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 Anetseder, MD; Michael Sachs, MD; Andreas Hoyer, MD; Edmund Hartung, MD, PhD; Norbert Roewer, MD, PhD, Anesthesiology, University, 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 Anetseder, MD; Michael Sachs, MS; 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. Blunk, MD; Wolfgang Koppert, MD; Reinhard Sittl, MD; Sven Albrecht, MD; Martin Schmelz, MD, Dept. of Anesthesiology, Univ. Erlangen, Erlangen, Germany.* Pain after injection of rocuronium is a concentration dependent effect of aminosteroids, 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 Bremaud, MD; Claude Meistelman, MD; Benoit Plaud, MD; Laurent Brunaud, MD; Bertrand Debaene, MD, department of Anesthesiology, Hopital de Brabois, 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 Aun, MD; Tony Gin, MD, Anaesthesia 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. Booij, 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)
Oxyhemoglobin Desaturation Following Apnea Induced by Succinylcholine and Sodium Thiopental in Volunteers *John R. Feiner, MD; Tom Heier, MD, PhD; Jim Lin, MD; James E. Caldwell, MBChB, Anesthesia, UCSF, San Francisco, CA, United States.* We gave thiopental 5 mg/kg and succinylcholine 1 mg/kg to 12 preoxygened volunteers. Lowest SpO_2 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; Jeevendra Martyn, MD; Manfred Blobner, MD, Anaesthesiologie, Klinikum rechts der Isar der TUM, Munchen, Germany.* Increase in α_1-acid glycoprotein and not 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 Alfentanil and Propofol *A. Gaspar, MD; G. Minguet, MD; P. Dewandre, MD; P. Hans, MD, Dpt of Anesthesia, CHR Citadelle, Liege, Belgium.* At 1 min.,tracheal intub. was 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, M.D, Ph.D; Chingmuh Lee, M.D.; Nguyen B. Nguyen, B.S; Young-Moon Cho, Ph.D., Anesthesiology, Harbor UCLA Med. Ctr., Torrance, CA, United States.* Two new, tropinyl 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 Tropinyl Diester Type Neuromuscular Blocking Agents *Laszlo Gyermek, M.D., Ph.D.; Nguyen B. Nguyen, B.S.; Young-Moon Cho, Ph.D., Anesthesiology, Harbor UCLA Med. Ctr., Torrance, CA, United States.* In contrast to Rocuronium and Mivacurium, two new nondepolarzing tropinyl diester NMB 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.* Skin 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, M.D.; 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.