

The Ochsner Journal

Continuing Medical Education

QUESTIONS VOL. 11, NO. 1

This section provides a review. Mark each statement (circle the correct answer) according to the factual material contained in this issue and the opinions of the authors. A score of 70% per article is required to qualify for CME credit.

Anesthesiology —The John Adriani Story

1. John Adriani was a proponent of using brand name drugs rather than generic drugs. *True or False*
2. Adriani received his anesthesia training under Ralph Waters in Madison, Wisconsin. *True or False*
3. Adriani was appointed as the chairman of the Food and Drug Administration by President Nixon. *True or False*

Outside the Operating Room: Unlimited Directions in Research and Beyond

1. Mesenchymal stem cells are capable of differentiating into the following:
 - a. adipocytes
 - b. bone
 - c. blood cells
 - d. all of the above
2. The application of mesenchymal stem cells as therapy for pain
 - a. is only dependent on the type of pain
 - b. is based on the anti-inflammatory capabilities of the stem cells
 - c. is limited by the potential for rejection of stem cells by the recipient
3. Treating mesenchymal stem cells with TLR4 *in vitro*
 - a. is a way to preserve them for future use
 - b. makes them easier to transfuse
 - c. gives them a more pro-inflammatory profile

Gender Rather Than Choice of Intermediate Duration Opioids Affects Emergence After Craniotomy for Large Intracranial Tumors

1. Evidence shows that faster emergence from anesthesia after craniotomy is associated with all of the following EXCEPT
 - a. small brain tumor size
 - b. female gender
 - c. total intravenous anesthesia
 - d. fentanyl/nitrous oxide anesthesia
 - e. sufentanil-supplemented anesthesia
2. Context-sensitive half-life of an intravenous anesthetic refers to
 - a. the time required for plasma level to decline by 50% after infusion stops
 - b. elimination half-life as measured in the context of pharmacokinetic equilibrium
 - c. the time required for 50% of drug metabolites to appear in plasma
 - d. the time required by the liver to eliminate 50% of the administered drug dose
 - e. distribution half-life as measured in the context of rapidly changing pharmacodynamic conditions
3. Gender affects emergence from anesthesia only after craniotomy for brain tumor resection. *True or False*
4. Intermediate duration (elimination half-lives of 110-500 minutes) opioids include all of the following EXCEPT
 - a. fentanyl
 - b. sufentanil
 - c. remifentanyl
 - d. alfentanil
 - e. morphine

Impact of Hurricanes Katrina and Rita on the Anesthesiology Workforce

1. The general trend is that Louisiana will have a shortage of anesthesiologists in the coming years. *True or False*
2. The anticipated shortage of anesthesiologists is a regional problem; nationally the number of anesthesiologists is adequate to meet demand. *True or False*
3. In the coming years, the supply and demand of anesthesiologists will be affected by which of the following?
 - a. Retirement rate of anesthesiologists
 - b. Graduation rate of anesthesiology residents
 - c. Demand for surgical services as the baby boomers turn 65
 - d. All of the above

Operating Room Fire Safety

1. According to recent ECRI estimates, surgical fires occur between 550 and 650 times per year in the United States. *True or False*
2. Which of the following is considered part of the fire triad?
 - a. Oxidizer
 - b. Fuel source
 - c. Ignition source
 - d. All of the above
3. Airway fires account for 1-2 deaths annually from operative fires. *True or False*
4. The RACE acronym should always be applied in OR fires. *True or False*
5. Improperly applied alcohol-based skin preparations may be a common cause of OR fires. *True or False*

Pediatric Cuffed Endotracheal Tubes: An Evolution of Care

1. Subglottic stenosis was rarely reported prior to the advent of tracheal intubation in the pediatric patient. *True or False*
2. Uncuffed endotracheal tubes result in less medical gas usage. *True or False*
3. Polyurethane endotracheal tube cuffs achieve tracheal sealing with lower intracuff pressure than polyvinyl chloride cuffs. *True or False*

Use of α_2 -Agonists in Neuroanesthesia: An Overview

1. Dexmedetomidine decreases cerebral blood flow. *True or False*
2. Dexmedetomidine decreases CMRO₂. *True or False*
3. Dexmedetomidine has a neuroprotective effect. *True or False*

Anesthesia for Left Ventricular Assist Device Insertion: A Case Series and Review

1. Significant aortic insufficiency should be surgically corrected prior to LVAD insertion. *True or False*
2. Significant mitral regurgitation should be repaired prior to LVAD insertion. *True or False*
3. Right heart dysfunction is rare in patients receiving LVADs. *True or False*
4. Pharmacologic inotropic support is rarely needed in the post-bypass period as the LVAD takes over the work of the entire heart. *True or False*

Epidural Anesthesia for Cesarean Delivery in a Patient With Severe Pulmonary Artery Hypertension and a Right-to-Left Shunt

1. During pregnancy
 - a. lower esophageal sphincter tone decreases
 - b. minute ventilation decreases
 - c. functional residual capacity increases
 - d. oxygen consumption decreases
2. Eisenmenger syndrome is characterized by all of the following EXCEPT
 - a. pulmonary hypertension
 - b. a right-to-left shunt
 - c. a patent foramen ovale
 - d. hypoxemia
3. All of the following are true regarding epoprostenol EXCEPT
 - a. it is an intravenous prostacyclin
 - b. it induces the production of cyclic AMP
 - c. it has a half-life of approximately 20 minutes
 - d. it is used for the management of pulmonary hypertension

(Questions continued on opposite side)

Multidisciplinary Approach to the Management of Placenta Accreta

1. Placenta percreta is defined as
 - a. placenta attaching to the decidua basalis layer of the uterus
 - b. placenta attaching to the myometrium
 - c. placenta invading into the myometrium
 - d. placenta invading through the myometrium to the uterine serosa and often invading other pelvic organs
2. Which of the following is NOT a risk factor for placenta accreta in patients with placenta previa?
 - a. multiparity
 - b. advanced maternal age
 - c. nonsmoker
 - d. previous cesarean delivery
 - e. previous dilation and curettage
3. Prenatal diagnosis of placenta accreta is associated with a decrease in maternal morbidity. Which of the following medical specialties should be part of a multidisciplinary team in the care of a patient with abnormal placentation?
 - a. Anesthesiology
 - b. Interventional radiology
 - c. Urology
 - d. Neonatology
 - e. All of the above

Orthotopic Liver Transplantation in a Pediatric Patient With Progressive Intrahepatic Cholestasis: A Coordinated Perioperative Subspecialty Approach

1. Clinical manifestations of progressive familial intrahepatic cholestasis include all of these EXCEPT
 - a. cholestasis
 - b. jaundice
 - c. progressive hepatic failure
 - d. hypercoagulability
2. Progressive familial intrahepatic cholestasis is an autosomal recessive cholestatic disorder. *True or False*
3. Progressive familial intrahepatic cholestasis Type 2 is caused by a mutation in the *ABCB11* gene on chromosome 2q24. *True or False*

The Ochsner Journal CME CREDIT APPLICATION FORM

MD DO Other (specify) _____
 Specialty: _____
 Name: _____
 Business Address: _____
 City: _____
 County: _____ State: _____ Zip: _____
 Daytime Phone: _____ Fax Number: _____
 Email Address: _____
 Hospital Affiliation: _____

The Ochsner Clinic Foundation is required to file information for record keeping regarding awarding of CME credits. Please send your completed CME credit application form, test questionnaire, and evaluation form to Continuing Medical Education, Ochsner Clinic Foundation, 1514 Jefferson Highway, New Orleans, LA 70121.

VERIFICATION OF ATTENDANCE

Please indicate the actual time spent reading and completing this education activity. _____ hour(s) and _____ minutes.
 The maximum number of credits awarded for this activity is 11 *AMA PRA Category 1™* credits.

Signature _____

Date _____

EVALUATION

Your response to these questions helps us to enhance our CME offerings. Please take the time to respond and return the evaluation. Thank you.

Please use the following codes to answer items 1-7.

- SA** – Strongly Agree
- A** – Agree
- U** – Undecided
- D** – Disagree
- SD** – Strongly Disagree

1. The objectives of the CME activity were clearly stated.
 SA A U D SD
2. The content of the journal articles was up-to-date.
 SA A U D SD
3. The journal articles illustrated independence, objectivity, balance, and scientific rigor.
 SA A U D SD
4. The content was closely related to objectives of my clinical practice and/or teaching.
 SA A U D SD

5. The journal articles increased my knowledge of the subject.
 SA A U D SD
6. The content of the journal articles met my personal expectation and needs.
 SA A U D SD
7. I will apply the information learned from these journal articles in my clinical practice.
 SA A U D SD

Do you have any suggestions as to how to improve the content of the journal articles?

What topics would you like to see in future journal articles?

Thank you for completing this evaluation and survey.