NWC EMSS – CE Post-Test Study-Questions – Mar 2013 – Cardiac Arrest Team Resuscitation

Resources to use when answering the following questions: (1) NWC EMSS SOP's, (2) CE handout, (3) video on YouTube – NWCEMS - cardiac arrest team resuscitation - http://www.youtube.com/watch?v=CZWgUHDO1f4&feature=plcp

1. What should be assessed & documented every 2 minutes during CPR? A O_2 sat & $ETCO_2$ B ECG rhythm & $ETCO_2$ C Pulse & respiratory rate D Pulse, RR, ECG, O_2 sat, & $ETCO_2$,	2. Why should ECG rhythm be assessed every 2 minutes during CPR? A Determine need for atropine B Determine need for intubation C Determine need for epinephrine D Determine need for defibrillation	3. During CPR when should the pulse be checked? A Every 2 minutes B After every defibrillation C When VF is seen on ECG monitor D When an organized rhythm is seen
4. What is the significance of a sudden, dramatic $ETCO_2$ increase during CPR? A Pt needs to be hyperventilated B Pt is unlikely to be resuscitated C May signal of impending ROSC D Pt is in need of a dose of bicarbonate	5. Why should $ETCO_2$ be assessed every 2 minutes during CPR? A Determine need for atropine B Determine need for intubation C Measure effectiveness of CPR D Determine need for defibrillation	6. What is the significance of $ETCO_2$ that remains less than 10 for at least 20 minutes of CPR? A Pt is unlikely to be resuscitated B Tells you pt is being hyperventilated C May be a signal of impending ROSC D Pt is in need of a dose of bicarbonate
7. What best defines PEA? A IVR at any rate B IVR w/ rate less than 60 C Bradycardic rhythm w/ hypotension D Organized ECG rhythm, no pulse felt	8. In PEA, what should be documented in the "pulse" section of the e-PCR? A 0 B "PEA" C rate of ECG rhythm D 999	9. What is pseudo-PEA? A VF w/ a pulse B No pulse or myocardial contraction C Pulse palpable but no myocardial contraction D Pulse unable to be felt, yet myocardial contraction is present
10. What is the most common, treatable cause of PEA? A Acidosis B Hypovolemia C Hyperkalemia D Tension pneumothorax	11. How should an IVF bolus be given to a pt in PEA? A 200 mL over 10 minutes B 200 mL as rapidly as possible C 20 mL/kg over 30 minutes D 20 mL/kg as rapidly as possible	12. Pt in PEA, wt 175 lbs. How should IVF be given? A 200 mL - as fast as possible B 1600 mL - as fast as possible C 2000 mL - over 30 minutes D 2400 mL – over 30 minutes
13. What is the physiological significance of persistent VF? A Indicates poor quality CPR B Indicates higher pacemakers have failed C Indicates absence of coronary artery blood flow D Indicates heart muscle is receiving blood via coronary arteries	14. What is persistent/refractory VF? A VF that requires amiodarone to treat B VF that defibrillation does not abolish C VF that recurs despite successful defibrillation D VF that converts to asystole after defibrillation	15. What is meant by recurrent VF? A VF that requires amiodarone to treat B VF that defibrillation does not abolish C VF that recurs despite successful defibrillation D VF that converts to asystole after defibrillation
16. What can EMS providers do, <u>without an OLMC order</u>, to treat persistent / refractory VF? A Administer Lidocaine B Administer procainamide C Dual sequential defibrillation D Apply new set of defib pads in alternate position and defib using those pads	17. What is the purpose of defibrillation? A Stop all electrical activity B Stimulate SA & AV nodes to fire C Create artificial electrical impulse to stimulate ECG rhythm D Increase the amplitude of VF to make it more responsive to medication	18. What is standard placement for defib electrodes? A R of sternum, below clavicle and ~ V6 position in midaxillary line B R of sternum, below clavicle and V4 position C V4 position and below L scapula D V1-2 position and below L scapula
19. What is the most common type of re-arrest? A Asystole B Pulseless VT C Recurrent VF D Development of PEA	20. When is re-arrest most likely to occur? A Within a minute of ROSC B First 10 minutes after ROSC C 30 minutes after ROSC D 60-120 minutes after ROSC	21. What is best method to detect re-arrest? A Watch ECG monitor B Set monitor HR alarms C Continuous palpation of pulse D Set auto-BP to every 15 minutes

NWC EMSS – CE Post-Test Study-Questions – Mar 2013 – Cardiac Arrest Team Resuscitation

22. Post-ROSC, which has the highest priority? A Hyperventilate B Treat hypotension C Begin therapeutic hypothermia D Administer bicarb to treat acidosis	23. If post ROSC a pt is hypotensive, what should be done FIRST? A Perform a 12L ECG B Administer IVF while preparing dopamine C Begin therapeutic hypothermia D Hyperventilate to assure oxygenation	24. If post ROSC a pt has an $ETCO_2$ >55, what should be done? A Decrease ventilation rate B Immediately hyperventilate C Administer sodium bicarbonate D Assess rate & volume of assisted vent
25. What should be done if an IO line is not flowing well? A Manually twist/wiggle IO needle B Remove & reestablish in another site C Give 10-20 mL NS flush using syringe D Remove & reinsert needle in same site	26. Why may it be a good idea to establish an IV site - during CPR? A Meds are less effective when given IO B To give PM's more practice starting IV's C Establishing IV during CPR is a bad idea D May be used to treat PEA and give cold IVF for therapeutic hypothermia	27. What should be done after the administration of all IV/IO meds – during cardiac arrest? A Defib within 10 seconds B Give 20-50 mL IVF bolus C Check pulse in 30-60 seconds D Immediately check ECG rhythm
28. What is a contraindication for therapeutic hypothermia? A Trauma B VF arrest C Asystole arrest D Patients greater than 75 years old	29. At what temperature should cold IVF be kept for therapeutic hypothermia? A 4^{o} F B 19^{o} F C 39^{o} F D 53^{o} F	30. For therapeutic hypothermia, where should cold packs be placed? A Head & feet B Chest & abdomen C Neck, axilla, groin D Around arms and legs
31. When tx pt w/ therapeutic hypothermia, what should be done if pt is shivering? A Stop cooling the pt B Nothing, it is a desirable action C If SBP >90, administer midazolam D If SBP >90, administer Lidocaine for cerebral protection	32. How much cold IVF should be given to a 175 lb pt for therapeutic hypothermia? A 1000 mL B 1500 mL C 2000 mL D 2500 mL	33. How fast should cold IVF be given for therapeutic hypothermia? A As fast as possible, goal < 30 min B Over 60 minutes C Over 1-2 hours D Over 2-4 hours
34. When using pit-crew approach to team resuscitation, what is the responsibility of the 1^{st} team member to reach the pt? A Airway management B Turn on monitor & attach electrodes C Check pulse, begin chest compressions D Establish vascular access	35. When using pit-crew approach to team resuscitation, what is the responsibility of the 2^{nd} team member to reach the pt? A Airway management B Turn on monitor & attach electrodes C Check pulse, begin chest compressions D Establish vascular access	36. When using pit-crew approach to team resuscitation, what is the responsibility of the 3^{rd} team member to reach the pt? A Airway management B Turn on monitor & attach electrodes C Check pulse, begin chest compressions D Establish vascular access
37. If only 2 PM's are on scene of a pt in cardiac arrest, what treatment should be delayed until additional help arrives? A CPR B Defibrillation C ResQPOD - ITD D Advanced airway & vascular access	38. What compression rate is associated with the best pt outcomes when using the ResQPOD - ITD? A 90-99 B 100-109 C 110-120 D 120	39. Why are compressions performed too fast harmful? A Too fast tends to be too deep B Too fast compressions are not harmful C Decrease refilling of heart & coronary arteries D Tend to increase the incidence of rib fx and pneumothorax development
40. <u>Prior to adv airway placement</u>, what should the airway mgmt team member **<u>NOT</u>** do? A Insert OP/NPA B Squeeze bag-valve device C Maintain tight face-mask seal D Connect capno & RQP-ITD to BVM	41. Prior to placement of an advanced airway, when is the pt ventilated? A After every 10 compressions, compressor pauses to give 1 breaths B After every 15 compressions, compressor pauses to give 2 breaths C After every 30 compressions, compressor pauses to give 2 breaths D 10/min; asynchronous w/ compressions	42. When using pit-crew team resuscitation, <u>prior to adv airway placement</u>, whose responsibility is it to ventilate the pt? A Team leader B Airway mgmt team member C PM obtaining vascular access D Person performing compressions

43. Which has the highest priority?
A Defibrillation
B Medications
C Vascular access
D Advanced airway

44. Which has the highest priority?
A Intubation
B Medications
C Pupil check
D Advanced airway

45. What procedure is being implemented to minimize medication errors?
A Only senior PM on scene can give meds
B Daily recitation of the 7 rights of medications
C Take meds out of boxes, so labels easier to read
D Meds should be checked by another PM - prior to administration

46. What is meant by "release completely" during CPR?
A Do not touch pt during defibrillation
B Do not squeeze BVM during compressions
C Lift hand very slightly off chest wall between compressions
D When ventilating w/ BVM, allow bag to fully reinflate

47. Why is releasing completely important?
A Allows lung to fully deflate
B It prevents too fast/deep compressions
C Prevents rescuer injury during defibrillation
D Allows venous return - heart to refill w/ blood

48. What should be done at the same time the ECG rhythm is checked?
A Check pulse
B Ventilate pt once
C Ventilate pt twice
D Rotate compressors

49. When defibrillating a pt, who should be the last to clear the pt?
A Team leader
B Person ventilating
C Person giving medications
D Person doing compressions

50. Should pt be ventilated right before defibrillation?
A No, decreases defib effectiveness
B Only if it is time to ventilate the patient
C Yes, pause in compressions allows full ventilations
D Yes, if more than 5 seconds have elapsed since last ventilation

51. What should be done immediately after defibrillating a pt?
A Check pulse
B Check ECG rhythm
C Check ECG rhythm & pulse
D Resume chest compressions

52. When during CPR should an advanced airway be placed?
A As soon as possible
B After first ECG rhythm check
C Before beginning compressions
D Not before 2nd ECG rhythm check

53. What is the most important factor to successful resuscitation?
A Antidysrhythmic meds
B Advanced airway placement
C Frequent epinephrine administration
D Minimizing interruptions in compressions

54. After placement of adv airway, how should compressions be performed?
A Compressions should be continuous
B Pause after every 10 compressions to give 1 breath
C Pause after every 15 compressions to give 2 breaths
D Pause after every 30 compressions to give 2 breaths

55. Why is it important to insert an OP/NPA prior to ventilating w/ a BVM?
A It is not important.
B Minimizes tongue obstruction
C OP/NPA is only needed if unable to ventilate without placement
D They are in place in case an advanced airway can not be placed

56. For the RQP - ITD to function, when is it most important to have a tight facemask seal?
A During ventilations
B During chest compressions
C A tight face-mask seal is not important
D RQP - ITD does not work w/ BVM ventilation, req placement of adv airway

57. Why is it important to insert an OP/NPA prior to ventilating w/ a BVM?
A It is not important.
B Helps prevent gastric distention
C OP/NPA is only needed if unable to ventilate without placement
D They are in place in case an advance airway can not be placed

58. Pt in VF given only epinephrine, what is the next drug that should be given?
A Atropine
B Vasopressin
C Amiodarone
D Repeat epinephrine

59. Pt in VF given only vasopressin, what is the next drug that should be given?
A Atropine
B Epinephrine
C Amiodarone
D Repeat vasopressin

60. Pt in VF given only epinephrine & amiodarone, what is the next drug that should be administered?
A Atropine
B Vasopressin
C Epinephrine
D Repeat amiodarone