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### Questions and answers

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### Preguntas y respuestas

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# 1. Regarding the nuclear magnetic resonance risk areas, it is true that:

- a) There are 5 clearly defined zones.
- b) Zone 1 is the transition zone where the clinical record is usually filled out, doubts are resolved and patients are under constant observation.
- c) Zone 3 is a restricted circulation area for untrained staff and ferromagnetic objects.
- d) The resuscitation area is located in zone 1 and it is equipped with advanced cardiopulmonary resuscitation devices.

#### 2. Postoperative residual relaxation is currently defined as:

- a) The presence of a T4/T1 ratio < 0.9 versus the T34 stimulation < 0.9.
- b) A T4/T1 ratio < 0.7.
- c) A T4/T1 ratio < 0.6.
- d) A T4/T1 ratio < 0.5.

# 3. With respect to observational scientific research, all of the following are true except:

- a) Describe and analyze the facts without intervening.
- b) Establish definitive causal relationships.
- c) Provides scientific basis relating to the health-disease process.
- d) Can guide future research.

# 4. Which of the following parameters is not part of the four universal categories in resuscitation of the patient with thoracoabdominal penetrating trauma?

a) Intraoperative monitoring of serum fibrinogen.

- b) Central temperature greater than 35  $^{\circ}\text{C}$  at the end of surgery.
- c) Serum fibrinogen levels greater than 150 mg/dl and a platelet count greater than 50000/mm<sup>3</sup>.
- d) Base deficit less than -8 and hemoglobin levels greater than 8.5.

# 5. The center that regulates body temperature and truly acts as a thermostat is:

- a) In transient potential receptors
- b) In the thalamus.
- c) In the hypothalamus.
- d) In the locus coeruleus.

# 6. Which of the following is not part of the mechanisms for regulating body temperature?

- a) Transient potential receptors are widely distributed in sensory neurons.
- b) Central thermoreceptors are located in the spinal cord, heart, and lungs.
- c) The cold signal activates neurons of the lateral parabrachial nucleus.
- d) Body temperature is exclusively regulated by negative feedback nerve mechanisms.

# 7. Hypothermia may alter coagulation for all of the following except:

- a) Transient thrombocytopenia.
- b) Decreased synthesis of thromboxane B2.
- c) Increased blood viscosity.
- d) Shortening of prothrombim time values.

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- 8. The standard definition of hypothermia is classified as moderate:
- a) From 28 to 31.9 °C.
- b) From 32 to 34 °C.
- c) From 33 to 34.5 °C.
- d) None of the above.
- 9. In neonatal patients receiving general anesthesia, intrahospital monitoring between 12 and 24 hours is recommended when the postconceptional age is less than:
- a) 60 weeks.
- b) 56 weeks.
- c) 50 weeks.
- d) 44 weeks.
- 10. From the pharmacological point of view, it is true in the pediatric patient that:
- a) Hepatobiliary clearance through the p450 izoenzymes is diminished until 6 months of age, at which point it reaches 50% of adult levels.
- b) Binding to proteins and acid alpha1-glycoprotein is normal at birth.
- c) The glomerular filtration rate reaches 90% of the adult value at approximately 3 years of age.
- d) The minimum alveolar concentration of inhaled anesthetics is greater between 1 and 6 months of age than in adults.
- 11. Regarding the heart of the newborn compared to the adult heart, which of the following characteristics is false:
- a) Contains more non-contractil elements.
- b) Is more elongated.
- Has a greater dependence on intracellular Ca for contraction.
- d) It is less compatible with early diastolic filling.
- 12. Which of the following variables is a major source of the pharmacokinetic variability seen in neonates:
- a) Size
- b) Age.
- c) Organic function (Liver-Kidney.)
- d) All of the above.

- 13. Which of the following statements regarding obstructive sleep apnea is correct:
- a) Hypopnea is defined as the decrease in airflow > or equal to .40% for 15 seconds with arterial desaturation > or equal to 6% of baseline.
- b) Severity is determined through measurement of arterial saturation during one hour of sleep.
- c) During sleep, increased PCo2 and ventilatory effort cause the active reticular system to be inhibited.
- d) The mechanical basis that explains the influence of the volume of lungs ver the size of the upper airway is located in the longitudinal traction of the trachea.
- 14. In clinical practice, slow metabolizing patients compared to fast metabolizing patients when they receive a therapeutic dose of codeine:
- e) Have an increased risk of respiratory depression.
- f) Have greater analgesic effect.
- Easter African patients have a higher incidence of slow metabolism of codeine than Caucasians.
- h) A and C are true.

### Reference

Raffán F. Preguntas y respuestas. Rev Colomb Anestesiol. 2017;45:1–82.

#### **Answers**

- 1. c.
- 2. a.
- 3. b.
- 4. d.
- 5. c.6. b.
- 7. d.
- 8. a.
- 9. b.
- 10. d.
- 11. b.
- 12. d.
- 13. d.
- 14. c.