ASA ABSTRACTS

A-969  Room 310, 10/17/2000 10:30 AM - 12:00 PM (PD)

A-970  Room 310, 10/17/2000 10:30 AM - 12:00 PM (PD)
Epidural Catheter Length That Can Be Threaded without Coiling in Lumbar Epidural Space Young-Hun Lim, MD; Sang-Choil Lee, MD, Anesthesiology, Seoul National University College of Medicine, Seoul, Korea. The length of catheter threaded into lumbar epidural space without coiling was measured using fluoroscopy. It was 2.8 cm (median), and varied from 1.0 to 8.0 cm.

Local Anesthesia: Pain - Basic Science

A-971  Room 310, 10/17/2000 3:30 PM - 5:00 PM (PD)
Chronic Opioid Administration Affects Pain Thresholds in a Rat Model of Incisional Pain David J. Clark, M.D./Ph.D.; Xiange Li, M.D., Anesthesiology, Stanford University, Palo Alto, CA, United States. These studies examine the effect chronic opioid use on post-procedural pain in a model of incisional pain. Chronic opioid use is correlated with increased post-procedural hyperalgesia and allodynia.

A-972  Room 310, 10/17/2000 3:30 PM - 5:00 PM (PD)
Evidence of the Involvement of cGMP-Dependent Protein Kinase Iα in Spinal Processing of Noceficive Information Yuan-Xiang Tao, Ph.D., M.D.; Roger A. Johnson, M.D.; Aaalya Hassan, Elie Haddad, M.D., Department of Anesthesiology and Critical Care Medicine, Johns Hopkins University School of Medicine, Baltimore, MD, United States. cGMP-dependent protein kinase Iα is involved in pain processing.

A-973  Room 310, 10/17/2000 3:30 PM - 5:00 PM (PD)
Cannabinoids Reduce Morphine-Induced E mossis in Ferrets Isabelle F. Simonini, M.D.; Magde Hanaza, M.D., Heriberto P. Mata, B.S.; Frank Porreco, Ph.D.; T. Philip Malan, J.R., M.D./Ph.D., Department of Anesthesiology, University of Arizona, Tucson, AZ, United States. The mixed CB1/CB2 cannabinoid receptor agonist, WIN 55212-2, dose-dependently prevents retching and vomiting induced by morphine.

A-974  Room 310, 10/17/2000 3:30 PM - 5:00 PM (PD)
Role of NOS Isoforms on the Modulation of Pain and Associated Cardiovascular Effects in the Rat Formalin Test Marie-Francoise Dourson, Ph.D.; Yaoqian Liang; Jacques E. Chealy, M.D., Ph.D., MB, Anesthesiology, University of Texas Medical School, Houston, TX, United States. Our data provide direct evidence of the involvement of cNOS and iNOS in nociceptive behaviors in the rat formalin test.

A-975  Room 310, 10/17/2000 3:30 PM - 5:00 PM (PD)
Intracerebroventricular Morphine Evokes GABA Release through Activation of 5-HT3 Receptor in the Spinal Cord Tomoyuki Kawamura, MD; Keibito Omote, MD; Masashi Toriyabe, MD; Mikito Kawamura, MD; Akiyoshi Namiki, MD, Anesthesiology, Sapporo Medical University School of Medicine, Sapporo, Hokkaido, Japan. i.c.v. morphine evokes spinal GABA release via the activation of spinal 5-HT3 receptors.

A-976  Room 310, 10/17/2000 3:30 PM - 5:00 PM (PD)
Efficacy of Spinal Cyclooxygenase (COX) Inhibitors and Clonidine Combination to Relieve Postoperative Pain in a Validated Animal Model Patricia M. Lavand'homme, MD, Ph.D; Nathalie Renier; Marc De Kock, MD, Ph.D., Anesthesiology, St Luc Hospital - UCL, Brussels, Belgium. Spinal selective COX2 inhibitor displays clonidine sparing effect in post-incisional pain.

A-977  Room 310, 10/17/2000 3:30 PM - 5:00 PM (PD)
Effect of Joro Spider Toxin (JSTX) on Primary and Secondary Hyperalgesia after Incision in the Rat Esther M. Pogatzki, MD; Jan S. Niemeier, BS; Linda S. Sorten, Ph.D; Timoloby J. Brennan, MD, Ph.D, Anesthesiology, Univ of Iowa, Iowa City, IA, United States. JT JSTX, an antagonist to Ca2+ permeable AMPA receptors, blocked secondary but not primary punctate hyperalgesia after incision.

A-978  Room 310, 10/17/2000 3:30 PM - 5:00 PM (PD)
Tumor Necrosis Factor α Mediates Spontaneous Activity in Chronically Compressed Dorsal Root Ganglion Neurons in the Rat Jian-Ming Zhang, M.S., M.D.; Huiqin Li, M.D.; Sorin J. Bruihl, M.D., Anesthesiology, University of Arkansas for Medical Sciences, Little Rock, AR, United States. TNF-α altered firing rate of abnormal activity and action potential characteristics of the injured sensory neuron.

Local Anesthesia: Basic Science

A-979  Room 301, 10/18/2000 9:00 AM - 10:30 AM (PD)
Calcium Dependence of Low-Dose Local Anesthetic Neurotoxicity Michael E. Johnson, M.D., Ph.D.; Cindy B. Uld; B.S., Anesthesiology, Mayo Medical School, Rochester, MN, United States. Low dose local anesthetic is neurotoxic after 2-4 hr exposure. Cytoplasmic calcium buffering by BAPTA is not protective. Equivalent bupivacaine is as toxic as lidocaine under these conditions.

A-980  Room 301, 10/18/2000 9:00 AM - 10:30 AM (PD)
Nicorandil, Calcium and Glyceryl Trinitrate - Efficacy in Reversal of Ropivacaine-Induced Cardiotoxicity Jennifer M. Porter, FFARCSI, Fanouk Markos, BSc; H.M. Snow, PhD; George D. Shorten, PhD, Anesthesiology & Intensive Care Medicine, Cork University Hospital, University College Cork, Cork, Ireland. Calcium chloride was effective in reversing ropivacaine-induced depression of myocardial contractility.

A-981  Room 301, 10/18/2000 9:00 AM - 10:30 AM (PD)
Inhibition of L-Type Ca2+ Current by Bupivacaine Enantiomers in Rat Cardiac Myocytes G. Zapata-Sudo, M.D., Ph.D.; M.M. Trachez, M.D., Ph.D.; R.T. Sudo, M.D., Ph.D.; T.E. Nelson, Ph.D., Dept. of Basic and Clin. Pharmacol, UFRJ, Rio de Janeiro, Brazil. R(+) and S(+)bupivacaine block L-type calcium current of cardiac myocytes in a dose-dependent manner, by binding to the inactivated state of the channel.

A-982  Room 301, 10/18/2000 9:00 AM - 10:30 AM (PD)
Steroselective Effects of Ropivacaine on Lyosphosphatidate Signaling Markus W. Hollmann, MD; Andreas Berger, MS; Lars G. Fischer, MD; Marcel E. Durieux, MD, Ph.D., Department of Anesthesiology, University of Virginia, Charlottesville, VA, United States. Inhibition of LPA signaling by S(+)ropivacaine is less than that induced by comparable concentrations R(+)ropivacaine, lidocaine or bupivacaine.