NEUROMUSCULAR TRANSMISSION

Neuromuscular Transmission: Pharmacology, Monitoring & Associated Disease States

A-1003 Room I, 10/16/2000 2:00 PM - 4:00 PM (PS) Intramuscular Halothane and Caffeine Application Induces Local Hypermetabolism in MH-susceptible Pigs but not in Normal Pigs Martin Anestesader, MD; Michael Sachs, MD; Andreas Hoyer, MD; Edmund Hartung, MD, PhD; Norbert Roewer, MD, PhD, Anesthesiology, University of Wuerzburg, Wuerzburg, Germany. Local application of a MH trigger is a promising principle for an in-vivo test for Malignant Hyperthermia.

A-1004 Room I, 10/16/2000 2:00 PM - 4:00 PM (PS) Local Intramuscular Application of Halothane in MH-Susceptible Pigs without Systemic Effects Martin Anestesader, MD; Michael Sachs, MD; Andreas Hoyer, MD; Edmund Hartung, MD, PhD; Norbert Roewer, MD, PhD, Anesthesiology, University of Wuerzburg, Wuerzburg, Germany. Local intramuscular halothane application does not produce systemic effects but induces local hypermetabolism in MH-susceptible pigs.

A-1005 Room I, 10/16/2000 2:00 PM - 4:00 PM (PS) Vecuronium Induces Similar Pain and Vasodilation as Rocuronium, but Weaker Mast Cell Activation James A. Blank, MD; Wolfgang Koppert, MD; Reinhard Wittl, MD; Seen Albrecht, MD; Martin Schmelz, MD, Dept. of Anesthesiology, Univ. Erlangen, Erlangen, Germany. Pain after injection of rocuronium is a concentration-dependent effect of phospholipase A2, most probably due to direct activation of nociceptors.

A-1006 Room I, 10/16/2000 2:00 PM - 4:00 PM (PS) Cisatracurium Neuromuscular Block at the Adductor Pollicis and the Laryngeal Adductor Muscles in Humans Marc Brennaud, MD; Claude Meisetnal, MD; Benoit Plaun, MD; Laurent Brinnaud, MD; Bertrand Dehaene, MD, Department of Anesthesiology, Hopital de Braibois, Nancy, France. Increasing the dose of cisatracurium up to 0.2 mg/kg shorten the onset time at the laryngeal adductor muscles.

A-1007 Room I, 10/16/2000 2:00 PM - 4:00 PM (PS) Age Dependent Changes in the Dose–Response Relation of Cisatracurium during Propofol Anesthesia Y.E. Chee, FANZCA; Matthew T. Chan, FANZCA; Cindy Au, MD; Tony Gin, MD, Anesthesiology and Intensive Care, Chinese University of Hong Kong, Hong Kong, Hong Kong. Neonates and infants require less cisatracurium to produce the same degree of neuromuscular block than older children and adults.

A-1008 Room I, 10/16/2000 2:00 PM - 4:00 PM (PS) The Time-Course of Action of Rocuronium 0.3 mg/kg in Children with or without End-Stage Renal Failure Jacques J. Driessen, MD; Eric N. Robertson, FRCA; Leo H. Boorij, MD, Anesthesiology, Academic Hospital Nijmegen, Nijmegen, Netherlands. The mean recovery times after rocuronium 0.3 mg/kg in children with (n=14, 59 mo) and without (n=14, 54 mo) chronic renal failure were similar.

A-1009 Room I, 10/16/2000 2:00 PM - 4:00 PM (PS) Oxymetazol for Desaturation Following Apnea Induced by Succinylcholine and Sodium Thiopental in Volunteers John R. Feinba, MD; Tom Heier, MD, PhD; Jim Lin, MD; James E. Caldwell, MB, BCh, Anesthesia, UCSC, San Francisco, CA, United States. We gave thiopental 5 mg/kg and succinylcholine 1 mg/kg to 12 preoxygened volunteers. Lowest So2 correlated with apnea duration and decreased below 80% in 4 subjects.

A-1010 Room I, 10/16/2000 2:00 PM - 4:00 PM (PS) Systemic Inflammation and Pharmacodynamics of Atracurium Heidrun Fink, MD; Peter Luppa, MD; Ralph Bogdanski, MD; Jeveendra Martyn, MD; Manfred Bichner, MD, Anaesthesiologie, Klinikum rechts der Isar der TUM, Munchen, Germany. Increase in α,-acid glycoprotein and no changes in ACHR expression is the possible cause for atracurium resistance during systemic inflammation.

A-1011 Room I, 10/16/2000 2:00 PM - 4:00 PM (PS) Evaluation of Intubating Conditions and Safety Following Rapacuronium, Succinylcholine or Placebo during Anesthesia with Alfenatindal and Propofol A. Gaspar, MD; G. Mingeu, MD; P. Duvandré, MD; P. Hens, MD, Dept. of Anesthesiology, CHR Carelde, Liege, Belgium. At 1 min., tracheal intub. facilitated by Rap, but clinically acceptable conditions were less frequently achieved than after Suc.

A-1012 Room I, 10/16/2000 2:00 PM - 4:00 PM (PS) New, Ultrashort Acting Muscle Relaxants. Neuromuscular Blocking Profile on Infusion Administration in Pigs Laszlo Gyermek, MD, Ph.D; Chingmub Lee, M.D.; Nguyen B. Nguyen, B.S; Young-Moon Cho, Ph.D., Anesthesiology, Harbor UCLA Med. Cir., Torrance, CA, United States. Two new, troponin diesters show shorter recovery characteristics than Rocuronium and Rapacuronium on bolus and infusion administration.

A-1013 Room I, 10/16/2000 2:00 PM - 4:00 PM (PS) Time Course of the Breakdown in Blood of Two New Tropin Diester Type Neuromuscular Blocking Agents Laszlo Gyermek, MD, Ph.D; Nguyen B. Nguyen, B.S; Young-Moon Cho, Ph.D., Anesthesiology, Harbor UCLA Med. Cir., Torrance, CA, United States. In contrast to Rocuronium and Mivacurium, two new nondepolarizing troponin diester NMBA agents are very rapidly inactivated in whole blood in pigs.

A-1014 Room I, 10/16/2000 2:00 PM - 4:00 PM (PS) Intramuscular Versus Skin Electromyography (EMG) of the Diaphragm: Determination of the Neuromuscular Block (NMB) after Mivacurium Thomas M. Hemmerling, MD, DEAA; Tobias Wolf; Christian Hanusa; Hubert Schmitt, MD, Anesthesiology, University Erlangen, Erlangen, Bavaria, Germany. EMG of the diaphragm from the back (lateral TH12) correlated well with intramuscular EMG to determine NMB.

A-1015 Room I, 10/16/2000 2:00 PM - 4:00 PM (PS) Requirements for Muscle Relaxants during Radical Retropubic Prostatectomy Melinda A. King, MD; Nuntiya Sujirattanawimol, M.D.; David R. Danielson, M.D.; Brian A. Hall, M.D.; David O. Warner, M.D., Department of Anesthesiology, Mayo Clinic and Foundation, Rochester, MN, United States. The quality of the surgical field in patients undergoing prostatectomy is good to excellent without using vecuronium.