ANESTHESIOLOGY



Antagonism of Nerve Growth Factor-TrkA Signaling and the Relief of Pain (Review Article)

The analgesic mechanisms for blocking the actions of nerve growth factor are reviewed.

Ultrasound Imaging Facilitates 94 Spinal Anesthesia in Adults with Difficult Surface Anatomical Landmarks

Ultrasound imaging improves the performance of spinal anesthesia in adult patients with difficult surface landmarks.

Treatment with Epinephrine (Adrenaline) in Suspected Anaphylaxis during Anesthesia in Denmark

First-line treatment for anaphylaxis is intravenous epinephrine starting with bolus doses of 0.01 mg.

Derivation and Diagnostic Accuracy of the Surgical Lung Injury Prediction Model

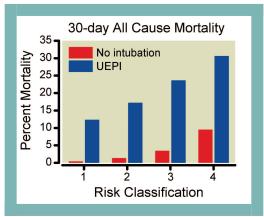
A preoperative prediction model for identifying patient's risk for postoperative acute lung injury is discussed. *See the accompanying Editorial View on* **page 10**

Thoracic Epidural Analgesia and Acute Pain Management (Clinical Concepts and Commentary)

Indications, placement techniques, solutions administered, potential complications, and evidence-based outcomes are discussed.

Independent Predictors and Outcomes of Unanticipated Early Postoperative Tracheal Intubation after Nonemergent, Noncardiac Surgery

Little is known about the risk of respiratory failure within the first 3 days after surgery and its role on mortality. In a retrospective analysis of the American College of Surgeons-National Surgical Quality Improvement Program database, the authors reviewed the incidence and predictors of postoperative reintubation in 222,094 patients undergoing nonemergent, noncardiac surgery. Overall, 49.4% of patients that received an



unanticipated early postoperative tracheal intubation (UEPI) underwent this procedure within the first three postoperative days. This was associated with a nine-fold increase in 30-day mortality. Some of the risk factors included alcohol use, smoking, dyspnea, chronic obstructive pulmonary disease, diabetes, congestive heart failure and hypertension, extremes of body mass index (high or low), and sepsis. A risk classification system was developed and validated based on the number of risks and the associated incidence of UEPI.

Pediatric Surgery and Parental Smoking Behavior

Secondhand smoke increases risks for anesthesia. A retrospective secondary analysis of the 2005 National Health Interview Survey was conducted to see if the smoking habits changed in 9,289 parents whose children underwent surgery. Of 12.5% of children exposed to secondhand smoke, there was an increased likelihood that a parent would try to quit if they (odds ratio [OR] = 2.19) or their child (OR = 2.61) underwent surgery within the year. However, smoking cessation was more likely to be successful if the parent themselves underwent surgery (OR = 2.35). See the accompanying Editorial View on page 1

Genome-wide Association Study Using Pooled DNA to Identify Candidate Markers Mediating Susceptibility to Postoperative Nausea and Vomiting

Although postoperative nausea and vomiting (PONV) are known to be hereditary, the genetic basis of this risk factor is not known. Through a genome-wide association study of 122 patients and 129 matched controls, the authors identified 41 potential allelic variants between the groups. After several correction steps, one single nucleotide polymorphism, associated with the gene for the muscarinic acetylcholine receptor 3 subtype, was significantly associated with PONV. Further analysis is required to determine the role of this gene in PONV.

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