

DECEMBER 2008 DAC ANSWERS

Tuesday, December 23, 2008

In patients with reflex sympathetic dystrophy affecting the arm, which of the following findings indicates a therapeutic block?

- a. bradycardia
- b. contralateral nasal congestion
- c. hoarseness
- d. increased skin temperature
- e. ipsilateral Horner's syndrome

Answer: d

Monday, December 22, 2008

Neuromuscular blockade of the diaphragm is best ensured by monitoring which of the following peripheral muscles?

- a. adductor pollicis muscle
- b. first dorsal interosseous muscle
- c. flexor of the hypothenar eminence
- d. muscles of the hypotenar eminence
- e. orbicularis oculi muscle

Answer: e

Which of the following statements regarding carbon monoxide poisoning is true?

- a. breathing 100% oxygen at 1 atmosphere reduces the carboxyhemoglobin half-life
- b. effective treatment includes administration of methylene blue
- c. it is commonly associated with respiratory acidosis
- d. it is incompatible with a normal SpO₂ while breathing room air
- e. the oxyhemoglobin dissociation curve is shifted to the right

Answer: a

Friday, December 19, 2008

A 45-year-old woman who sustained a subarachnoid hemorrhage 18 hours ago develops a severe headache and becomes unresponsive. Which of the following is the most likely cause of this patient's change in mental status?

- a. cerebral edema
- b. cerebral embolism
- c. cerebral vasospasm
- d. hypertensive encephalopathy
- e. second subarachnoid hemorrhage

Answer: e

Which of the following statements regarding latex allergy is true?

- a. diphenhydramine is the treatment of choice for latex-induced anaphylactic reaction
- b. hospital workers are at equal risk as the general population
- c. it is more common in patients with frequent urethral catheterization
- d. latex gloves can be rinsed free of antigens
- e. skin testing should be performed immediately after an acute reaction in the operating room

Answer: c

Thursday, December 18, 2008

The laryngeal mask airway:

- a. causes more hemodynamic stimulation than an oropharyngeal airway
- b. is contraindicated in patients with cervical spine instability
- c. is more easily inserted when cricoid pressure is applied
- d. may serve as a temporary airway in case of a failed rapid response sequence intubation
- e. requires administration of a muscle relaxant to avoid laryngospasm during insertion

Answer: d

Wednesday, December 17, 2008

A woman has weakness of the right quadriceps and a decreased knee jerk reflex on the right one day after forceps delivery under epidural anesthesia. The most likely cause is

- a. epidural hematoma
- b. intrapelvic nerve trauma
- c. lithotomy positioning
- d. reaction to the preservative in the anesthetic solution
- e. trauma from the epidural needle

Answer: b

Tuesday, December 16, 2008

Which of the following provides the most the most definitive diagnosis in a patient with suspected brain death?

- a. absent bilateral somatosensory evoked potentials
- b. absent cerebral blood flow during four vessel contrast cerebral arteriography
- c. intracranial pressure greater than mean arterial blood pressure
- d. score of zero on Glasgow coma scale

- e. two isoelectric electroencephalograms

Answer: b

Monday, December 15, 2008

Measurement of which of the following provides the most reliable information about the severity of bronchospasm?

- a. diffusion capacity
- b. expiratory reserve volume
- c. forced expiratory volume in 1 second
- d. residual volume
- e. total lung capacity

Answer: c

Friday, December 13, 2008

A patient is undergoing exploration of a stab wound to the left side of the neck. On awake laryngoscopy, the left vocal cord is in midposition and the right vocal cord is abducted during inspiration. The most likely cause of these findings is trauma to which of the following structures on the left?

- a. C7-C8 nerve root
- b. Stellate ganglion
- c. Glossopharyngeal nerve
- d. Superior laryngeal nerve
- e. Vagus nerve

Answer: e

Thursday, December 11, 2008

Which of the following is the most common initial sign of hemolytic transfusion reaction during general anesthesia?

- a. bronchospasm

- b. diffuse bleeding
- c. fever
- d. hemoglobinuria
- e. hypotension

Answer: d

Wednesday, December 10, 2008

Which of the following is the primary factor regulating normal coronary blood flow

- a. aortic diastolic pressure
- b. coronary perfusion pressure
- c. heart rate
- d. myocardial oxygen consumption
- e. systolic wall tension

Answer: d

Tuesday, December 9, 2008

Metoclopramide:

- a. decrease gastric secretion
- b. decrease gastroesophageal sphincter tone
- c. is contraindicated in patients with Parkinson's disease
- d. is most effective when administered in combination with atropine
- e. requires an intact vagus nerve for gastrointestinal effects

Answer: c

Monday, December 8, 2008

Which of the following factors causes a decrease in mixed venous oxygen saturation?

- a. arteriovenous fistula
- b. decreased hemoglobin concentration
- c. decreased oxygen consumption
- d. increased cardiac output
- e. nitroprusside toxicity

Answer: b

Friday, December 05, 2008

A healthy 60-kg 52-year-old woman undergoing reduction mammoplasty is anesthetized with isoflurane and oxygen, and deliberate hypotension to 80/40 mmHg is induced with nitroprusside. Urine output through an indwelling urethral catheter has been 10 mL during the past hour. You should now

- a. administer furosemide 40 mg i.v.
- b. infuse normal saline solution until urine output reaches 35ml/h
- c. administer dopamine at 3 mcg/kg/min
- d. discontinue nitroprusside administration

Answer: d

Thursday, December 4, 2008

Measurement of blood pressure with a Doppler device involves

- a. reflection of ultrasound waves off blood elements
- b. detection of oscillations in cuff pressure
- c. amplification of Korotkoff sounds with a miniature microphone
- d. transillumination with a near infrared light
- e. detection of variations in blood vessel diameter

Answer: A

Wednesday, December 3, 2008

A 120 kg 56-year-old man undergoing gastrectomy during anesthesia with fentanyl and isoflurane has a PetCO₂ of 35 mmHg and a PaCO₂ of 50 mmHg. His FEV₁/FVC ratio is 80% of predicted. Heart rate is 120bpm and BP 80/40 mmHg. Which of the following is the most likely cause of difference in PaCO₂ and PetCO₂?

- a. aspiration pneumonia
- b. COPD

- c. Decreased cardiac output
- d. Decreased Vd/Vt ratio
- e. Increased Qs/Qt ratio

Answer: C

Tuesday, December 2, 2008

A 58-year-old woman with rheumatoid arthritis and hyperactive gag reflex requires awake intubation prior to cervical spine stabilization. Which of the following regional anesthesia is most appropriate?

- a. deep cervical plexus block
- b. glossopharyngeal nerve
- c. hypoglossal nerve
- d. superior trigeminal nerve
- e. trigeminal nerve

Answer: B

Monday, December 1, 2008

Which of the following factors will slow down the induction of anesthesia in patients receiving volatile anesthetics?

- a. addition of 70% nitrous oxide
- b. increased cardiac output
- c. increased minute ventilation
- d. low blood/gas solubility coefficient
- e. previous pneumonectomy

Answer: B