

CME QUESTIONS

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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 91, 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 November 30, 2005.
- Please allow 4 to 6 weeks for processing.

CME QUESTIONS

- | | | |
|---|---|---|
| 1. Thermoregulatory vasomotor responses are uniform across the general skin surface.
a. True b. False | 7. Core temperature is defined as the blood perfusing the hypothalamus.
a. True b. False | 12. Risk factors for hypothermia in trauma patients include:
a. head injury
b. shock
c. alcohol intoxication
d. 30% total body surface burn
e. all of the above |
| 2. Heat dissipation from the trunk of the body of a heat-stressed individual accounts for what percent of the total heat loss?
a. Greater than 80%
b. 60% to 80%
c. 40% to 60%
d. Less than 30% | 8. The goal of temperature monitoring is to get as accurate a measure of core temperature as possible.
a. True b. False | 13. Passive methods of rewarming such as warm ambient temperature:
a. reduce heat loss by several mechanisms but rely on the patient's internal heat production for rewarming.
b. are appropriate for patients with core temperature <28°C. |
| 3. Shivering and sweating are the primary thermoregulatory responses of humans.
a. True b. False | 9. The "gold standard" for core temperature measurement is the esophagus.
a. True b. False | 14. Continuous arteriovenous rewarming (CAVR) is beneficial at restoring normothermia in hypothermic patients with absent perfusing heart rhythms.
a. True b. False |
| 4. Blood flow through lean tissues is relatively uniformly distributed.
a. True b. False | 10. Temperature measurement technologies consist of:
a. Thermistors
b. Infrablue sensors
c. Thermocouples
d. Rectotemp | 15. The thermal stress of infusing cold IV fluids during massive transfusion is clinically insignificant in trauma patients.
a. True b. False |
| 5. The respiratory system provides a portal by which a thermal load can be delivered to the body core.
a. True b. False | 11. Liquid crystal thermometry:
a. is equal in accuracy to tympanic membrane temperature monitoring.
b. does not give an erroneous increased temperature reading when a heating lamp shines on it from a distance of 3 feet.
c. is disposable.
d. gives a reliable warning of malignant hyperthermia. | |
| 6. Homeostasis describes a variable condition.
a. True b. False | | |

16. Concerning temperature regulation, which of the statements is true?
- a. Thermoregulatory responses are based on a physiologically weighted average skin temperature, where $T_{skin} = 0.3 (T_{chest} + T_{arm}) + 0.2 (T_{thigh} + T_{leg})$.
 - b. Ketamine depresses thermoregulation more than the volatile anesthetics.
 - c. Temperature is primarily regulated by the pituitary gland.
 - d. General anesthesia decreases the thermoregulatory threshold for hyperthermia by approximately 2.5°C.
17. This factor revitalized interest in the potential application of deliberate hypothermia to cerebral resuscitation.
- a. Remarkably mild hypothermia (a temperature reduction of between 3 and 5°C) was effective in reducing secondary brain damage in laboratory models.
 - b. Brain temperature, not body temperature, was a critical therapeutic target.
 - c. The duration of hypothermia necessary for a beneficial effect in some models was transient—as short as 1 hour.
 - d. b and c
 - e. All of the above
18. Controlled clinical trials of moderate hypothermia, applied for 24 hours, suggest that the incidence of side effects such as coagulopathy, arrhythmias, or infectious complications is not significantly different from that seen during normothermia.
- a. True
 - b. False
19. Based on the results of clinical trials, beneficial effects of mild or moderate hypothermia in injured brain may result from a reduction of which of the following?
- a. excitotoxicity
 - b. regeneration
 - c. inflammation
 - d. a and c
 - e. all of the above
20. Laboratory models of hemorrhagic shock have demonstrated that application of mild or moderate hypothermia during the “golden hour” reduces mortality rate.
- a. True
 - b. False

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Comments: _____

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TraumaCare Spring 2004 issue

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Signature _____ Date _____

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

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References:

- 1) BMJ Volume 320, 18 March 2000
- 2) To Err is Human: Building a Safer Health System, Linda T. Kohn, Janet M. Corrigan, and Moira S. Donaldson, Editors, © 2000 by the National Academy of Sciences.

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