

## Mercyhealth CME Lecture Quiz

### November 2022: Physiology

Provider Name \_\_\_\_\_ Provider Level \_\_\_\_\_ Primary Agency \_\_\_\_\_

Questions 1-7 EMR/EMT

Questions 1-10 AEMT

Questions 1-12 Paramedic

1. Which of the following statements regarding control of blood pressure is correct?
  - A.  $MAP = CO + SVR$
  - B.  $CO = HR - SV$
  - C.  $CPP = MAP - ICP$
  - D.  $SBP = MAP - DBP$
2. When transporting a patient with a hypertensive crisis, what position should the patient be transported in?
  - A. Supine
  - B. Head of bed elevated 30 degrees
  - C. Left lateral recumbent
  - D. Head of bed elevated 10 degrees
3. A patient presenting with signs of Cushing's Reflex (Hypertension, Bradycardia, and Irregular respirations) is most indicative of which physiologic condition?
  - A. Increased intracranial pressure
  - B. Decreased mean arterial pressure
  - C. Cardiac tamponade
  - D. Increased cerebral perfusion pressure
4. Where in the body do we store Glycogen?
  - A. Pancreases
  - B. Stomach
  - C. Gallbladder
  - D. Liver
5. Which of the following lessens the degree of perceived shock within a tissue?
  - A. Hypotension
  - B. Displaced oxygen from hemoglobin
  - C. Vasoconstriction
  - D. Hypoxia
6. Which of the following is a life-saving interventions should be performed as part of the primary survey, when indicated?
  - A. Head to toe exam
  - B. Blood glucose check
  - C. Obtain 12-lead EKG
  - D. Application of pelvic binder

7. The valsalva maneuver would most appropriate in a symptomatic yet stable adult patient with a heart rate at which of the following?
  - A. Below 40
  - B. Above 150
  - C. 60 to 100
  - D. Above 220
8. Which of the following statements about diabetics is correct?
  - A. Use caution in giving DKA and HHS patients any IVF
  - B. Glucagon causes release of Insulin stores from the liver
  - C. Initial dosage of D10 is 125ml in adults and 10ml/kg in PEDS
  - D. Kussmaul's respirations is due to metabolic alkalosis
9. What is the primary purpose of giving IV crystalloid fluids (normal saline or lactated ringers) to a patient in shock?
  - A. Provide intravascular volume repletion
  - B. Increase the BP to 120/80
  - C. Dilute clotting factors and fix acidosis
  - D. Improve the oxygen-carrying capacity of the blood
10. Nitroglycerine is helpful in the treatment of CHF in setting of a hypertensive emergency due which of the following?
  - A. Systemic venoconstriction
  - B. Coronary artery vasodilation
  - C. Reduction of heart rate
  - D. Increase in heart contractility
11. In patients with severe metabolic acidosis, the target EtCO<sub>2</sub> level will fall within what range?
  - A. 35-45
  - B. Above 50
  - C. Below 35
  - D. 40-50
12. A patient with very symptomatic yet hemodynamically stable atrial fibrillation with RVR and a known history of WPW should be given which of the following treatment measures?
  - A. Amiodarone
  - B. Synchronized cardioversion
  - C. Diltiazem
  - D. Adenosine