ASA ABSTRACTS

A-622  Room D, 10/16/2000 9:00 AM - 11:00 AM (PS)
Abnormal Vascular Reactivity in the Ob/ob Mouse B. Winters, PhD/MD; D. Berkowitz, MD, A. Shoubas, PhD, ACCM, Johns Hopkins, Baltimore, MD, United States. We report the phenomena of enhanced vasoscontriction and impaired endothelial dependent vasorelaxation in the ob mouse as compared to wild type. Leptin repletion reversed these abnormalities. This implicates leptin's role in vasomotor regulation.

A-623  Room D, 10/16/2000 9:00 AM - 11:00 AM (PS)
Immunohistochemical Localization of the NO-cGMP-PKG Signaling Pathway in Rat Kidney Xinbua Zhan, M.D., Ph.D.; Deebun Li, M.D., Ph.D.; Roger A. Johns, M.D., Department of Anesthesiology, Union Affiliated Hospital of Tongji Medical University, Wuhan, Hubei, China. eNOS, sGC and PKG Iα showed in tubule and renin-containing cell. PKG Iα showed in SMC of the arterioles only.

Experimental Circulation: Cardiac Muscle & Cardiac Performance

A-624  Room D, 10/16/2000 2:00 PM - 4:00 PM (PS)
Intracellular Ca2+ Is Not Altered by Increased External Mg++ in Isolated Guinea Pig Hearts Jiazhong An, MD, Amadou K.S. Camara, Ph.D.; Srinivasan G. Varadarajan, MD; Enis Novelija, MD; David F. Storee, MD, Ph.D, Anesthesiology, Medical College of Wisconsin, Milwaukee, WI, United States. Cytosolic Ca2+ is not altered by incremental increases in external Mg++

A-625  Room D, 10/16/2000 2:00 PM - 4:00 PM (PS)
Increased β-Tubulin in Hypertrophied and Failing Human Hearts Louise A. Aquila-Pastir, M.S.; Christine S. Moreave, Ph.D., Anesthesiology Research, The Cleveland Clinic Foundation, Cleveland, OH, United States. β-tubulin protein is increased in hypertrophied and failing human hearts vs non-failing human hearts, suggesting a role for increased microtubules in cardiac dysfunction.

A-626  Room D, 10/16/2000 2:00 PM - 4:00 PM (PS)
Increased Extracellular Magnesium in Intact Beating Guinea Pig Hearts Does Not Alter Rates of Accumulation and Removal of Myoplasmic Free Calcium Amadou Camara, Ph.D; Jiazhong An, MD; Enis Novelija, MD; Srinivasan G. Varadarajan, MD; David F. Storee, M.D/P.D, Anesthesiology, Medical College of Wisconsin, Milwaukee, WI, United States. Excess Mg does not alter cytosolic Ca accumulation in the intact beating heart.

A-627  Room D, 10/16/2000 2:00 PM - 4:00 PM (PS)
IGF-I Gene Transfer Prevents Hypoxia-Induced Cardiomyocyte (CM) Apoptosis Wei Chao, M.D., Ph.D.; Takashi Matsui, M.D., Ph.D.; Ling Li, M.D.; Anthony Rosenzweig, M.D., Anesthesia and Cardiovascular Research Center, Mass. General Hospital, Boston, MA. We conclude: 1) adenoviral gene transfer achieves effective expression of IGF-I in vitro and in vivo, 2) expression of IGF-I inhibits hypoxia-inducd CM apoptosis.

A-628  Room D, 10/16/2000 2:00 PM - 4:00 PM (PS)
Cholinergic Regulation of Myocardial Contractility George J. Crystal, Ph.D; Syed Alam, MD; Agnieszka Piotrowska, MD; Guangchao Hu, MD, Anesthesiology, II, Masonic Med Ctr & Unio II, Col Med, Chicago, IL, United States. Negative inotropic effect of acetylcholine during B-adrenergic stimulation is independent of NO-cGMP pathway. Mechanism downstream from adenylate cyclase plays role in this effect.

A-629  Room D, 10/16/2000 2:00 PM - 4:00 PM (PS)
Lidocaine Reduces Ischemic Injury but Not Reperfusion Injury in the Isolated Rat Heart Dirk Ebel, MD; Peter Lipfert, MD, Ph.D; Benedikt Preekel, MD; Volker Thamer, MD, Ph.D; Wolfgang Schlack, MD, Ph.D, Institute of Clinical Anaesthesiology, Heinrich-Heine-University, Dusseldorf, NRW, Germany. Lidocaine protects myocardium from ischemic injury but not against reperfusion injury in the isolated rat heart.

A-630  Room D, 10/16/2000 2:00 PM - 4:00 PM (PS)
Multivariate Analysis of Ventricular Fibrillation and Prediction of Defibrillation Success Matthias Fischer, MD; Holger Greteke, MS; Martin Breil, MS; Alfred Dabben, MD, Jorgen Bruhn, MD, Anesthesiology, University of Bonn, Bonn, Germany. Prediction of defibrillation success by ECG derived parameters might optimize CPR algorithm, but median, entropy, amplitude and power of VF failed.

A-631  Room D, 10/16/2000 2:00 PM - 4:00 PM (PS)
Effects of Nicorandil on Myocardial Function and Metabolism in the Ischemic Heart with or without Inhalation Anesthetics Atsushi Paruya, M.D.; Satoshi Kasbinoto, M.D.; Takeda Oguchi, M.D.; Kenichi Masat, M.D.; Terno Kuma, M.D., Anesthesiology, Yamaguchi Medical University, Yamaguchi, Japan. Isoflurane and sevoflurane reduced the beneficial effects of nicorandil on the heart.

A-632  Room D, 10/16/2000 2:00 PM - 4:00 PM (PS)

A-633  Room D, 10/16/2000 2:00 PM - 4:00 PM (PS)

A-634  Room D, 10/16/2000 2:00 PM - 4:00 PM (PS)
Effects of Combined Use of Sevoflurane with MCI-154, a Calcium-Sensitizer, on Stunned Myocardium in Dogs Tetsuya Hara, MD; Shunji Takahashi, MD; Sanao Cho, MD; Shiro Tomiyasu, MD; Koji Sunagawa, MD. Anesthesiology, Nagasaki University, Nagasaki, Japan. The combination of sevoflurane and MCI-154 could synergistically act to produce full recovery of myocardial contraction after ischemia.

A-635  Room D, 10/16/2000 2:00 PM - 4:00 PM (PS)
The Effect of Magnesium Deficiency on the Dysrhythmic Dose of Epinephrine during Halothane and Sevoflurane Anesthesia David H. Ho, MBBS; Mark W. Crawford, MBBS; Meraj Shams; Robert Gow; Frederick J. Carmichael, Dept. of Anaesthesia, The Hospital for Sick Children, University of Toronto, Toronto, ON, Canada. Mg deficiency attenuates differences in the DDE during H and S anesthesia.