THIS MONTH IN Anesthesiology

There was a higher success rate with the GlideScope technique in untrained personnel as compared with direct laryngoscopy.

Respiratory and Sleep Effects of Remifentanil in Volunteers with Moderate Obstructive Sleep Apnea......41

Remifentanil markedly increased central apneas in a subset of subjects.

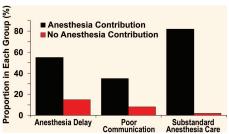
Preoperative and Intraoperative Predictors of Cardiac Adverse Events after General, Vascular, and Urological Surgery58

The inclusion of intraoperative elements improves the ability to predict cardiac adverse events after noncardiac surgery.

Trends and Outcomes of Malignant Hyperthermia in the United States, 2000 to 2005......89

The incidence and mortality of malignant hyperthermia in the United States are higher than previously reported.

The authors reviewed recent obstetric claims in the American Society of Anesthesiologists Closed Claims database. Claims for injuries from 1990 to 2003 were compared with obstetric claims for injuries prior to 1990. Compared with pre-1990 obstetric claims, the proportion of maternal death and newborn death/brain damage decreased, whereas maternal nerve injury and maternal back pain increased in claims from 1990 or later, In claims from 1990 or later,



payment was made on behalf of the anesthesiologist in only 21% of newborn death/brain damage claims compared with 60% of maternal death/brain damage claims. These payments in both groups were associated with an anesthesia contribution to the injury and substandard anesthesia care. Potentially preventable anesthetic causes of newborn injury included delays in anesthesia care and poor communication between the obstetrician and anesthesiologist. See the accompanying Editorial View on page 8

Manual in-line stabilization (MILS) is recommended during direct laryngoscopy and intubation in patients with known or suspected cervical spine instability. The authors hypothesized that anesthesiologists would apply greater pressure during intubations with MILS than without. Nine patients underwent two sequential laryngoscopies and endotracheal intubations, one with MILS and one without. Pressures applied to airway tissues during laryngoscopy were measured and glottic view was characterized. With MILS, glottic visualization was worse in six patients. Maximum laryngoscope pressure was greater with MILS than without. In the presence of cervical instability, impaired glottic visualization and secondary increased pressure application with MILS have the potential to increase pathologic cranio-cervical motion. See the accompanying Editorial View on page 6

Hemoglobin-based oxygen-carrying solutions (HBOC) provide emergency alternatives to blood transfusion. Two primary concerns limiting the clinical acceptance of acellular HBOC are the occurrence of systemic and pulmonary vasoconstriction. The authors examined the impact of HBOC-201 infusion with or without inhaled nitric oxide on pulmonary vascular tone in healthy, awake lambs. Pretreatment with inhaled nitric oxide (80 ppm) for 1 h followed by breathing a lower concentration of nitric oxide (5 ppm) during and after HBOC-201 infusion prevented systemic and pulmonary vasoconstriction. These findings demonstrate that pretreatment with inhaled nitric oxide followed by breathing a lower concentration of nitric oxide allowed administration of an acellular hemoglobin substitute without vasoconstriction.

Preoperative Use of Statins Is Associated with Reduced Delirium Rates after Cardiac Surgery......67

Statin drugs have been shown to reduce adverse perioperative events. The objective of this study was to determine if there was an association between preoperative administration of statins and postoperative delirium in a prospective cohort of patients undergoing cardiac surgery with cardiopulmonary bypass. All patients were screened for delirium during their hospitalization using the Confusion Assessment Method in the intensive care unit. Multivariable logistic regression analysis was used to identify independent perioperative predictors of delirium. Of the 1,059 patients analyzed, 122 patients had delirium. Administration of statins reduced the odds of delirium after cardiac surgery with cardiopulmonary bypass by 46%. A prospective placebo-controlled clinical trial will be required to validate these findings.