

ACLS PRETEST ANSWER KEY

RHYTHM IDENTIFICATION (PART I)

1. 3rd Degree Block (Complete Heart Block)
2. Pulseless Electrical Activity
3. Coarse Ventricular Fibrillation
4. Reentry SVT
5. Sinus Bradycardia
6. Polymorphic Ventricular Tachycardia
7. 2ND Degree Type II (Mobitz)
8. Reentry SVT
9. 2ND Degree Type II (Mobitz)
10. Sinus Bradycardia
11. Atrial Flutter
12. Reentry SVT
13. Reentry SVT (*duplicate*)
14. 2nd Degree Type I (Wenkebach)
15. Normal Sinus Rhythm (*pretty ugly, though...*)
16. Agonal/Asystole
17. Atrial Fibrillation
18. Sinus Tachycardia
19. Fine Ventricular Fibrillation
20. Fine Ventricular Fibrillation (*duplicate*)

PHARMACOLOGY (PART II)

21. Magnesium is indicated for VF/Pulseless VT associated with torsades de pointes
22. Give aspirin 160-325 mg chewed immediately
23. Start epinephrine 2-10 mcg/min (*New standard that they will be hearing about on the DVD. It would also be appropriate to give Dopamine, even though the BP is not low, for the treatment of bradycardia as well but the dosage would need to be 2 mcg/kg/min – that dosage will be on their post test and is not mentioned in the DVD*)
24. Do not give aspirin for at least 24 hours if rtPA is administered (*Discuss the Cincinnati Stroke Scale here: put both arms out in front of them and close their eyes to check for weakness, repeat “you can’t teach an old dog new tricks” to check for mentation and speech slurring, and ask them to give you a big smile to check for facial droop. These 3 things should be performed on EVERY patient suspicious for CVA*)
25. Use of phosphodiesterase inhibitor (ED medications) within 12 hours
26. Epinephrine 1 mg (*By the way – if you are managing the patient’s airway with a BVM on an ET tube, you need to take the BVM off of the tube and take it with you when you back away for a defibrillation attempt. Do not allow oxygen to flow across the patient’s chest when defibrillation is attempted, which would happen if you laid the BVM down on the patient’s neck*)
27. Adenosine 6 mg (*Remind them that this is still the national standard dosaging for Adenosine, even if local protocol is different*)
28. 0.5 mg

29. 150 mg IV push
30. Give normal saline 250-500 mL fluid boluses
31. Seek expert consultation
32. Gain IV or IO access (*Remind them that an AED is automatic, functioning off of pre-programmed software to do certain things at certain times. If the AED is not doing something that you think it should, the AED is not defective – it just isn't the right time to do that particular thing*)
33. Amiodarone 300 mg
34. Lidocaine, epinephrine, vasopressin
35. IV or IO
36. Second dose of epinephrine 1 mg
37. Perform immediate cardioversion (*I strongly disagree – it should be to perform a 12 Lead! However, this is a good place to discuss the concept of “Medical Emergency Teams” or “Rapid Response Teams” that can be called for clinical deterioration of a patient in the hospital setting – your EMS folks won't know what those teams are*)
38. Chest pain or shortness of breath is present
39. The correct dose of vasopressin is 40 units administered IV or IO
40. Epinephrine 1 mg or vasopressin 40 units IV or IO

PRACTICAL APPLICATION (PART III)

41. Repeat adenosine 12 mg IV
42. Sublingual nitroglycerin 0.4 mg
43. Prepare to give epinephrine 1 mg IV (*Good place to remind them that chest compressions are started immediately after a shock – there is no pulse check at this point*)
44. Give atropine 0.5 mg IV
45. Begin CPR, starting with high-quality chest compressions (*Remind them that chest compressions are the MOST important thing on any full arrest scenario. Also, if you are “uncertain” if there is a pulse or not, there isn't one!*)
46. Give an immediate unsynchronized high-energy shock (defibrillation dose). (*Tell them that it is unnecessary to stop compressions while the monitor is charging up – in fact, it is better if you DON'T stop just in case the monitor takes too long to charge... longer than the recommended 10 seconds at a time of no compressions*)
47. Give atropine 0.5 mg IV
48. Give epinephrine 1 mg IV (*Given the possibility of the need for suction, remind them of the rules: no longer than 10 seconds and only on the way out*)
49. Perform vagal maneuvers
50. Administer adenosine 6 mg; seek expert consultation (*The new rule for adenosine is to use it as a diagnostic tool ONLY IF you can't tell the difference between a narrow complex tachycardia with some kind of aberrancy or if it is actually a wide complex tachycardia. If adenosine works, then it was a narrow complex and if it didn't, then it was wide. This rhythm CLEARLY is wide but of the available answers for this stable patient, adenosine is the only answer that would come close*)
51. Begin TCP
52. Reperfusion Therapy (Cardiac Catheterization)
53. Give magnesium sulfate 1-2 grams IV diluted in 10 mL D₅W given over 5-20 minutes

54. Administer epinephrine 1 mg
55. Continue monitoring the patient and seek expert consultation
56. Resume high-quality chest compressions
57. Continue monitoring the patient and seek expert consultation
58. Seek expert consultation
59. Give a single shock
60. 1-2 L normal saline (*Many people will question the answer – suggesting that instead it should be to give a post-conversion dosage of Amiodarone. The heart is clearly irritated here – it is a logical assumption that it could need a post-conversion dosage of Amiodarone to reduce that irritation or the irritation could be from the hypoxia created from the currently low blood pressure and would settle down if a fluid bolus was given to boost the systolic BP up to the **recommended goal of 90**. Either way, this is a good place to tell them that the infusion of 1-2 Liters should ONLY be to get the blood pressure up to 90 and that that didn't translate well onto the post test. The post test answer is that EVERYONE gets 1-2 Liters, regardless of their current blood pressure, once ROSC is achieved. Different topic of discussion: when your patient has attained ROSC, AND CONTINUES TO BE UNRESPONSIVE, inducing a mild state of hypothermia often prevents reperfusion injuries. It gets discussed on the DVD but the unresponsive part isn't emphasized)*)