

THIS MONTH IN *Anesthesiology*

Postoperative Urinary Retention: Anesthetic and Perioperative Considerations (Review Article) 1139

The pathophysiology, clinical assessment, and management of postoperative urinary retention are reviewed.

Reversal of Profound Neuromuscular Block by Sugammadex Administered Three Minutes after Rocuronium: A Comparison with Spontaneous Recovery from Succinylcholine. 1020

Sugammadex administered 3 min after rocuronium is faster than spontaneous recovery from succinylcholine.

Perioperative Drug Therapy in Elderly Patients (Clinical Concepts and Commentary) 1176

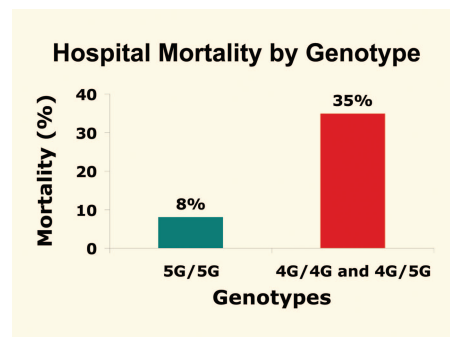
Elderly patients have altered responses to drugs used perioperatively.

Quality and Safety Indicators in Anesthesia: A Systematic Review (Review Article) 1158

This review identifies, describes, and assesses clinical indicators for quality and safety measurement in anesthesia.

4G/5G Polymorphism of Plasminogen Activator Inhibitor-1 Gene Is Associated with Mortality in Intensive Care Unit Patients with Severe Pneumonia. 1086

The 4G allele of the 4G/5G polymorphism of the plasminogen activator inhibitor-1 gene is associated with an increased incidence of hospitalizations for pneumonia. The authors hypothesized that the 4G allele would be associated with worse clinical outcomes in patients with severe pneumonia. Genotyping detection for the plasminogen activator inhibitor-1 4G/5G polymorphism was carried out in a total of 111 patients admitted to the hospital with severe pneumonia. Patients with the 4G/4G and the 4G/5G genotypes had higher mortality (35% vs. 8%, $P = 0.007$) and fewer ventilator-free days (median 4 vs. 13, $P = 0.04$) compared with patients with the 5G/5G genotype. These findings suggest that plasminogen activator inhibitor-1 may have a role in pathogenesis and that the 4G/5G polymorphism may be an important biomarker of risk in patients with severe pneumonia.



Reduction in Intraoperative Bacterial Contamination of Peripheral Intravenous Tubing through the Use of a Novel Device 978

The investigators hypothesized that improvements in intraoperative hand hygiene compliance would reduce transmission of bacteria to surgical patients and reduce the incidence of postsurgical healthcare-associated infections. One hundred fourteen operative cases were studied in a controlled manner before and after study over two consecutive months. The treatment phase used a novel personal hand decontamination device. The patient's intravenous tubing was contaminated in 32.8% of cases in the control group versus 7.5% in the treatment group (odds ratio = 0.17; 95% confidence interval, 0.06–0.51; $P < 0.01$). Healthcare-associated infection rates were reduced in the device group (3.8%) as compared with the control group (17.2%) (odds ratio = 0.19; 95% confidence interval, 0.00–0.81; $P = 0.02$). Improved hand hygiene compliance through the use of a novel hand sanitation strategy was associated with a reduction in healthcare-associated infections. See the accompanying Editorial View on page 959

Randomized, Double-blind, Placebo-controlled, Dose-response, and Preclinical Safety Study of Transforaminal Epidural Etanercept for the Treatment of Sciatica 1116

Recent evidence has implicated tumor necrosis factor as a cause of radiculopathy in patients with herniated nucleus pulposus. The authors evaluated the safety of an epidurally administered anti-tumor necrosis factor agent. A double-blind, placebo-controlled, dose-response study was conducted. An epidural canine safety study was conducted using the same injection doses and paradigm as in the clinical study. The animal study revealed no behavioral, neurologic, or histologic evidence of drug-related toxicity and all patients tolerated the injections without evidence of acute toxicity. Epidural etanercept may be a future treatment for lumbosacral radiculopathy. See the accompanying Editorial View on page 967

Continuous Perioperative Insulin Infusion Decreases Major Cardiovascular Events in Patients Undergoing Vascular Surgery 970

Although evidence suggests that hyperglycemia is an independent predictor of increased cardiovascular risk, the benefit of glycemic control in noncardiac surgery is unknown. The investigators undertook a single-center, prospective, unblinded, active-control study in 236 patients who were randomized to continuous insulin infusion (target glucose 100–150 mg/dl) or to a standard intermittent insulin bolus (treat glucose >150 mg/dl). These patients underwent peripheral vascular bypass, abdominal aortic aneurysm repair, and below- or above-knee amputations. The primary endpoint was a composite of all causes of death, myocardial infarction, and acute congestive heart failure. Multivariate analysis demonstrated that continuous insulin infusion was a negative independent predictor of adverse events (odds ratio = 0.28; 95% confidence interval, 0.09–0.87; $P = 0.027$), whereas previous coronary artery disease was a positive predictor of adverse events. See the accompanying Editorial View on page 957