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-Jin Lim, MD; Sang-Chul 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 Alters Pain Thresholds in a Rat Model of Incisional Pain David J. Clark, M.D./Ph.D.; Xiangqi Li, M.D., Anesthesiology, Stanford University, Palo Alto, CA, United States. These studies examine the effect of 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 I alpha in Nociceptive Information Transmission in the Spinal Cord Yuan Xiang Tao, Ph.D., M.D.; Roger A. Johns, M.D.; Hadi Aghajani, Ph.D.; Department of Anesthesiology and Critical Care Medicine, Johns Hopkins University School of Medicine, Baltimore, MD, United States. cGMP-dependent protein kinase I alpha is involved in pain processing.

A-973 Room 310, 10/17/2000 3:30 PM - 5:00 PM (PD)
Cannabinoids Reduce Morphine-Induced Emetic Response to Ferrets Isabelle I. Simonneau, M.D.; Maged Haniza, M.D.; Herberto P. Mata, B.S.; Frank Porreco, Ph.D.; T. Philip Malan, Jr., M.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 Regulation of Pain and Associated Cardiovascular Effects in the Rat Formalin Test Marie-Francoise Dormoy, Ph.D.; Yangyan Liang; Jacques E. Cheeth, 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 behavior 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 To moyuki Kawamata, M.D.; Keitichi Omote, M.D.; Masaki Toriyabe, M.D.; Mikito Kawamata, M.D.; Akiyoshi Namiki, M.D., 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, PhD, 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. Sorkin, Ph.D; Timolby J. Brennan, PhD, MD, Anesthesiology, Univ of Iowa, Iowa City, IA, United States. IT 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 Jun-Ming Zhang, M.S., M.D.; Huiqiang Li, M.D.; Sorin J. Brull, 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. Uhl, 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. Equipotent bupivacaine is as toxic as lidocaine under these conditions.

A-980 Room 301, 10/18/2000 9:00 AM - 10:30 AM (PD)
Noricardial, Calcium and Glyceryl Trinitrate - Efficacy in Reversal of Ropivacaine-Induced Cardiotoxicity Jennifer M. Porter, FFARCSI; Farouk Markos, BSc; H.M. Snow, Ph.D; George D. Shorten, Ph.D, 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. Troche, M.D., Ph.D.; R.T. Sudo, M.D., Ph.D.; T.E. Nelson, Ph.D., Dept. of Basic and Clinical Pharmacol, UFRJ, Rio de Janeiro, Brazil. R(+) and S(+)bupivacaine block L-type current and 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)
Steroelective Effects of Ropivacaine on Lyosphophatidate 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.