

The Ochsner Journal

Continuing Medical Education

CME QUESTIONS VOL. 10, NO. 3

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.

Epistaxis: A Common Problem

1. Name of the vascular plexus located on the anterior septum that provides the source for the majority of nosebleeds?
 - a. Kiesselbach's plexus
 - b. Inferior hypogastric plexus
 - c. Periodontal vascular plexus
 - d. Carotid plexus
2. Which of the following is an exacerbating factor for epistaxis?
 - a. Hypertension
 - b. Anticoagulant therapy
 - c. Cold/dry climate
 - d. All of the above
3. Hereditary hemorrhagic telangiectasia is a genetic disorder characterized by telangiectasias (small vascular malformations) on the skin and mucosal linings that increase the risk for epistaxis.
True or False

Pain Management in the Elderly Population: A Review

1. An advantage of oxymorphone in the elderly includes:
 - a. It has a similar action as most SSRIs.
 - b. It is metabolized in a non-cytochrome P450 pathway and therefore bypasses many of the drug-drug interactions common to the elderly.
 - c. There is no tolerance.
 - d. This drug should never be given in the elderly.
 - e. All are true.
2. A multidisciplinary approach is recommended to investigate all possible options for optimal management in the elderly including:
 - a. Pharmacotherapy
 - b. Interventional procedures
 - c. Physical rehabilitation
 - d. Psychological support
 - e. All of the above
3. All are true regarding the WHO recommendations "Analgesic Ladder" except:
 - a. For mild pain, the most appropriate first choice for relatively safe analgesia is oxymorphone.
 - b. For mild to moderate pain or pain uncontrolled with acetaminophen, the use of NSAIDs is appropriate.
 - c. For pain refractory to NSAID, or pain rated as moderate initially, a weaker opioid (e.g. codeine) is the appropriate first choice. Other weak opioids that may be used include hydrocodone, propoxyphene, and oxycodone in combination with acetaminophen.
 - d. For pain refractory to the above plan, or pain rated as severe, a pure opioid agonist (e.g. morphine) is selected. Other pure opioids to consider include hydromorphone, fentanyl, levorphanol, and oxycodone.
 - e. Adjuvant medication may be used to relieve fear and anxiety in the patient as well as for synergism with the above medications.

The Accuracy of Intraoperative Subareolar Frozen Section in Nipple-Sparing Mastectomies

1. Skin-sparing mastectomy is an oncologically safe alternative to modified radical mastectomy for all patients.
True or False
2. Which of the following is/are risk factor(s) associated with NAC involvement with tumor?
 - a. Lymph node involvement
 - b. Tumor-nipple distance
 - c. Multicentric tumour
 - d. Tumor size
 - e. Size of breasts
3. ISFS was a sensitive test for malignancy or duct atypia.
True or False

Immunotoxins: A Promising Treatment Modality for Metastatic Melanoma?

1. Which of the following is/are known risk factor(s) of malignant melanoma?
 - a. Frequent sunburns
 - b. A family history of melanoma
 - c. Immunosuppression
 - d. All of the above
 - e. A and B
2. What percentage of melanoma patients are cured by surgery alone?
 - a. ~ 5%
 - b. ~ 20%
 - c. ~ 80%
 - d. None

3. The FDA-approved chemotherapeutic drug for treatment of metastatic malignant melanoma is:
 - a. Doxorubicin
 - b. Dacarbazine
 - c. Etoposide
 - d. Vincristine
4. An immunotoxin consists of an ... linked to a ... ?
 - a. Inhibitor, toxin
 - b. Toxin, toxin
 - c. Antibody, toxin
 - d. Antibody, antibody
5. Diphtheria toxin and Pseudomonas exotoxin A are two toxins commonly used in immunotoxin constructs. Cell death caused by such immunotoxins is induced by ADP-ribosylation of the Elongation Factor-2 resulting in inhibition of DNA synthesis.
True or False
6. The 9.2.27 antibody targets an antigen on the ... antigen.
 - a. MUC18
 - b. MART-1 / Melan-A
 - c. HMW-MAA
 - d. EF-2

Cutaneous Manifestations of Tuberous Sclerosis

1. Which of the following are major features of tuberous sclerosis?
 - a. Facial angiofibromas
 - b. Periungual fibroma
 - c. Shagreen patches
 - d. All of the above
2. All diagnostic features of tuberous sclerosis are age dependant.
True or False
3. More than 90% of tuberous sclerosis patients suffer from seizures.
True or False

Intraoperative Pulseless Electrical Activity and Acute Cardiogenic Shock After Phenylephrine, Epinephrine, and Ketamine

1. Phenylephrine:
 - a. Is an alpha 1 agonist.
 - b. Can be absorbed systemically after nasal administration.
 - c. Is often administered in the operating room for hypotension.
 - d. Can potentially cause hypertension regardless of route of administration.
 - e. All of the above
2. In an ENT surgical suite a 46-year-old female about to undergo nasal septoplasty received an array of medications administered by both the ENT doctor and anesthesiologist. Patient vitals were stable until the blood pressure suddenly increased to 198/105 mmHg. Which of the following could have contributed to the sudden hypertensive response?
 - a. Systemic absorption of locally administered 0.5% phenylephrine injected into the nasal mucosa
 - b. Inadequate pain control at the start of the surgery
 - c. Insufficient anesthesia level
 - d. 1% lidocaine with epinephrine used for the sphenopalatine nerve block
 - e. All of the above
3. In the above case, what is the LEAST appropriate response to treating this patient's hypertensive episode if it was related to systemic, global vasoconstriction?
 - a. Push additional fentanyl intravenously
 - b. Treat with a fast-acting beta-blocker such as labetalol
 - c. Deepen the maintenance anesthetic gas
 - d. Observe for 10-15 min prior to further pharmacologic intervention for severity or accompanying EKG changes
4. What percentage of local administration of alpha-agonist vasoconstrictors are absorbed into the systemic circulation according to the New York Phenylephrine guidelines?
 - a. Never
 - b. Rarely
 - c. One should assume 100% absorption
 - d. 2-5% of the time
5. Ketamine has actions that include all EXCEPT?
 - a. Blood pressure elevation through direct stimulation of the sympathetic nervous system
 - b. Inhibition of norepinephrine reuptake
 - c. NMDA-receptor activation
 - d. Induction and maintenance of anesthesia, as well as analgesia

(Questions continued on opposite side)

(Questions continued from opposite side)

An Incidental Finding

1. Congenital bronchial atresia (CBA) is thought to be the result of
 - a. Recurrent bacterial pneumonia
 - b. Intrauterine ischemia
 - c. Smoking
2. Most patients must undergo open lung biopsy or VATS to establish the diagnosis of CBA.
True or False
3. Pulmonary function tests do not play a role in making the diagnosis of CBA.
True or False

- c. If the numerical values of the 95% confidence interval are negative, this indicates the two data sets are inversely correlated.
- d. The purpose of the 95% confidence interval is to mathematically describe the number of times an experiment would need to be repeated to achieve the same results.
2. Regarding parametric versus non-parametric tests:
 - a. Parametric tests are only useful when examining categorical data.
 - b. Non-parametric tests are more sensitive to small differences between data sets.
 - c. Parametric tests are more sensitive to small differences between data sets.
 - d. Parametric and non-parametric tests are independent; there are no analogous parametric and non-parametric tests.
3. Which of the following criteria must be satisfied in order to calculate a meaningful Pearson's product-moment coefficient?
 - a. The data must be normally distributed.
 - b. The data sets must be independent of one another.
 - c. Only a single pair of measurements should be made on each subject.
 - d. Every coefficient must be accompanied by a P-value.
 - e. All of the above.

Statistics: A Brief Overview

1. Which of the following is true concerning a 95% confidence interval?
 - a. The wider the range of values encompassed by the 95% confidence interval, the stronger the result.
 - b. If the 95% confidence interval includes both meaningful values and the value zero, the result is unlikely to be statistically significant.

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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 8 *AMA PRA Category 1™* credits.

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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.