and pulse pressures from that recorded at the radial artery in anesthetized patients.

A-343  Room C, 10/16/2000 2:00 PM - 4:00 PM (PS)  
Clinical Value of Aortic and Radial Pressure Wave Analysis Alfredo L. Pauca, M.D.; Michael F. O’Rourke, M.D., D.Sc.; Neal D. Kon, M.D., Dept. of Anesthesiology, Wake Forest Univ. School of Medicine, Winston-Salem, NC, United States. In pre-CPB, cardiac patients, the radial pulse waveform gives a better estimate of aortic and LV systolic pressure than radial artery systolic pressure.