



Lipid Emulsion Infusion: Resuscitation for Local Anesthetic and Other Drug Overdose (Clinical Concepts and Commentary) 180

Rapid infusion of lipid emulsion can reverse toxicity caused by lipophilic drugs.

Effect of Nitrous Oxide Exposure during Surgery on the Homocysteine Concentrations of Children 15

Children exposed to nitrous oxide for at least 2 h showed increased postoperative plasma total homocysteine concentrations. See the accompanying Editorial View on page 3

Variability in Blood and Blood Component Utilization as Assessed by an Anesthesia Information Management System 99

Variability in blood utilization was identified among individual medical providers.

Transient Receptor Potential Ankyrin 1 Ion Channel Contributes to Guarding Pain and Mechanical Hypersensitivity in a Rat Model of Postoperative Pain 137

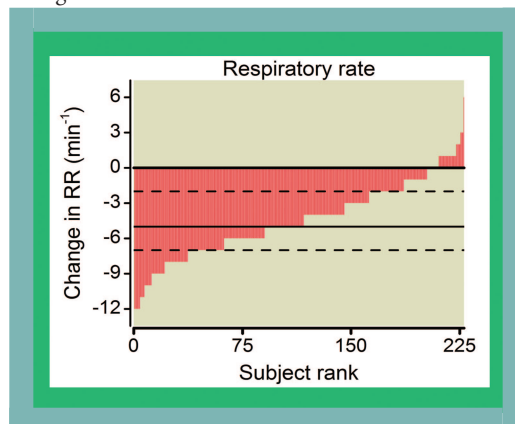
Transient receptor potential ankyrin 1 may be a target for postoperative pain relief. See the accompanying Editorial View on page 8

Obesity Hypoventilation Syndrome: A Review of Epidemiology, Pathophysiology, and Perioperative Considerations (Review Article) 188

Perioperative management of patients with the triad of obesity, daytime hypoventilation, and sleep disordered breathing is reviewed. Management of these patients is discussed.

Aversive and Reinforcing Opioid Effects: A Pharmacogenomics Twin Study 22

The interindividual differences in adverse effects of opioids are well known. In this classical twin study, the authors explored the genetic and/or shared environmental contributions to acute adverse and affective opioid responses. Among the 121 twin pairs analyzed, significant heritability was detected for nausea (59%), drug disliking (36%), and respiratory depression (30%). Significant familial effects were also observed for pruritus, dizziness, sedation, and drug liking (38% to 26%). Covariates, including age, gender, race, ethnicity, education, mood, and depression affected sedation, pruritus, drug liking/disliking, and dizziness. This study demonstrates that adverse and reinforcing effects of opioids are influenced by genetic, environmental, and demographic factors. See the accompanying Editorial View on page 6



Comparative Effectiveness of Regional versus General Anesthesia for Hip Fracture Surgery in Adults 72

There are conflicting results regarding the type of anesthesia for optimum postoperative outcomes in patients undergoing surgery for hip fracture. This retrospective cohort study assessed the association between regional versus general anesthesia and postoperative outcomes in approximately 18,000 patients undergoing surgery for hip fracture. Of the 5,254 patients who received regional anesthesia, there was a 2.1% rate of in-hospital mortality, compared with 2.5% in the 12,904 patients who received general anesthesia. However, the adjusted odds of mortality (odds ratio [OR] = 0.710; $P < 0.014$) and pulmonary complications (OR = 0.752; $P < 0.0001$) favored patients who received regional anesthesia. This retrospective analysis suggests that regional anesthesia may be beneficial for patients undergoing surgery for hip fracture.

Utilization of Critical Care Services among Patients Undergoing Total Hip and Knee Arthroplasty: Epidemiology and Risk Factors 107

Patients undergoing hip and knee arthroplasties are often elderly and have a high rate of comorbidities which may increase their risk for perioperative complications. It is not known if the use of critical care services will improve outcomes in these patients. A retrospective review of hospital discharge data was analyzed for approximately 530,000 patients undergoing hip or knee arthroplasty. Overall, 3% of patients required critical care services and these patients were generally older and had a higher comorbidity burden compared with non-critical care service patients. Patients in critical care developed more complications, had longer hospital stays, and had higher costs. This study highlights the importance of close monitoring of this patient population.