

CME QUESTIONS

This issue of *TraumaCare* can be used to earn 10 CME credit hours.

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INSTRUCTIONS

- The answer grid and evaluation form may be submitted as the page from the printed journal or as a printout from the ITACCS website.
- On the answer form at the bottom of page 39, circle only one response next to each number.
- Complete the evaluation form.
- Cut out or copy your completed answer form and evaluation form.
- Write a check for \$200 (or \$100 accompanied by verification of current ITACCS membership), payable to the International Trauma Anesthesia and Critical Care Society.
- Mail the forms and your check (and membership verification, if applicable) to ITACCS, Department of CME Credit, PO Box 4826, Baltimore, MD 21211.
- The completed test will be accepted for grading if received by May 31, 2006.
- Please allow 4 to 6 weeks for processing.

CME QUESTIONS

- Cytotoxic edema is a feature of traumatic brain injury.
 - True
 - False
- Cellular damage in TBI is caused by
 - Glutamate release
 - Free radical release
 - Aspartate release
 - Magnesium release
 - a through c
- Brain Trauma Foundation's current guidelines recommend
 - Aggressive CPP management > 70 mmHg in all cases
 - A minimum CPP of 60 mmHg
 - CPP > 70 mmHg in the presence of cerebral ischemia
 - Regular IV mannitol boluses
 - b and c
- There were four U.S. civil disasters that occurred between 1975 and 2000 that required more than 100 units of RBC during the first 24 hours after the events. Which of the following numbers is closest to the number of units of RBC used to treat the casualties in the first 24 hours.
 - 100 units
 - 200 units
 - 500 units
 - 1,000 units
- During the same time period, 1975 to 2000, there were a number of major *natural* disasters. Which of these was considered the most deadly event?
 - San Francisco earthquake of 1989
 - Major volcanic eruption in remote Washington state
 - Category V hurricane in Florida
 - Major earthquake in urban California
- A 64 year old woman with stable angina was struck by an automobile. She undergoes exploratory laparotomy with general anesthesia. At the end of the 3.5-hour surgery you note that her core temperature is 34.8°C. Which of the statements is true?
 - She is at increased risk of postoperative wound infection.
 - She is at increased risk of postoperative ventricular tachycardia and unstable angina.
 - She is at increased risk of postoperative shivering and prolonged peripheral vasoconstriction.
 - The most likely cause of her low temperature is monitoring error.
 - All of the above
 - a through c
- Concerning hypothermia in trauma patients, which of the statements is true?
 - Administration of cold or inadequately warmed intravenous fluids may cause decreased temperature.
 - Temperature is primarily regulated by the pituitary gland
 - General anesthesia decreases the thermoregulatory threshold for hypothermia
 - Tissue hypoperfusion is unlikely to affect the incidence and severity of hypothermia
 - a and c
 - All of the above
- Intraoperative hypothermia can be minimized by:
 - Increasing room temperature to > 28°C
 - Appropriate use of convective warming
 - Warming refrigerated blood products to 36°C prior to IV administration
 - Warming room temperature crystalloid solutions to 36°C prior to IV administration
 - All of the above
- Which of the following describes convective warming?
 - Loss of heat content from core due to increased distal extremity skin blood flow through capillary and arteriovenous shunts; accounts for major decrease in core temperature after induction of general anesthesia.
 - Most effective heat exchange device; preserves flow and oxygenation if mechanical cardiac activity lost.
 - Maintains thermoneutral environment during general anesthesia; transfers approximately 30 kcal heat/hour.
 - Maintains constant imidazole ionization of histidine and optimal enzyme function as temperature changes.
 - Useful monitoring site for considering adequacy of rewarming during cardiac surgery; lags behind esophageal or other core sites during rapid temperature changes

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| <p>10. HBOC are acceptable to Jehovahs Witness patients
a. True b. False</p> <p>11. Oxygen Diffusion to the cell is no different with HBOC or red cells
a. True b. False</p> <p>12. Which of the following statements are true?
a. HBOC are blood substitutes .
b. Some HBOC can be stored 'on the shelf' for one or two years
c. Renal injury occurs in individuals with normal renal function, given HBOC
d. HBOC increase survival of anemic (< 5.3 g/dl) patients
e. The difference between Plasma Hemoglobin and Total Hemoglobin is the hemoglobin concentration in red cells
f. Only b, d, and e are true</p> <p>13. Phase III clinical trials are completed in two Hemoglobin Glutamers
a. True b. False</p> | <p>14. Coma will be present if injury occurs in
a. The medulla
b. The pons
c. The diencephalon
d. A single cerebral cortex
e. Both cerebral cotices
f. a, b, and c only</p> <p>15. Diagnosis of brain stem death and brain death can safely be made in the presence of :
a. Spinal reflexes
b. Extensor movement
c. Core temperature 35.1oC
d. Coma of unknown cause
e. All criteria defined by national guidelines in a patient with a glass eye
f. All of the above
g. a, c, and e only</p> <p>16. The following diseases are associated with apnea and loss of brain stem reflexes. The diagnosis of brain stem death made be made when the diagnosis is:
a. Head trauma
b. Subarachnoid haemorrhage
c. Viral encephalitis
d. Guillain Barre syndrome
e. Cerebral infarction
f. c and d only
g. a, b, and e only</p> | <p>17. The following cranial nerves can be tested at the bedside in a comatose patient:
a. I b. II
c. V d. VIII
e. XI f. a and e only
g. b, c, and d only</p> <p>18. Which marker (or markers) is (or are) <i>only</i> released passively when the brain cell dies?
a. NSE b. S100B
c. GFAP d. All of the above
e. a and c only</p> <p>19. Which marker (or markers) is (or are) located primarily in glia?
a. NSE b. S100B
c. GFAP d. All of the above
e. b only f. c only</p> <p>20. Measurement of NSE, S100B or GFAP by immunoluminometric assay takes
a. Minutes
b. About 2 hours
c. About 8 hours</p> |
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Evaluation Form: Please rate this self-study activity by marking one response for each statement.

Did the articles meet their stated objectives? Yes No

How do you rank the quality of this educational activity? 5 (high) 4 3 2 1 (low)

Comments: _____

Did you perceive any evidence of bias for or against any commercial products? Yes No If yes, please explain.

Comments: _____

How do you rank the effectiveness of this activity as it pertains to your practice? 5 (high) 4 3 2 1 (low)

Did this material stimulate your intellectual curiosity? 5 (high) 4 3 2 1 (low)

Additional comments about this activity:

Answer Form: Please circle the *one* best answer for each question.

TraumaCare Winter 2005 issue

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| 1. a b | 14. a b c d e f |
| 2. a b c d e | 15. a b c d e f g |
| 3. a b c d e | 16. a b c d e f g |
| 4. a b c d | 17. a b c d e f g |
| 5. a b c d | 18. a b c d e |
| 6. a b c d e f | 19. a b c d e f |
| 7. a b c d e f | 20. a b c |
| 8. a b c d e | |
| 9. a b c d e | |
| 10. a b | |
| 11. a b | |
| 12. a b c d e f | |
| 13. a b | |

I certify that I have completed the "TraumaCare/Winter 2005" activity as designed and claim 10 credit hours in Category 1 of the Physicians Recognition Award of the American Medical Association.

Signature _____ Date _____

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