

- 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 CO<sub>2</sub> Does Not Need to Remain Constant during CO<sub>2</sub> 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 CO<sub>2</sub> rebreathing method to estimate cardiac output does not require constant venous CO<sub>2</sub> 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 Kukucka, MD; Joachim Erb, MD; Andreas Koster, MD; Hermann Kuppe, MD, PhD, Anesthesiology, Deutsches Herzzentrum Berlin, Berlin, Germany. PTDI was effective for RSVF assessment post-CABG, 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 Gruendel, MD; Jens Lindert, MD; Hermann Kuppe, MD, PhD, 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, Anesthesia, 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. 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: Dyskinesia during Single Lung Ventilation Quantified by Tissue Doppler** Stephan Mierdl, MD; Sigrid Kessler, MD; Wilhelm Roskopf, MD; Christian Bybavn, 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 Aneurysms 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 Anesthesia, 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** Yoshinari Niimi, MD; Yoshiki Ishiguro, MD; Hiroaki Saegusa, MD; Takabisa Goto, MD; Shigebo Morita, MD, Anesthesiology, Teikyo University, Ichibara Hospital, Ichibara, 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 greater 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 Thermodilution & Oesophageal Doppler Using Transit Time Ultrasound as Reference in Cardiac Surgery** Rachel A. O Farrell, MB, FRCSC; Ingrid M. Browne, MB, FRCSC; Denis C. Moriarty, MB, FRCSC; Frank Chambers, MB, FRCSC, Dept. of Anaesthesia, Mater Hospital, Dublin, Ireland. Thermodilution and oesophageal doppler inaccurately 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 Radial Pulse during Anesthesia** Alfredo L. Pauca, M.D.; Ahmad 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 SphygmoCor 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.