Test Canvas

Add, modify, and remove questions. Select a question type from the Add Question drop-down list and click Go to add questions. Use Creation Settings to establish which default options, such as feedback and images, are available for question creation.

Name: BUSM/BMC Geriatric Anesthesia Post-Test
Description: Geriatric Anesthesia Post-Test
Instructions: This test is to evaluate the impact of Geriatric Anesthesia month.

Question 1: Multiple Choice 5 points
Question: Expected pulmonary function test results in an older adult include which one of the following?
Answer:
- a. Increased vital capacity
- b. Decreased closing volumes/closing capacity
- c. Decreased alveolar gas exchange
- d. Increased FEV1

Question 2: Multiple Choice 5 points
Question: The apolipoprotein E e4 allele has been linked in elderly patients to the development of which ONE of the following?
Answer:
- a. Coronary Artery Disease
- b. COPD
- c. Alzheimer's disease
- d. Rheumatoid arthritis

Question 3: Multiple Choice 5 points
Question: Which one of the following statements about hypothermia is TRUE?
Answer:
- a. Shivering response is marked in older adults
- b. Vasconstricion is preserved and serve as a major mechanism during hypothermia
- c. Drug clearance is unaffected in the hypothermic patient
- d. Myocardial ischemia might result from hypothermia

Question 4: Multiple Choice 5 points
Question: Pharmacokinetics in the older adult differ from younger individuals due to all of the following EXCEPT:
Answer:
- a. Lower levels of albumin increasing the fraction of free drug
- b. Decreases on hepatic and renal function impact drug clearance
- c. Higher plasma concentrations are achieved with same doses due to lower blood
volume

☑ d. Changes in fat tissue content have no impact on duration of drug effects

Question 5  Multiple Choice  5 points

Question All of the following statements regarding renal function in the older patient are true EXCEPT:

Answer
a. Acute renal failure significantly increases perioperative mortality
☑ b. The GFR of an 80 year old is about 125 ml/min
 c. ATN is the most common cause of renal failure in the elderly
d. Renal blood flow is decreased in the older adult

Question 6  Multiple Choice  5 points

Question Which one of the following statements about prevention of peri-operative delirium in the older patient is TRUE?

Answer
a. Avoid ambulatory surgery
b. Keep Foley until discharge to avoid urinary retention
☑ c. Avoid scopolamine patches for PONV prophylaxis
d. MAC has a lesser incidence of delirium than GA

Question 7  Multiple Choice  5 points

Question Changes in the central nervous system that are related to age include the following EXCEPT:

Answer
a. Attrition of Cerebral/Cerebellar neurons
b. Decreased number of serotonin receptors in the cortex
☑ c. Elevated levels of Acetylcholine and Acetylcholine receptors which are responsible for Delirium
d. Decreased levels of Dopamine in the Substantia nigra

Question 8  Multiple Choice  5 points

Question All of the following statements about the management of acute pain in the elderly are false EXCEPT:

Answer
☑ a. Meperidine should be avoided as first line of treatment in the older adult
b. Pain decreases with age
c. Elderly patients cannot tolerate opioids
d. Elderly patients are more susceptible to addiction

Question 9  Multiple Choice  5 points

Question Which of the following statements regarding post-operative cognitive dysfunction (POCD) is TRUE?

Answer
a. Regional anesthesia is a superior choice in preventing this entity
b. POCD is similar to delirium
☑ c. Its causes are likely multifactorial
d. Isoflurane is better than Desflurane if inhaled anesthetics are used
Question 10

Multiple Choice

5 points

Question Cardiovascular changes in the older adult include all of the following EXCEPT:

Answer

a. 20%-30% decrease in blood volume
✓ b. Decrease in the tonic influence of the parasympathetic system
c. Decrease in the response of the Beta receptors
d. Increases in the SVR

Question 11

Multiple Choice

5 points

Question Aging-related changes of the respiratory system include all of the following EXCEPT:

Answer

a. Decreased response to hypoxemia
b. Decreased response to hypercapnia
✓ c. Enhanced hypoxic vasoconstriction during single lung ventilation
d. Progressive decrease of the PaO2 with age

Question 12

Multiple Choice

5 points

Question Intraoperative risk factors for the development of delirium include which ONE of the following?

Answer

a. Inhalation anesthetics
b. Total intravenous anesthesia
c. Regional or neuroaxial techniques
✓ d. Significant blood loss

Question 13

Multiple Choice

5 points

Question Which of the following age ranges is the fastest growing segment of American society?

Answer

a. 55-64
b. 65-74
c. 75-84
✓ d. 85-94

Question 14

Multiple Choice

5 points

Question In the elderly, neuroaxial anesthesia is characterized by all of the following EXCEPT:

Answer

✓ a. Lower blood levels of local anesthetics
b. Slower metabolism of local anesthetics
c. Longer duration of block
d. May get higher block (especially epidural)

Question 15

Multiple Choice

5 points

Question Of the following, which is the MOST significant predictor of mortality after surgery and anesthesia at one year?

Answer

a. Volatile anesthetics
✓ b. Presence of comorbidities
c. Cumulative deep anesthesia (BIS<45, per hour)
d. Chronic Beta Blockers

Question 16  Multiple Choice  5 points

Question Cardiovascular changes related to age include the following EXCEPT:
Answer  a. LVH
b. Diastolic dysfunction
c. Significant cardiac output decreases if atrial contraction is impaired
✓ d. Decreased SVR

Question 17  Multiple Choice  5 points

Question Which of the following statements regarding the management of chronic pain in the elderly is TRUE?
Answer ✓ a. NSAID's should be used with extreme caution
b. Acetaminophen is not recommended due to decreased hepatic function
c. Opioids are contraindicated
d. Fentanyl patches are an excellent alternative as drug absorption is well-controlled

Question 18  Multiple Choice  5 points

Question Which of the following statements regarding post-operative delirium is TRUE?
Answer  a. MAC is a better option, if possible
b. Regional anesthesia clearly prevents post-operative delirium
c. Agitated elderly patients in the PACU should be given Benadryl
✓ d. It is a medical emergency

Question 19  Multiple Choice  5 points

Question Changes in the thoracic cage, respiratory muscles, and lung parenchyma lead to the following EXCEPT:
Answer  a. Decreased chest compliance
b. Decreased respiratory reserve
c. Susceptibility to become "tired" during respiratory distress
✓ d. Better tolerance of the supine position

Question 20  Multiple Choice  5 points

Question CNS changes related to aging include all of the following EXCEPT:
Answer  a. Decrease in the number of neurons
b. Decreased MAC
✓ c. Increased CMR O2
d. Decreased CBF