



Perioperative Management of a Multigravida at 34-week Gestation Diagnosed with Abnormal Placentation (Case Scenario) 852

Medical management of abnormal placentation is reviewed.

Rapid Eye Movement Sleep Debt Accrues in Mice Exposed to Volatile Anesthetics 702

Rapid eye movement sleep rebound occurs following 6 h of general anesthesia. See the accompanying Editorial View on page 683

Continuous Femoral Nerve Blocks: Varying Local Anesthetic Delivery Method (Bolus versus Basal) to Minimize Quadriceps Motor Block while Maintaining Sensory Block 774

Basal infusion versus repeated bolus doses did not influence continuous femoral nerve block effects.

Strategy-dependent Dissociation of the Neural Correlates Involved in Pain Modulation 844

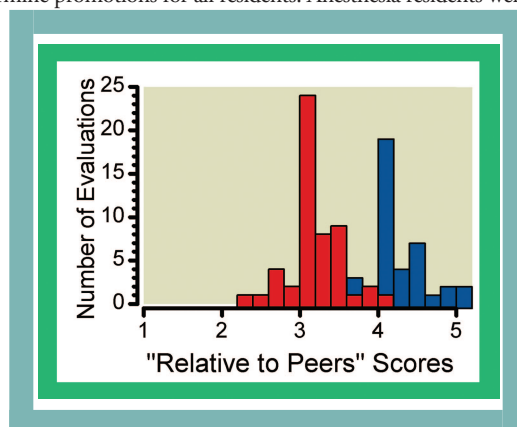
Two different cognitive strategies that modulate chronic pain are studied.

Perioperative Stroke in Noncardiac, Nonneurosurgical Surgery (Review Article) 879

Management of predisposing risk factors and early detection of perioperative stroke are reviewed.

Determining Resident Clinical Performance: Getting Beyond the Noise (Original Investigations in Education) 862

There is an essential need for valid measures of clinical performance in order to provide feedback for learning and determine promotions for all residents. Anesthesia residents were anonymously evaluated weekly using an electronic evaluation form based on a "relative to peers" performance scale and the Accreditation Council for Graduate Medical Education core competencies. Nearly 15,000 evaluations of 108 residents were reviewed, and all were generally positively biased (*blue*) versus unbiased faculty (*red*). A normalization process for each performance score based on individual faculty members allowed for determination of reliable performance scores. Average scores remained stable over time, were related to external measures of knowledge, and identified residents who required interventions. This study demonstrates the utility of a clinical performance assessment system for anesthesia residents. See the accompanying Editorial View on page 681



Autopsy Utilization in Medicolegal Defense of Anesthesiologists 713

Due to high costs and the use of other modern diagnostics, the rate of autopsy for in-hospital deaths has declined dramatically. This retrospective study compared the cause of death findings using the American Society of Anesthesiologists Closed Claims Project Database after autopsy was (n = 551) or was not (n = 429) performed. In the 288 evaluable claims with autopsy, patients were younger and healthier than those for whom autopsy was not performed ($P < 0.001$). In cases with autopsy, an unexpected pathological diagnosis was determined in half of all claims. A significant nonanesthetic contribution was found in the majority of claims (61%), which resulted in a positive outcome for the defense of the anesthesiologists in 55% of claims. Autopsy results were harmful in only 27% of cases. Despite the decline in utilization, autopsy findings remain more helpful than harmful in the medicolegal defense of anesthesiologists. See the accompanying Editorial View on page 685

Methylphenidate Actively Induces Emergence from General Anesthesia 791

Currently, pharmacologic agents are not used to actively induce emergence from general anesthesia. This study tested the effects of methylphenidate, a dopamine/norepinephrine transporter inhibitor, on time to emergence from isoflurane anesthesia in rodents. Time to emergence was reduced by nearly 200 s by methylphenidate. Methylphenidate also dose-dependently induced the return of righting reflex and an increase in minute ventilation. Methylphenidate may be clinically useful as an agent to reverse general anesthetic-induced unconsciousness and respiratory depression at the end of surgery.