In-Training Examination Gaps in Knowledge Reports

The following reports describe concepts from the In-Training Exam that were most misunderstood by examinees or proved to be especially difficult. Each question was reviewed by the ITE Committee as part of key validation and the correct answer was determined to be accurate. The reports are arranged by year.

2020 Gaps in Knowledge Report

- When used as an infusion at 50mcg/kg/min, propofol has bronchodilatory as well as respiratory depressant effects
- Amongst the causes of cerebral edema, administration of steroids is most effective for the treatment of vasogenic cerebral edema
- Inhaled volatile anesthetics will have an increased pharmacodynamic effect in children with cerebral palsy
- The increase in creatinine clearance that occurs with pregnancy returns to prepregnant levels 8 to 12 weeks postpartum
- The duration of action of epidural bupivacaine is not greatly affected by the addition of epinephrine

2019 Gaps in Knowledge Report

- Pyridostigmine is an appropriate medication for prophylaxis against possible nerve agent exposure, whereas atropine and pralidoxime chloride would be appropriate for treatment after exposure
- Benzodiazepines are indicated for initial treatment of an acutely cocaine intoxicated patient presenting for emergency surgery
- Application of charcoal filters to both inspiratory and expiratory limbs of the anesthesia machine's breathing circuit is an effective method of reducing further exposure to volatile agent during an intraoperative episode of malignant hyperthermia
- In healthy patients, serum creatinine is unlikely to change significantly between the ages of 40 and 70
- The use of ginseng and garlic as herbal supplements does not represent a contraindication to spinal anesthesia

2018 Gaps in Knowledge Report

- Increased temperature seen as the immediate result of a platelet transfusion is most likely due to the presence of cytokines in the platelet transfusion
- Facial and airway edema complicating airway management can result from ACE inhibitor associated angioedema
- Prolongation of the duration of action of succinylcholine can occur in patients who are taking donepezil
According to NIOSH, the recommended maximum level for volatile anesthetics in the ambient air of an OR is 2 parts per million

An elevated ipsilateral hemidiaphragm is commonly encountered after deep cervical plexus block

Inhalational general anesthetics exert their effects by binding directly to amphiphilic cavities in proteins

### 2017 Gaps in Knowledge Report

- Successful placement of an adductor canal block will result in weakness of the vastus medialis muscle
- Daily palpation of the dressing site for tenderness is recommended by the CDC as a method of preventing catheter-related bloodstream infections with central venous catheters
- Hypoalbuminemia is a potential cause of metabolic alkalosis
- The posterior cricoarytenoid muscles are solely responsible for abduction of the vocal cords, and are attached between the posterior cricoid cartilage and the arytenoid cartilages bilaterally