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	Does Correcting the Numbers Improve Long-term Outcome? Robert D. Sanders and Mervyn Maze  SPECIAL ANNOUNCEMENTS	475
	Journal-related Activities and Other Special Activities at the 2009 American Society of Anesthesiologists Annual Meeting  Bruno Riou, Evan Kharasch, Timothy J. Brennan, Alain Borgeat, and David J. Murray	478
	William L. Young, M.D., Recipient of the 2009 Excellence in Research Award Ronald D. Miller	485
	Mihai Podgoreanu, M.D., Recipient of the 2009 Presidential Scholar Award  Mark F. Newman	487
	PERIOPERATIVE MEDIGINE	
<u>GME</u>	Perioperative Peripheral Nerve Injuries: A Retrospective Study of 380,680 Cases during a 10-year Period at a Single Institution  Marnie B. Welch, Chad M. Brummett, Terrence D. Welch, Kevin K. Tremper, Amy M. Shanks, Pankaj Guglani, and George A. Mashour	490
	Hypertension, tobacco use, diabetes mellitus, general and epidural anesthesia, and several surgical specialties were significantly associated with perioperative peripheral perve injuries	

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◆Epinephrine Impairs Lipid Resuscitation from Bupivacaine Overdose: A Threshold Effect David B. Hiller, Guido Di Gregorio, Richard Ripper, Kemba Kelly, Malek Massad, Lucas Edelman, Guy Edelman, Douglas L. Feinstein, and Guy L. Weinberg	498
Above a threshold, adding epinephrine to a lipid infusion protocol impairs recovery of hemodynamic and metabolic parameters during resuscitation from bupivacaine-induced asystole.	
◇◆Placental Transfer and Fetal Metabolic Effects of Phenylephrine and Ephedrine during Spinal Anesthesia for Cesarean Delivery Warwick D. Ngan Kee, Kim S. Khaw, Perpetua E. Tan, Floria F. Ng, and Manoj K. Karmakar	506
Women having elective cesarean delivery with spinal anesthesia received phenylephrine or ephedrine titrated to systolic blood pressure. Placental transfer was greater for ephedrine (median umbilical venous (UV)/maternal arterial (MA) plasma concentration ratio 1.13 vs. 0.17). Ephedrine crosses the placenta to a greater extent and the associated increased fetal concentrations of lactate, glucose, and catecholamines support the hypothesis that depression of fetal pH and base excess with ephedrine is related to metabolic effects secondary to stimulation of fetal beta adrenergic receptors.	
Monitoring Electrical Skin Conductance: A Tool for the Assessment of Postoperative Pain in Children?	513
Bruce Hullett, Neil Chambers, James Preuss, Italo Zamudio, Jonas Lange, Elaine Pascoe, and Thomas Ledowski  In this observational study, a low number of fluctuations in skin conductance per second accurately excluded moderate/severe pain. The method may hence be a useful addition to the presently used clinical pain assessment tools.	
Preserved Memory Function during Bispectral Index—guided Anesthesia with Sevoflurane for Major Orthopedic Surgery  Chantal Kerssens, Julie R. Gaither, and Peter S. Sebel	518
The authors observed implicit memory for words presented during anesthetic titration to bispectral index values of 50-60 in patients undergoing major orthopedic surgery with sevoflurane. Temporary light hypnosis may account for part of the effect.	
Precision of Traditional Approaches for Lumbar Plexus Block: Impact and Management of Interindividual Anatomic Variability Axel R. Heller, Alexander Fuchs, Thomas Rössel, Oliver Vicent, Diana Wiessner, Richard H. W. Funk,	525
Thea Koch, and Rainer J. Litz  Landmarks for posterior lumbar plexus block show large deviations from the actual plexus and exert a low margin of error. Diagonal construction vectors in line with the plexus indicated closer needle position and more error tolerance. SUPPLEMENTAL DIGITAL CONTENT IS AVAILABLE IN THE TEXT	
Desflurane, Isoflurane, and Sevoflurane Provide Limited Neuroprotection against Neonatal Hypoxia-Ischemia in a Delayed Preconditioning Paradigm  John J. McAuliffe, Andreas W. Loepke, Lili Miles, Bernadin Joseph, Elizabeth Hughes, and Charles V. Vorhees	533
Delayed preconditioning with desflurane, isoflurane, and sevoflurane provides partial protection of cued learning and novel object recognition circuits, but not spatial memory, against neonatal hypoxic-ischemic injury.	
Dreaming and Electroencephalographic Changes during Anesthesia Maintained with Propofol or Desflurane  Kate Leslie, Jamie Sleigh, Michael J. Paech, Logan Voss, Chiew Woon Lim, and Callum Sleigh	547
Propofol anesthesia is associated with the same incidence of dream recall as desflurane anesthesia. Maintenance of spindle activity in the electroencephalogram late into the awakening period is associated with less dream recall.	

Bedside Prediction of Airway Length in Adults and Children Bong-Jae Lee, Jae-Woo Yi, Jun Young Chung, Dong-Ok Kim, and Jong-Man Kang	556
The airway length from the upper incisor to the carina in the neutral position can be predicted by the straight length from the upper incisor to the manubriosternal joint in the fully extended position.	
Baroreflex Sensitivity Is Impaired in Patients with Obstructive Jaundice Jian-gang Song, Yun-fei Cao, Yu-ming Sun, Yan-hu Ge, Xue-wu Xu, Li-qun Yang, Zhi-qiang Liu, Shao-li Song, and Wei-feng Yu	561
Baroreflex sensitivity is impaired in patients with obstructive jaundice, and the underlying mechanisms for such a change may be associated with increased level of plasma atrial natriuretic peptide.	
Delayed Treatment with Isoflurane Attenuates Lipopolysaccharide and Interferon γ-induced Activation and Injury of Mouse Microglial Cells  Jie-Ae Kim, Liaoliao Li, and Zhiyi Zuo	566
Delayed isoflurane treatment dose- and time-dependently attenuated lipopolysaccharide plus interferon $\gamma$ -increased inducible nitric oxide synthase expression and cell injury of mouse microglia. These isoflurane effects may be mediated by protein kinase C.	
Effects of Remifentanil on the Spectrum and Quantitative Parameters of Electroencephalogram in Propofol Anesthesia  Jukka Kortelainen, Miika Koskinen, Seppo Mustola, and Tapio Seppänen	574
This study shows that remifentanil changes in a characteristic manner the spectrum and quantitative parameters of electroencephalogram during induction of propofol anesthesia. The changes are strongly dependent on the level of anesthesia.	
In Vitro Effects of Propofol and Volatile Agents on Pharmacologically Induced Chloride Channel Myotonia Oliver Bandschapp, Hans F. Ginz, Charles L. Soule, Thierry Girard, Albert Urwyler, and Paul A. laizzo	584
Pharmacologically induced chloride channel myotonia was reversed by high-dose propofol in an <i>in vitro</i> model. The volatile anesthetics halothane, isoflurane, and sevoflurane aggravated the <i>in vitro</i> myotonic reaction. SUPPLEMENTAL DIGITAL CONTENT IS AVAILABLE IN THE TEXT	
Isoflurane Inhibits the Tetrodotoxin-resistant Voltage-gated Sodium Channel $\rm Na_v 1.8$ Karl F. Herold, Carla Nau, Wei Ouyang, and Hugh C. Hemmings, Jr.	591
Isoflurane inhibits tetrodotoxin-resistant and tetrodotoxin-sensitive voltage-gated Na <sup>+</sup> channels, consistent with a conserved interaction site with inhaled anesthetics in all Na <sup>+</sup> channel isoforms. Effects on Na <sub>v</sub> 1.8 could contribute to modulation by inhaled anesthetics of peripheral nociception.	
CRITICAL CARE MEDICINE	
Adjunct Nitrous Oxide Normalizes Vascular Reactivity Changes after Hemorrhagic Shock in Mice under Isoflurane Anesthesia Iryna V. Samarska, Matijs van Meurs, Hendrik Buikema, Martin C. Houwertjes, Francis M. Wulfert, Grietje Molema, Anne H. Epema, and Robert H. Henning	600
Short-term hemorrhagic shock under isoflurane anesthesia enhances phenylephrine-mediated contractile response, suppresses acetylcholine-evoked contractile affect and augments acetylcholine-mediated relaxant responsiveness of the mouse thoracic aorta. Adjunct nitrous oxide counteracts these changes and normalizes vascular reactivity.	

	Accuracy of Postoperative End-tidal Pco <sub>2</sub> Measurements with Mainstream and Sidestream Capnography in Non-obese Patients and in Obese Patients with and without Obstructive Sleep Apnea  Yusuke Kasuya, Ozan Akça, Daniel I. Sessler, Makoto Ozaki, and Ryu Komatsu	609
	Mainstream capnometer more accurately measures end-tidal carbon dioxide partial pressure than sidestream capnometer in non-obese, obese, and obese with obstructive sleep apnea patients. An oral guide improves the accuracy of measurements.	
	PAIN MEDICINE	
	Analgesic Efficacy of Peripheral κ-Opioid Receptor Agonist CR665 Compared to Oxycodone in a Multi-modal, Multi-tissue Experimental Human Pain Model: Selective Effect on Visceral Pain  Lars Arendt-Nielsen, Anne E. Olesen, Camilla Staahl, Frédérique Menzaghi, Sherron Kell, Gilbert Y. Wong, and Asbjørn M. Drewes	616
	A peripheral tetrapeptide $\kappa$ -opioid receptor agonist (CR665) was compared to oxycodone in a human experimental study. CR665 showed a selective effect on visceral pain, whereas oxycodone had effect on skin, muscle, and visceral pain.	
$\Diamond$	Does Postoperative Delirium Limit the Use of Patient-controlled Analgesia in Older Surgical Patients?  Jacqueline M. Leung, Laura P. Sands, Sudeshna Paul, Tim Joseph, Sakura Kinjo, and Tiffany Tsai	625
	Postoperative delirium did not limit opioid use. Despite using more opioids, postoperative visual analog scale scores were higher in patients with postoperative delirium. Future studies should consider whether pain reduction may reduce the occurrence of postoperative delirium.	
	Contact-free Infrared Thermography for Assessing Effects during Acupuncture: A Randomized, Single-blinded, Placebo-controlled Crossover Clinical Trial Kamayni Agarwal-Kozlowski, Ann-Christin Lange, and Helge Beck	632
	Findings in the present study suggest that infrared thermographic imaging is a valuable tool in distinguishing sham acupuncture from true acupuncture at Hegu, as temperature increases early and consistently.	
	Spinal Microglial Expression and Mechanical Hypersensitivity in a Postoperative Pain Model: Comparison with a Neuropathic Pain Model  Naomi Ito, Hideaki Obata, and Shigeru Saito	640
	The role of spinal OX42 expression in hypersensitivity after paw incision may differ from that in peripheral nerve injury; increased spinal OX42 expression does not contribute to postoperative mechanical hypersensitivity after paw incision.	
	REVIEW ARTICLES	
	Role of Central and Mixed Venous Oxygen Saturation Measurement in Perioperative Care Stephen J. Shepherd and Rupert M. Pearse	649
	Venous oxygen saturation is affected by a wide range of perioperative factors, and its use as a therapeutic target may be associated with improvements in outcome.	

Predictors of Postoperative Pain and Analgesic Consumption: A Qualitative Systematic Review  Hui Yun Vivian Ip, Amir Abrishami, Philip W. H. Peng, Jean Wong, and Frances Chung	657
This qualitative systematic review shows that preexisting pain, anxiety, age, and type of surgery are significant predictors for postoperative pain, whereas age, type of surgery, and psychological distress are significant predictors for postoperative analgesic consumption.	
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