

ASSESSMENT OF 30 MCQs

FPSC NO : 55
MCQs on EMERGENCY MEDICINE
Submission DEADLINE : 19 NOVEMBER 2013 12 NOON

INSTRUCTIONS

- To submit answers to the following multiple choice questions, you are required to log on to the College On-line Portal (www.cfps2online.org).
- Attempt ALL the following multiple choice questions.
- There is only ONE correct answer for each question.
- The answers should be submitted to the College of Family Physicians Singapore via the College On-line Portal before the submission deadline stated above.

1. The total volume of attendances at the restructured hospitals' emergency departments has been increasing since 2003. What is the projected number in 2014?
 - (A) Over a third of a million attendances.
 - (B) Over half a million attendances.
 - (C) Over three quarters of a million attendances.
 - (D) Over a million attendances.
 - (E) Over a million and a quarter attendances.
2. In Singapore, for a newly diagnosed ST elevation myocardial infarction, what is the upper limit of the "door to balloon time" that has been set?
 - (A) 100 minutes.
 - (B) 90 minutes.
 - (C) 80 minutes.
 - (D) 70 minutes.
 - (E) 60 minutes.
3. The appropriate use of the Emergency Medical Service ambulance is necessary. Which of the following patient has the LEAST need to be sent to the Emergency Department this way?
 - (A) 24-year-old patient with pregnancy, abdominal pain and syncope.
 - (B) 20-year-old patient with isolated left facial numbness for 2 days.
 - (C) 18-year-old patient with "worst ever headache".
 - (D) 48-year-old patient with chest pain and history of balloon angioplasty a year ago.
 - (E) 62-year-old patient with ischemic heart disease and fainting.
4. A paramedic arrives with Emergency Medical Service ambulance to pick up a patient with acute chest pain. She proceeds to perform a standard patient assessment with history taking, physical examination, the measurement of vital signs, and repeats the ECG before instituting treatment and evacuation. Which of the following is the LEAST LIKELY reason for doing this?
 - (A) To perform a wireless ECG.
 - (B) To follow the protocol that has been set for the paramedic
 - (C) To ensure due diligence is performed for each patient.
 - (D) To counter check on the need for referral.
 - (E) To have a baseline of the clinical status of the patient
5. For a patient with early stroke, what is the therapeutic window between onset to thrombolysis for intravenous tPA to be used?
 - (A) 3.0-hour window.
 - (B) 3.5-hour window.
 - (C) 4.0-hour window.
 - (D) 4.5-hour window.
 - (E) 5.0-hour window.
6. A 35-year-old patient is suspected to have acute coronary syndrome. Which of the following statements is INCORRECT?
 - (A) Epigastric pain can be a presentation.
 - (B) Nausea can be present.
 - (C) Syncope can be present.
 - (D) Diaphoresis is a clinical feature.
 - (E) A normal 12-lead ECG rules out the diagnosis.
7. A 41-year-old patient with acute chest pain is diagnosed to have acute coronary syndrome. Which of the following about initial treatment is INCORRECT?
 - (A) GTN may be given sublingually for relief of pain.
 - (B) GTN patch can be used for relief of pain.
 - (C) Aspirin 300 mg is given before arrival at the hospital.
 - (D) Clopidogrel 75 mg can be given while waiting for the ambulance.
 - (E) If aspirin is given, a written record should accompany the patient.

- 8. About the factors that may cause a delay of presentation of a patient with myocardial ischaemia to the emergency department, which of the following is the LEAST likely?**
- (A) A feeling of fatigue rather than chest pain.
 - (B) Decision by the patient to self treat symptoms.
 - (C) Diaphoresis as a presenting symptom.
 - (D) Decision by the patient to see primary care facilities rather than call for emergency medical service ambulance.
 - (E) Epigastric discomfort instead of chest pain.
- 9. To minimize transfer times and maximize neurological outcomes, the American Stroke Association has described the stroke "Chain of Survival". Which of the following is NOT in this "Chain of Survival"?**
- (A) Rapid recognition and reaction to stroke warning signs.
 - (B) Rapid emergency medical service ambulance dispatch.
 - (C) Pre-arrival notification to the receiving facility.
 - (D) Rapid diagnosis and treatment in hospital.
 - (E) Aspirin is given before arrival at the hospital.
- 10. The mother of a 5-year-old boy complains that since this morning her son is noted to be drooling, preferring to sit up, and also has noisy breathing. Which of the following is the MOST likely diagnosis?**
- (A) Bronchial asthma.
 - (B) Acute bronchiolitis.
 - (C) Acute epiglottitis.
 - (D) Interstitial lung disease.
 - (E) Diabetic keto-acidosis.
- 11. The chain of survival for cardiac arrest consists of 4 links: early access, early cardio-pulmonary resuscitation (CPR), early defibrillation, and early advanced life support. In this context, which of the following CORRECTLY describes what is included in basic cardiac life support?**
- (A) Early access, early CPR.
 - (B) Early access.
 - (C) Early CPR.
 - (D) Early defibrillation.
 - (E) Early access, early CPR, and early defibrillation.
- 12. In cardio pulmonary resuscitation (CPR), what is the desired rate of cardiac compressions per minute?**
- (A) 100.
 - (B) 90.
 - (C) 80.
 - (D) 70.
 - (E) 60.
- 13. With regards to training of cardiopulmonary resuscitation (CPR), which of the following is CORRECT?**
- (A) Teaching hands only CPR to lay rescuers is adequate.
 - (B) Both chest compressions and mouth-to-mouth ventilation should be taught to lay rescuers.
 - (C) Mouth-to-mouth ventilation is more important than chest compression.
 - (D) Pulse check is routinely included in teaching lay rescuers.
 - (E) Pulse check is mandatory to be taught to healthcare workers.
- 14. With regards to cardiac arrest, which of the following is the most common rhythm at onset of arrest?**
- (A) Ventricular tachycardia.
 - (B) Rapid atrial fibrillation.
 - (C) Ventricular asystole.
 - (D) Complete heart block.
 - (E) Coarse ventricular fibrillation.
- 15. In cardiopulmonary resuscitation, after defibrillation is done, what is the next step?**
- (A) Check ECG for cardiac rhythm before more chest compression.
 - (B) Continue uninterrupted CPR of 1 minute.
 - (C) Continue uninterrupted CPR of 1-2 minutes.
 - (D) Continue uninterrupted CPR of 2-3 minutes.
 - (E) Continue uninterrupted CPR of 3-4 minutes.
- 16. A 35-year-old man complains of acute breathlessness since 3 hours ago. Which of the following statements is INCORRECT?**
- (A) A patient with metabolic acidosis can present with breathlessness.
 - (B) Pulmonary embolism can present with chest pain and breathlessness.
 - (C) A normal pulse oximeter reading rules out respiratory failure.
 - (D) Anxiety should only be considered as the diagnosis after careful exclusion of other life threatening causes.
 - (E) Pneumothorax can present with chest pain and breathlessness.
- 17. A 36-year-old woman complains of headache lasting 3 hours. Which of the following statements is INCORRECT?**
- (A) Meningitis can be present even though the classical triad of fever, neck stiffness and altered mental state is not complete.
 - (B) A change in headache pattern can be a clue to a life threatening cause.
 - (C) Pre-eclampsia can present as acute headache.
 - (D) Acute angle closure glaucoma can present as acute headache.
 - (E) There is a correlation between high blood pressure and headache.

18. A 75-year-old man presents with acute abdominal pain lasting for 4 hours. He has a history of atrial fibrillation for 10 years. Which of the following statements is INCORRECT?

- (A) Normal abdominal examination findings rules out mesenteric ischaemia as a cause for the pain.
- (B) The possibility of acute coronary syndrome needs to be considered.
- (C) A leaking abdominal aortic aneurysm can be a cause for the pain.
- (D) Acute appendicitis needs to be considered.
- (E) A perforated gastric ulcer can present this way.

19. A 65-year-old man complains of backache lasting for four weeks. He now has urinary urgency for a week. A straight X-ray of the back is reported as normal apart from osteoarthritic changes. Which of the following statements is INCORRECT?

- (A) Upper back pain can be the first symptom of acute coronary syndrome from posterior myocardial ischaemia.
- (B) The normal X-ray of the back rules out myelopathy from cord compression.
- (C) Leaking abdominal aortic aneurysm can present with low back pain.
- (D) Abdominal aortic aneurysm can present with chest pain radiating to the back.
- (E) Spinal stenosis causes back pain that is relieved by bending forward.

20. About wounds and injuries encountered in the ambulatory care setting, which of the following statement is CORRECT?

- (A) Surgical implants have normal risk of infection in people with diabetes.
- (C) Glass fragments as retained foreign bodies will be picked up by plain X-rays as they are uniformly radio-opaque.
- (D) A dog bite is more prone to infection than a cat bite.
- (E) Human bite sustained from a fight is more prone to infection than a cat bite.

21. A targeted systematic survey performed in a set order which searches for injuries that pose the most immediate threats to life is set out in the Advanced Trauma Life Support (ATLS) course can be remembered as A,B,C,D, and E. Which of the following is INCORRECT?

- (A) A = Airway assessment.
- (B) B = Breathing assessment.
- (C) C = Circulation assessment.
- (D) D = Danger assessment.
- (E) E = Exposure and environmental control.

22. A 29-year-old driver is involved in head-on collision. Which of the following indicates that airway obstruction is present?

- (A) Presence of stridor.
- (B) Ability to answer and speak normally.
- (C) Loss of consciousness.
- (D) Facial trauma.
- (E) Oral bleeding.

23. About airway management in the patient with major trauma, which of the following statement is CORRECT?

- (A) Laryngeal masks (LMAs) prevent "hands-free" bagging.
- (B) Oropharyngeal airway is ineffective in securing a patent airway.
- (C) If breathing is absent, bag mask ventilation (BMV) is the action to take.
- (D) Laryngeal masks (LMAs) prevent aspiration.
- (E) Intubation is superior in outcome compared to bag mask ventilation (BMV).

24. A 45-year-old man construction work sustained a blunt injury to the chest when he slipped on a slippery floor and fell onto a concrete slab. He is suspected to have a tension pneumothorax. Which of the following clinical feature is NOT consistent with such a diagnosis?

- (A) Distended neck veins.
- (B) Unilateral decreased chest movement.
- (C) Shifting of trachea contralateral to the side with decreased chest movement.
- (D) Hypotension.
- (E) Paradoxical chest movement.

25. A 23-year-old construction worker falls from a height and lands on his feet. Which of the following is the most sensitive sign that he is suffering from an exsanguinating haemorrhage from a ruptured viscus?

- (A) Tachycardia.
- (B) Cool extremities.
- (C) Confusion.
- (D) Delayed capillary refill more than 2 seconds.
- (E) Pallor.

26. About the practical anatomical and physiological characteristics of the paediatric airway, which of the following statements is CORRECT?

- (A) In the infant and young child, the lower airways are larger but the supporting cartilage are less well developed.

- (B) The relatively large head flexes the neck and results in airway obstruction in the unconscious child.
- (C) The tidal volume in the young child is more dependent on the intercostal muscle function than the diaphragmatic function.
- (D) Children have higher metabolic rates, with an oxygen consumption of 10-12 ml/kg/min compared to 3-4 ml/kg/min in the adult.
- (E) The ribs are less pliable and compliant in the child compared to the adult.

27. The correct dosage of paediatric medications is often weight dependent. The weight of the child can be estimated by a formula if a weighing machine is not available. Using this formula, which of the following is the correct estimated weight in a 5-year-old child?

- (A) 12 kg.
- (B) 18 kg.
- (C) 17 kg.
- (D) 19 kg.
- (E) 21 kg.

28. Fever is a common presentation of the sick child. As a rule, which of following groups of children needs referral to the hospital routinely for further care and management?

- (A) Less than 3 months old.
- (B) Less than 6 months old.
- (C) Less than 9 months old.
- (D) Less than 12 months old.
- (E) Less than 15 months old.

29. Kawasaki disease is great mimic of many febrile conditions. What is the reason for admitting such a child with this condition to hospital?

- (A) Treatment of dehydration.
- (B) Treatment of renal complications.
- (C) Intravenous immunoglobulin therapy.
- (D) Monitoring of cardiac complications.
- (E) Treatment of fever.

30. A 5-year-old girl presents with fever without source. The triage temperature is 39 degree Celsius. The total white count is 20,000. Based on the findings of a retrospective study, what is the likelihood she has an occult pneumonia?

- (A) 12%.
- (B) 16%.
- (C) 22%.
- (D) 26%.
- (E) 32%.