

# OCTOBER 2008 DAC ANSWERS

---

**Friday, October 31, 2008**

Signs of intraoperative bronchospasm include

1. increased slope of the expiratory plateau on capnogram
2. increased peak airway pressure
3. prolonged exhalation
4. decreased arterial-to-end-tidal PCO<sub>2</sub> difference

Answer: 1,2,3

---

**Thursday, October 30, 2008**

Landmarks used in performing a stellate ganglion block include the

1. transverse process of C4
2. cricoid cartilage
3. hyoid bone
4. medial border of the sternocleidomastoid muscle

Answer: 2,4

---

**Wednesday, October 29, 2008**

A 44-year-old patient who had a subarachnoid hemorrhage two days ago undergoes induction of general anesthesia for clipping of an intracranial aneurysm. Changes that will increase the risk for intracranial aneurysm rupture include

1. decrease in intracranial pressure
2. decrease in cerebral perfusion pressure
3. increase in mean arterial pressure
4. increase in central venous pressure

Answer: 1,3

---

**Tuesday, October 28, 2008**

Compared with older children, neonates

1. require a higher dose of succinylcholine by weight to achieve the same degree of paralysis
2. recover from vecuronium more quickly
3. have a larger volume of distribution for nondepolarising relaxants
4. exhibit less tachycardia after administration of pancuronium

Answer: 1, 3

---

**Monday, October 27, 2008**

In a woman in active labor at term, uterine blood flow is decreased by

1. alpha-adrenergic agonists
2. beta-adrenergic agonists
3. hypocarbia
4. epidural test dose containing epinephrine

Answer: 1, 3

---

**Friday, October 24, 2008**

A patient with chronic liver disease is scheduled for an abdominal operation. This patient is at increased risk for bleeding problems caused by:

- a. decreased levels of prothrombin
- b. failure of hepatic clearance of fibrinolytic activators
- c. splenic sequestration of platelets
- d. decreased synthesis of factor VIII

Answer: 1,2,3

---

**Thursday, October 23, 2008**

Anesthetic considerations in patients with congestive heart failure include:

1. altered metabolism of anesthetic agents
2. decreased functional residual capacity
3. activation of the rennin-angiotensin system
4. decreased systemic vascular resistance

Answer: 1,2,3

---

**Wednesday, October 22, 2008**

Effects of dantrolene include:

1. decreased cytoplasmic calcium concentration
2. vasoconstriction
3. muscle weakness
4. decreased myocardial contractility

Answer: 1,3

---

**Tuesday, October 21, 2008**

Adverse effects of succinylcholine in children with Duchenne's muscular dystrophy include:

1. skeletal muscle rigidity
2. myoglobinemia
3. hyperglycemia
4. prolonged paralysis

Answer: 1, 2, 3

---

**Friday, October 17, 2008**

A patient with dibucaine number of 20 would have:

1. increased risk of toxicity from intranasally administered cocaine
2. increased risk of toxicity from subarachnoid administration of cocaine
3. prolonged paralysis after intravenous administration of succinylcholine
4. decreased duration of local anesthesia with chlorprocaine

Answer: 1, 3

---

**Thursday, October 16, 2008**

A 60-year-old man who is scheduled for left upper lobectomy undergoes preoperative pulmonary function testing. He has smoked 2 packs of cigarettes daily for 40 years. Findings that indicate an increased risk for postoperative pulmonary insufficiency include:

1. FEV1 of 800 ml
2. PaCO<sub>2</sub> of 50 mmHg
3. RV/TLC ratio greater than 50%
4. PaO<sub>2</sub> of 60 mmHg

Answer: 1, 2, 3

---

**Wednesday, October 15, 2008**

A patient undergoes CO<sub>2</sub> LASER ablation of a laryngeal tumor. The risk for an endotracheal tube fire is decreased by:

1. decreasing the fresh gas flow rates to less than 2 l/min
2. substituting helium for N<sub>2</sub>O in the inspired mixture
3. using a clear polyvinyl chloride endotracheal tube
4. using water for inflation of the endotracheal tube

Answer: 2, 4

---

**Tuesday, October 14, 2008**

A 25-year-old man with A-negative blood has brisk bleeding and hypotension during emergency laparotomy for a traumatic liver rupture. No A-negative blood is available. Acceptable alternatives for transfusion include:

1. A positive PRBC
2. O negative PRBC
3. O positive PRBC
4. AB negative whole blood

Answer: 1, 2, 3

---

**Monday, October 13, 2008**

During inspiratory phase of mechanical ventilation, use of O<sub>2</sub> flush causes:

1. the reservoir bag to fill with 100% O<sub>2</sub>
2. an open ventilator relief valve to remain open
3. the level of inhalational anesthesia to deepen
4. alveolar pressure to increase

Answer: 4

---

**Friday, October 10, 2008**

For diffusion hypoxia to occur during emergence from an anesthetic in which nitrous oxide is used, the:

- a. anesthetic must have contained more than 50% N<sub>2</sub>O
- b. patient must breathe spontaneously
- c. anesthetic must have lasted more than 45 minutes
- d. patient must breathe room air at the end of anesthetic

Answer: D

---

**Thursday, October 9, 2008**

A 59-year-old man who underwent a bilateral carotid endarterectomy one month ago is scheduled for a right total hip replacement. True statements concerning this patient include:

- a. he will respond normally to premedicant doses of narcotics
- b. his CSF pH will be in the normal range
- c. his ventilatory response to hypoxia will be normal

- d. he will have a chronic increase in resting PaCO<sub>2</sub>

Answer: B, D

---

**Wednesday, October 8, 2008**

A 3-year-old child undergoing tonsillectomy has bradycardia and hypotension following induction with halothane anesthesia. These changes are caused by effects of halothane on:

- a. myocardial contractility
- b. sympathetic outflow from the brain
- c. baroreceptor reflexes
- d. intracranial pressure

Answer: A, B, C

---

**Tuesday, October 7, 2008**

A 46-year-old woman is scheduled to undergo exploratory laparotomy for suspended appendicitis. She has newly diagnosed hyperthyroidism poorly controlled by medication. Perioperatively, she is at increased risk for:

- a. supraventricular tachyarrhythmias
- b. decreased responsiveness to beta-adrenergic agonists
- c. congestive heart failure
- d. hypervolemia

Answer: A, C

---

**Monday, October 6, 2008**

Conditions that increase the cardiovascular toxicity of bupivacaine include:

- a. hypertension
- b. acidosis
- c. hypokalemia
- d. pregnancy

Answer: B, D

---

**Friday, October 3, 2008**

Preoperative therapy with propranolol increases the likelihood that epinephrine-containing local anesthetics will produce:

- a. vasospasm
- b. bronchoconstriction
- c. hypertension

d. bradycardia

Answer: A, C

---

**Thursday, October 2, 2008**

Conditions that occur when the pH of the surrounding environment equals the pKa of a drug include:

- a. tachyphylaxis at physiologic pH
- b. a large change in ionization of the drug with a small change in pH
- c. decrease ionization of a basic drug with acidification
- d. existence of one-half of the drug in ionized form

Answer: B, D

---

**Wednesday, October 1, 2008**

During cardiopulmonary bypass, effects of profound hypothermia include:

- a. hypoglycemia
- b. continued decrease in cerebral metabolism after the EEG becomes isoelectric
- c. decreased systemic vascular resistance
- d. increased blood viscosity

Answer: B, D