



Anesthesiology



The Journal of the American Society of Anesthesiologists, Inc.
American Society of Critical Care Anesthesiologists
Society for Obstetric Anesthesia and Perinatology



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- In a prospective case-control study, it was shown that characteristics of anesthesia management have impact on postoperative severe morbidity and mortality.
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- ◆ **Recombinant Coagulation Factor VIIa in Major Liver Resection: A Randomized, Placebo-controlled, Double-blind Clinical Trial** 269
- J. Peter A. Lodge, Sven Jonas, Elie Oussoultzoglou, Massimo Malagó, Christian Jayr, Daniel Cherqui, Matthias Anthuber, Darius F. Mirza, Luce Kuhlman, Wolf-Otto Bechstein, Juan Carlos Meneu Díaz, Jack Tartiere, Daniel Eyraud, Marianne Fridberg, Elisabeth Erhardtsen, and Oliver Mimoz*
- This randomized, placebo-controlled, double-blind trial aimed at evaluating the hemostatic effect of 20 or 80 µg/kg recombinant activated coagulation factor VII in noncirrhotic patients undergoing major partial hepatectomy.
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- ◆ **A Phase III, Double-blind, Placebo-controlled, Multicenter Study on the Efficacy of Recombinant Human Antithrombin in Heparin-resistant Patients Scheduled to Undergo Cardiac Surgery Necessitating Cardiopulmonary Bypass** 276
- Michael S. Avidan, Jerrold H. Levy, Jens Scholz, Elise Delphin, Peter M. J. Rosseel, Michael B. Howie, Irwin Gratz, Charles R. Bush, Nikolaos Skubas, Gabriel S. Aldea, Michael Licina, Laura J. Bonfiglio, Daniel K. Kajdasz, Elizabeth Ott, and George J. Despotis*
- Fifty-four heparin-resistant patients undergoing cardiac surgery were randomly assigned to receive recombinant human antithrombin or saline. Antithrombin therapy was effective in restoring heparin responsiveness and decreased the heparin dose and requirement for fresh frozen plasma but did not alter the number of blood and platelet transfusions.

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Hideyuki Higuchi, Yushi Adachi, and Tomiei Kazama

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Lena E. Andersson, Margaretha Bååth, Anders Thörne, Peter Aspelin, and Suzanne Odeberg-Wernerman

Pneumoperitoneum at an intraabdominal pressure level of 11-13 mmHg causes increased atelectasis volume as examined by spiral computed tomography.

Effects of Intraoperative Blood Salvage on Leukocyte Recruitment to the Endothelium 300

Boris Nohé, Reiner Ries, Annette Ploppa, Christof Zanke, Martin Eichner, Klaus Unertl, and Hans-Jürgen Dieterich

Salvaged and processed wound blood is contaminated with considerable amounts of activated leukocytes. Despite up-regulated adhesion molecules, adhesion is markedly impaired, suggesting immunosuppressive rather than proinflammatory effects on leukocyte recruitment.

◇ Hemodynamic Changes after Protamine Administration: Association with Mortality after Coronary Artery Bypass Surgery 308

Ian J. Welsby, Mark F. Newman, Barbara Phillips-Bute, Robert H. Messier, Emil D. Kakkis, and Mark Stafford-Smith

Hemodynamic changes after protamine administration are independently related to in-hospital mortality after primary coronary artery bypass surgery. The relation is present, even in the lowest observed range of values for both systemic hypotension and pulmonary hypertension. Although the authors' findings suggest that common "minor" protamine reactions may not be benign, it is only possible to speculate that a direct causal link exists between protamine and mortality risk.

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Cricoid Pressure Does Not Increase the Rate of Failed Intubation by Direct Laryngoscopy in Adults 315

Alexis F. Turgeon, Pierre C. Nicole, Claude A. Trépanier, Sylvie Marcoux, and Martin R. Lessard

Seven hundred adult patients were randomly assigned to have a cricoid pressure or a sham cricoid pressure during direct laryngoscopy for orotracheal intubation. Cricoid pressure did not increase the rate of failed intubation and had no effect on laryngoscopic view or on the difficulty of intubation.

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Thomas Schricker, Rejeanne Gougeon, Leopold Eberhart, Linda Wykes, Louise Mazza, George Carvalho, and Franco Carli

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Human Kidneys Play an Important Role in the Elimination of Propofol 327

Daisuke Takizawa, Haruhiko Hiraoka, Fumio Goto, Koujiro Yamamoto, and Ryuya Horiuchi

Human kidneys play an important role in the elimination of propofol.

■ LABORATORY INVESTIGATIONS

Mechanical Ventilation Affects Lung Function and Cytokine Production in an Experimental Model of Endotoxemia 331

Fabienne Brégeon, Stéphane Delpierre, Bruno Chetaille, Osamu Kajikawa, Thomas R. Martin, Amapola Autillo-Touati, Yves Jammes, and Jérôme Pugin

Mechanical ventilation with 10 ml/kg and no positive end-expiratory pressure is associated with lung injury during transient endotoxemia. Lung chemokine production and inflammatory cell infiltration was greater when mechanical ventilation was associated with endotoxemia than during either mechanical ventilation or endotoxemia alone.

Continuous Monitoring of Cerebrospinal Fluid Oxygen Tension in Relation to Motor Evoked Potentials during Spinal Cord Ischemia in Pigs 340

Jeroen Lips, Peter de Haan, Gert Joan Bouma, Rebecca Holman, Eric van Dongen, and Cor J. Kalkman

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Berthold Drexler, Claire L. Roether, Rachel Jurd, Uwe Rudolph, and Bernd Antkowiak

Theta oscillations in cultured neocortical brain slices are attenuated by 0.2 μ M etomidate in slices from β_3 (N265M) mutant but not from wild type mice, indicating opposing actions of the anesthetic mediated *via* different γ -aminobutyric acid type A receptor subtypes.

Long-term Exposure to Local but Not Inhalation Anesthetics Affects Neurite Regeneration and Synapse Formation between Identified *Lymnaea* Neurons **353**

Shin Onizuka, Mayumi Takasaki, and Naweed I. Syed

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Benoît Vivien, Yves Lecarpentier, Bruno Riou, and Catherine Coirault

Halothane and isoflurane at clinically relevant concentrations do not directly depress mechanical or enzymatic properties of cross-bridges in the heart, as assessed by nonsignificant changes in actin filament sliding, maximal actomyosin adenosine triphosphatase activity, and the association constant of myosin for actin.

Remifentanyl Preconditioning Confers Cardioprotection *via* Cardiac κ - and δ -Opioid Receptors **371**

Ye Zhang, Michael G. Irwin, Tak Ming Wong, Mai Chen, and Chun-Mei Cao

Cardiac δ - and κ - but not μ -opioid receptors mediate the cardioprotection produced by remifentanyl preconditioning. Both protein kinase C and the mitochondrial adenosine triphosphate-sensitive potassium channel were involved in this effect.

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Ayako Wakai, Tatsuro Kohno, Tomohiro Yamakura, Manabu Okamoto, Toyofumi Ataka, and Hiroshi Baba

Isoflurane, 1.5%, reduced the excitatory postsynaptic current evoked by dorsal root stimulation. It potentiated the duration of electrically evoked and miniature inhibitory postsynaptic currents and the amplitude of γ -aminobutyric acid-induced currents. This may be a possible mechanism for antinociception by isoflurane in the spinal cord.

■ PAIN AND REGIONAL ANESTHESIA

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Christophe Dadure, Frederic Motais, Christine Ricard, Olivier Raux, Rachel Troncin, and Xavier Capdevila

Ambulatory continuous peripheral nerve block associated with an initial Bier block seems to be a significant and novel contribution to treat recurrent pediatric complex regional pain syndrome I. It allows complete pain relief, early mobilization, and rapid return home, representing a real psychological advantage for these children.

Continuous Infusion of Ropivacaine for Pain Relief after Iliac Crest Bone Grafting for Shoulder Surgery 392

Stephan Blumenthal, Alexander Dullenkopf, Katharina Rentsch, and Alain Borgeat

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Libby H. Y. Lee, Michael G. Irwin, and Siu-kuen Lui

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Navil F. Sethna, Susan T. Verghese, Raafat S. Hannallah, Jean C. Solodiuk, David Zurakowski, and Charles B. Berde

This study demonstrated that a 20-min application of S-Caine Patch™ is effective in lessening pain associated with venipuncture procedures. Adverse events after S-Caine Patch™ application were mild and transient.

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Yong Zhang, Dawn R. Conklin, Xinhui Li, and James C. Eisenach

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Ketamine Improves the Management of Exaggerated Postoperative Pain Observed in Perioperative Fentanyl-treated Rats 421

Philippe Richebé, Cyril Rivat, Jean-Paul Laulin, Pierre Maurette, and Guy Simonnet

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Michael Zaugg and Marcus C. Schaub

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