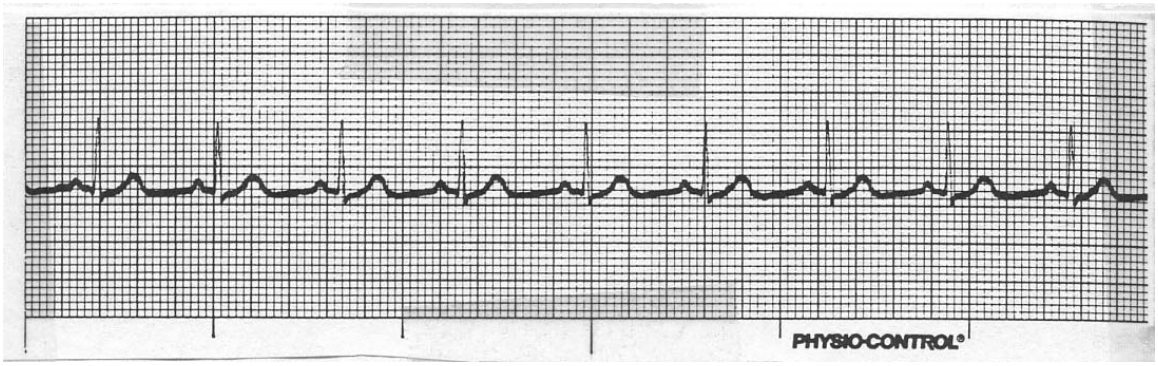
STUDY GUIDE
for
Cardiology II

Scenario

Your patient is a 45-year-old male who experienced some chest discomfort while jogging. The pain is substernal and does not radiate. He has no previous medical history and takes no medications. The pain is somewhat relieved by rest. His BP is 150/88, pulse 96 and regular, respirations 18, skin warm and pink. His lungs are clear bilaterally and he has no other remarkable signs or symptoms. His EKG strip is as follows:



1. This patient's probable diagnosis is

   A. stable angina
   B. unstable angina
   C. pre-infarction angina
   D. Prinzmetals angina

2. His EKG strip is

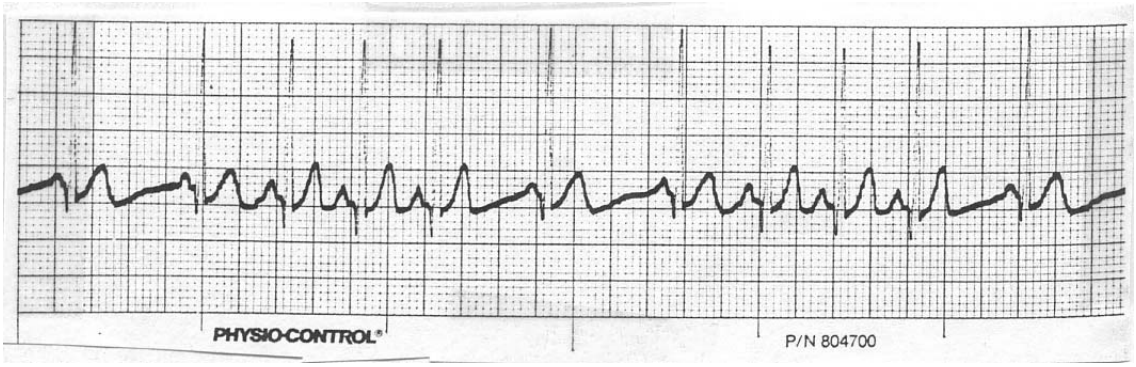
   A. sinus tachycardia
   B. wandering atrial pacemaker
   C. premature atrial contractions
   D. normal sinus rhythm

3. Initial prehospital management of this patient should include oxygen and

   A. morphine IV
   B. nitroglycerine SL
   C. epinephrine SC
   D. atropine IV

Scenario

Your patient is a 56-year-old female who complains of sudden onset of substernal chest pressure with no radiation while watching television. She denies any shortness of breath or nausea. She has a history of atherosclerotic heart disease and takes diltiazem. Her BP is 160/90, pulse is 110, respirations 16, skin warm and dry, lungs clear bilaterally. She has no other remarkable physical findings. Her EKG is as follows:



4. This patient is probably suffering from

   A. stable angina
   B. unstable angina
   C. cardiogenic shock
   D. Ludwig's angina

5. Her EKG strip is

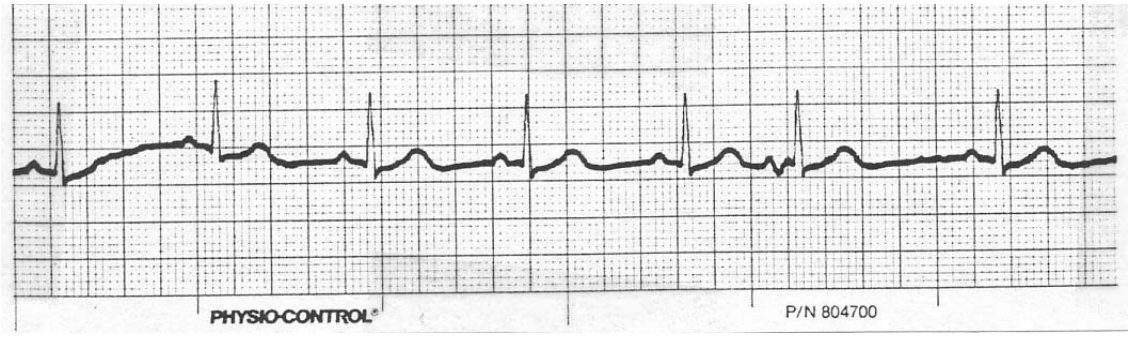
   A. normal sinus rhythm
   B. premature atrial contraction
   C. wandering atrial pacemaker
   D. sinus dysrhythmia

6. The process by which fatty deposits collect within arterial walls is known as
   A. arteriosclerosis
   B. Varicosis
   C. arteriosclerotitis
   D. atheritis

7. Diltiazem is a drug in which class?
   A. Nitrate
   B. Beta blocker
   C. Calcium channel blocker
   D. Diuretic

Scenario

Your patient is 65-year old man who complains of sudden onset of substernal chest pain radiating to the neck and left shoulder. It began while eating one hour ago and has not subsided. He also complains of some shortness of breath, nausea, and dizziness. He has a history of coronary artery disease and hypertension. He takes Procardia XL once a day. His BP is 180/80, pulse rate of 80 and irregular, respirations 26, lungs clear, skin warm and dry. His EKG strip is as follows:



8. This patient is probably suffering from

   A. stable angina
   B. unstable angina
   C. acute myocardial infarction
   D. cardiogenic shock

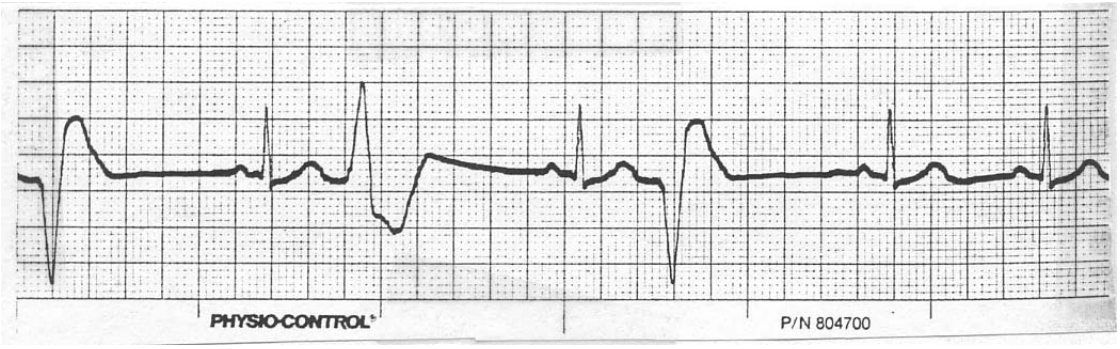
9. His EKG strip is
   A. normal sinus rhythm
   B. NSR with premature atrial contraction
   C. wandering atrial pacemaker
   D. sinus dysrhythmia

10. Procardia XL is a drug in which class?
   A. Nitrate
   B. Beta blocker
   C. Calcium channel blocker
   D. Diuretic

11. Prehospital management of this patient includes
   A. high flow oxygen
   B. pain management
   C. reassurance
   D. all of the above

Scenario

Your patient is a 25-year-old male with a congenital heart defect who presents with some chest pain and shortness of breath. He takes digoxin and claims that he often has problems. His BP is 170/80, pulse is 74 and irregular, respiratory rate is 18, skin warm and dry, lungs clear. His EKG is as follows:



12. His EKG is

    A. premature atrial contractions
    B. ventricular bigeminy
    C. ventricular tachycardia
    D. premature ventricular contractions

13. Digoxin is a drug in which class?

    A. Nitrate
    B. Cardiac Glycoside
    C. Osmotic diuretic
    D. Calcium channel blocker

14. Prehospital management of this patient should include

    A. verapamil IV
    B. adenosine IV
    C. nifedipine IV
    D. lidocaine IV

Scenario

Your patient is a 45-year-old female who complains of mild-to-moderate shortness of breath and some chest discomfort. She has a long history of cardiac problems and takes digoxin, Lasix, and Slo-K. Her BP is 180/80, pulse 94 and very irregular, respirations 20, skin cool and pink. She has bilateral crackles (rales) in the lower lobes. She has no peripheral edema or JVD. Her EKG is as follows:

15. Your diagnosis of this patient is

    A. right heart failure
    B. left heart failure
    C. cardiogenic shock
    D. acute pulmonary edema

16. Her medications suggest she has

    A. abnormal cardiac dysrhythmias
    B. aortic valve problems
    C. cor pulmonale
    D. congestive heart failure

17. Her EKG is

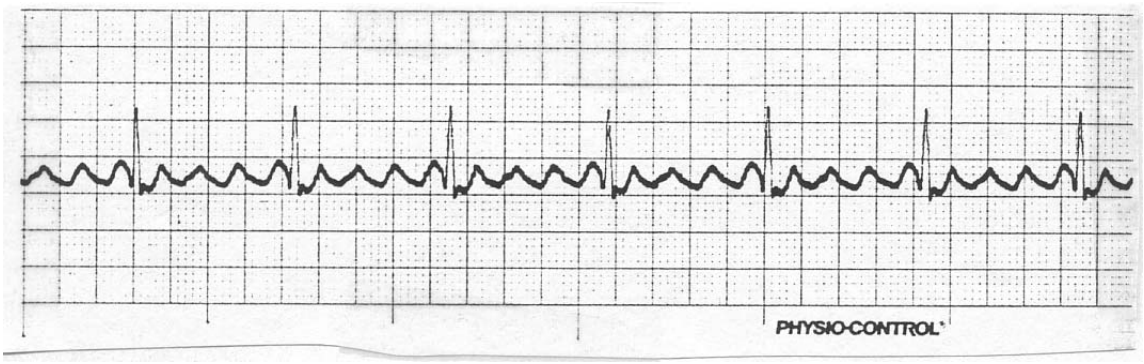
    A. wandering atrial pacemaker
    B. atrial flutter
    C. atrial fibrillation
    D. junctional rhythm

18. Prehospital pharmacological management of this patient should include oxygen and

    A. nitroglycerine, furosemide, morphine
    B. furosemide, albuterol, lidocaine
    C. morphine, naloxone, furosemide
    D. potassium, furosemide, morphine

Scenario

Your patient is an 80-year-old male who presents in severe respiratory distress, sitting bolt upright gasping for each breath. He has a history of high blood pressure and breathing problems. He takes Inderal each day. His BP is 170/70, pulse is 72 and irregular, respirations 40 and extremely labored, skin warm and diaphoretic. Upon auscultation, you hear diffuse bilateral crackles and wheezing. He coughs up blood tinged sputum. His EKG is as follows:



19. This patient is suffering from

A. acute pulmonary edema
B. cor pulmonale
C. cardiogenic shock
D. aortic aneurysm

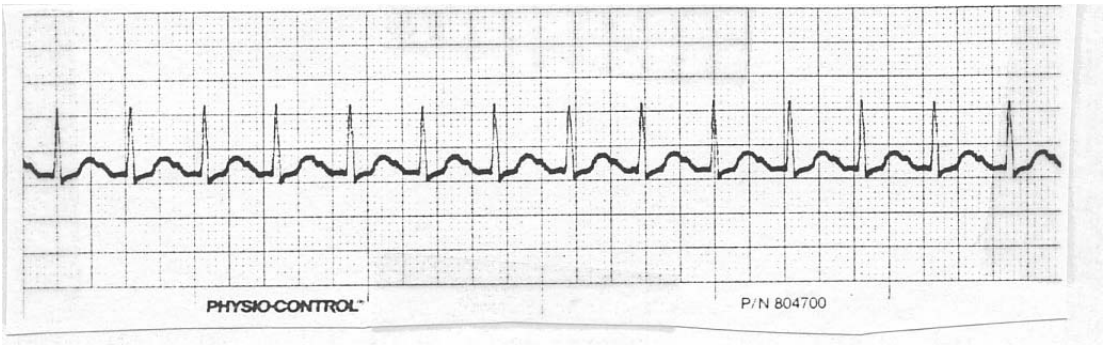
20. His EKG is
A. wandering atrial pacemaker
B. atrial flutter
C. atrial fibrillation
D. junctional rhythm

21. Inderal is a drug in which class?
A. Beta blocker
B. Nitrate
C. Calcium channel blocker
D. Cardiac glycoside

22. Which of the following is **NOT** a prehospital management goal for this patient?
A. oxygenation
B. Preload increase
C. Diuresis
D. Coronary artery dilation

Scenario

Your patient is a 57-year-old woman who lies unconscious on her living room floor. Her husband claims she "just collapsed after clutching her chest." She has a previous medical history and takes Cardizem. Her BP is 70 palpated, pulse is 140, respiratory rate 20 and shallow, skin cool, pale, and clammy, lungs congested, chemstrip is 130. Her EKG strip is as follows:



23. This patient is suffering from

    A. cardiogenic shock
    B. acute pulmonary edema
    C. right heart failure
    D. left heart failure

24. Her EKG is

    A. atrial fibrillation
    B. paroxysmal supraventricular tachycardia
    C. sinus tachycardia
    D. atrial flutter

25. The primary cause for this dysrhythmia is
    A. ectopic focus
    B. reentry focus
    C. compensatory mechanism
    D. parasympathetic stimulation

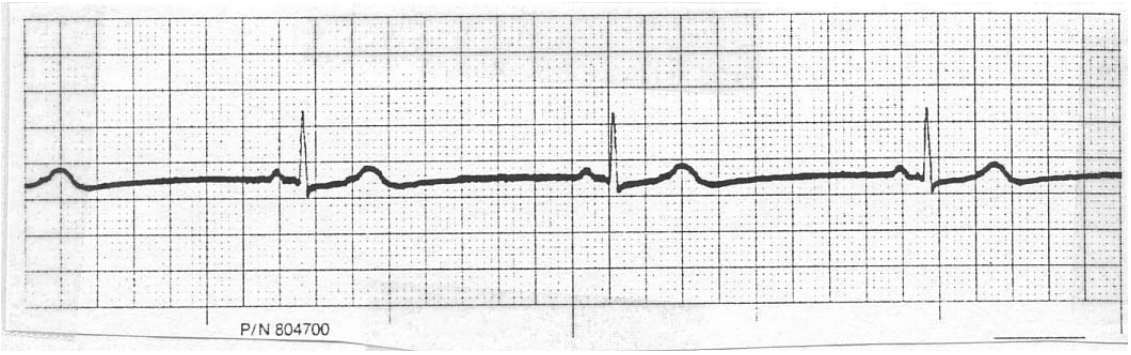
26. Cardizem is a drug in which class?
    A. Nitrate
    B. Cardiac glycoside
    C. Beta blocker
    D. Calcium channel blocker

27. Prehospital management of this patient includes all of the following **EXCEPT**

A. dopamine IV
B. oxygen
C. IV fluid challenge
D. positive pressure ventilation

Scenario

Your patient is a 78-year-old male who collapsed in the bathroom while moving his bowels. He sits slumped on the toilet, moaning, pale, and extremely diaphoretic. He has no history of cardiac problems and takes no medications. His BP is 70 palpated, pulse of 36, respirations 28 and shallow, lungs clear, chemstrip 120. His EKG is as follows:



28. The most likely cause of this man's problem is

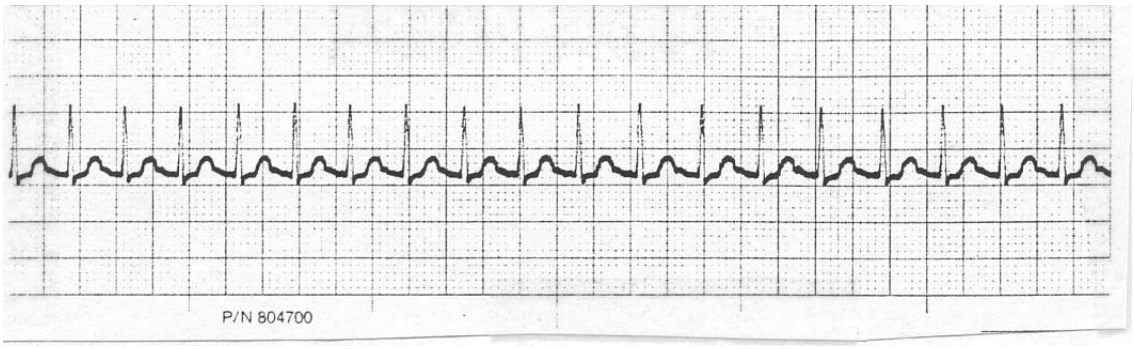
A. hypoglycemia
B. a vaso-vagal episode
C. narcotic overdose
D. sympathetic overstimulation

29. His EKG strip is
A. junctional rhythm
B. sinus arrhythmia
C. sinus bradycardia
D. idioventricular rhythm

30. The first prehospital treatment after oxygen is
A. transvenous cardiac pacing
B. adenosine IV
C. epinephrine IV
D. atropine IV

Scenario

Your patient is a 35-year-old female who developed heart palpitations while exercising. She complains of lightheadedness and some dizziness. She denies any chest pain. She has a history of Wolf-Parkinson-White syndrome and takes Pronestyl. Her BP is 140/70, pulse of 190, respirations of 18, skin warm and dry, lungs clear bilaterally. Her EKG is as follows:



31. This patient's rhythm is

A. sinus tachycardia
B. ventricular tachycardia
C. supraventricular tachycardia
D. atrial flutter

32. The probable cause of this dysrhythmia is

A. ectopic focus in the ventricle
B. reentry focus in the atria
C. compensatory mechanism
D. sympathetic stimulation

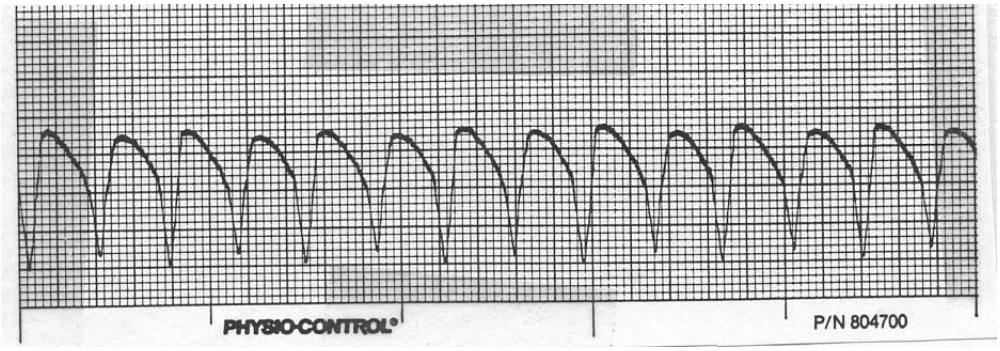
33. The initial treatment of this patient includes oxygen and

A. immediate cardioversion
B. immediate defibrillation
C. vagal maneuvers
D. verapamil IV

Scenario

Your patient is a 67-year-old man who collapsed in the kitchen while cooking dinner. He presents on the floor, pale, clammy, moaning, with vomit around his mouth. His wife states he has no history and takes no medications. His BP is 70/30, pulse is 170

and weak, respirations are 28 and shallow, lungs are clear bilaterally, chemstrip 120. His EKG is as follows:



34. His EKG is
    A. ventricular tachycardia
    B. SVT with aberrancy
    C. ventricular fibrillation
    D. idioventricular fibrillation

35. Initial management of this patient includes

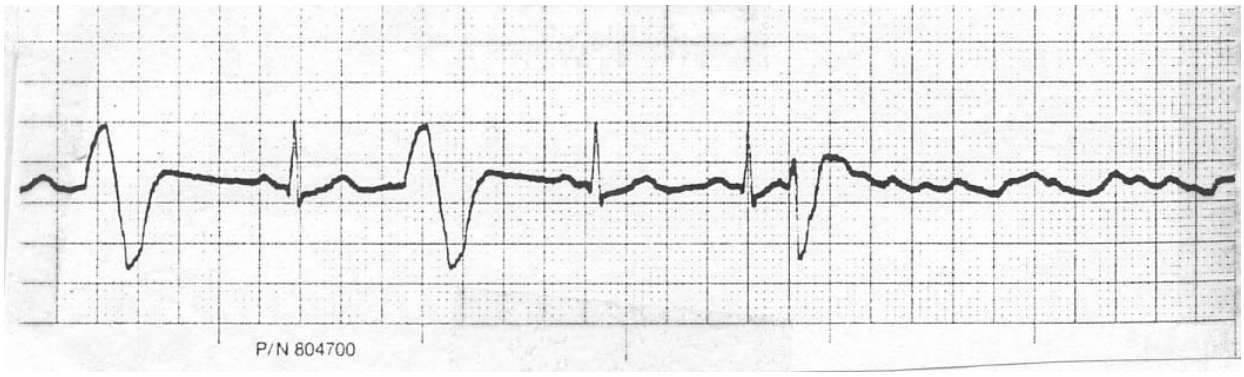
    A. immediate synchronized cardioversion
    B. aggressive airway management
    C. diazepam IV
    D. all of the above

36. Which of the following drugs may be ordered for this patient?

    A. Atropine and epinephrine
    B. Adenosine and verapamil
    C. Naloxone and 50% dextrose
    D. Lidocaine and procainamide

Scenario

Your patient is 45-year old male who complains of chest pain and shortness of breath. During your work up he suddenly becomes unconscious and slumps over. His EKG changes are as follows:



37. This patient's new EKG is

    A. ventricular fibrillation
    B. ventricular tachycardia
    C. asystole
    D. idioventricular rhythm

38. Your first move is to

    A. defibrillate at 200 joules
    B. deliver a precordial thump
    C. begin CPR
    D. check your patient

39. All of the following will decrease intrathoracic resistance during defibrillation **EXCEPT**

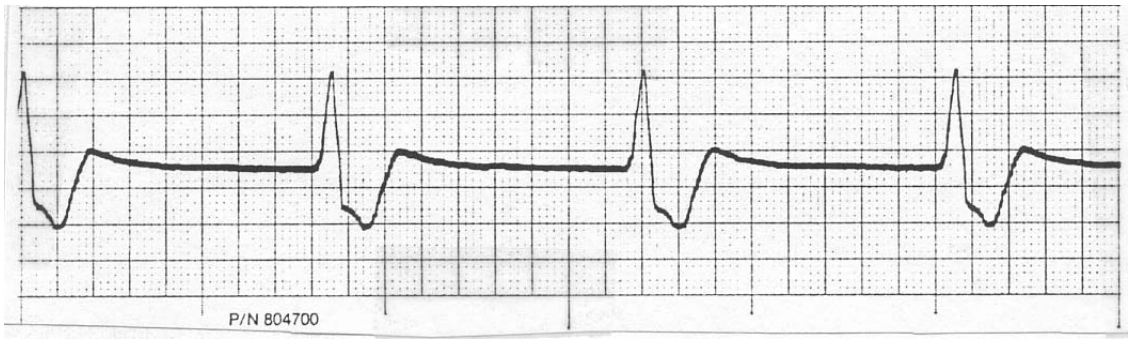
    A. using electrode jelly
    B. using proper paddle pressure
    C. using proper paddle positioning
    D. waiting 3-5 minutes between defibrillation attempts

40. Pharmacological management of this patient includes which of the following drugs?

    A. Oxygen, epinephrine, atropine
    B. Oxygen, epinephrine, lidocaine, bretylium
    C. Oxygen, adenosine, verapamil, lidocaine
    D. Oxygen, epinephrine, isoproterenol, lidocaine

Scenario

Your patient is a 99-year-old male found in cardiac arrest by his family. CPR was begun immediately and is ongoing upon your arrival. After a quick look, your patient is in the following rhythm. He is pulseless, apneic, unconscious.



41. This patient's rhythm is

A. supraventricular tachycardia
B. idioventricular rhythm
C. ventricular tachycardia
D. none of the above

42. This patient's condition is described as

A. AV dissociation
B. pulseless electrical activity
C. complete heart block
D. none of the above

43. Management of this patient includes all of the following **EXCEPT**

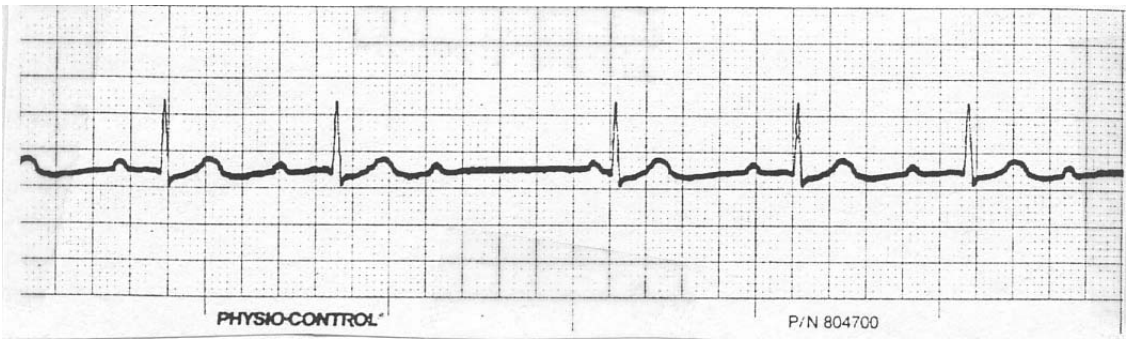
A. CPR and intubation
B. epinephrine and atropine IV
C. defibrillation and lidocaine
D. IV fluids

44. Causes for this condition include

A. hypovolemia
B. pericardial tamponade
C. hypoxia and acidosis
D. all of the above

Scenario

Your patient is a 65-year-old male complaining of malaise. He has no medical history and takes no medications. His BP. is 120/70, pulse is 60 and irregular, respirations of 20, lungs clear, skin warm and dry. His EKG is as follows:

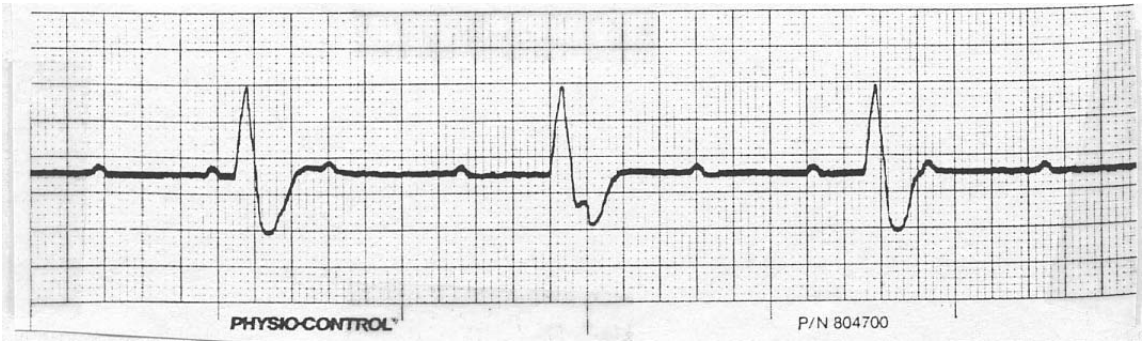


45. This patient's rhythm is
    A. second degree AV block type 2
    B. second degree AV block type 1
    C. third degree AV block
    D. first degree AV block

46. Prehospital management of this patient includes
    A. oxygen and monitoring only
    B. oxygen, atropine IV
    C. oxygen, transcutaneous pacing
    D. oxygen, atropine, transcutaneous pacing

Scenario

Your patient is an 89-year-old female who collapsed while shopping. No one is available to give you a history and she responds to deep pain only. Her BP is 70/30, pulse 36, respirations 30 and shallow, skin pale and clammy, lungs clear bilaterally, chemstrip 100. Her EKG is as follows:

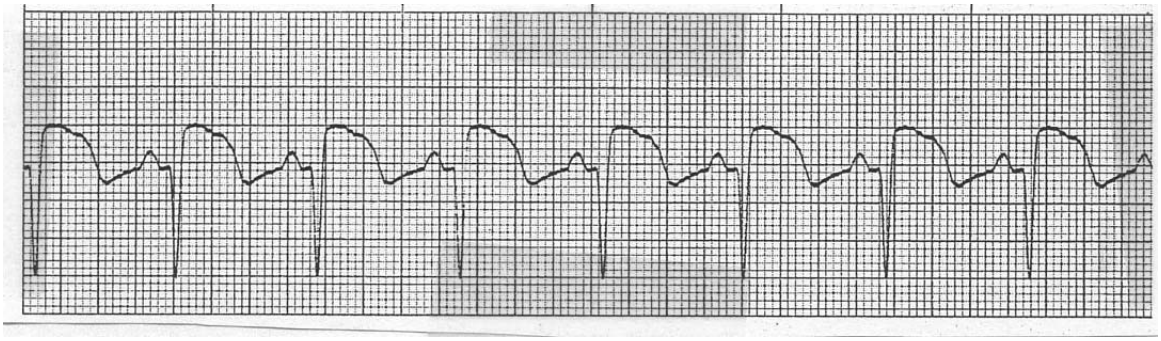


47. Her EKG is

A. Second degree AV block type 2
B. junctional escape rhythm
C. third degree AV block
D. ventricular escape rhythm

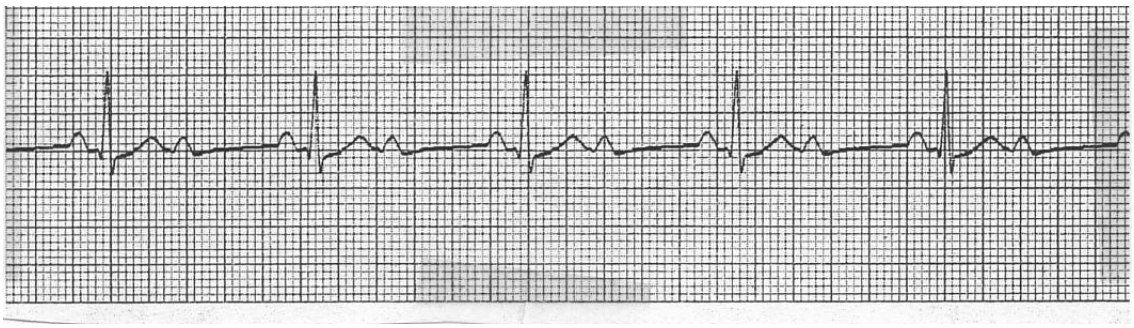
48. Prehospital management of this patient includes

A. CPR and intubation
B. atropine and transcutaneous pacing
C. lidocaine and bretylium
D. adenosine and verapamil

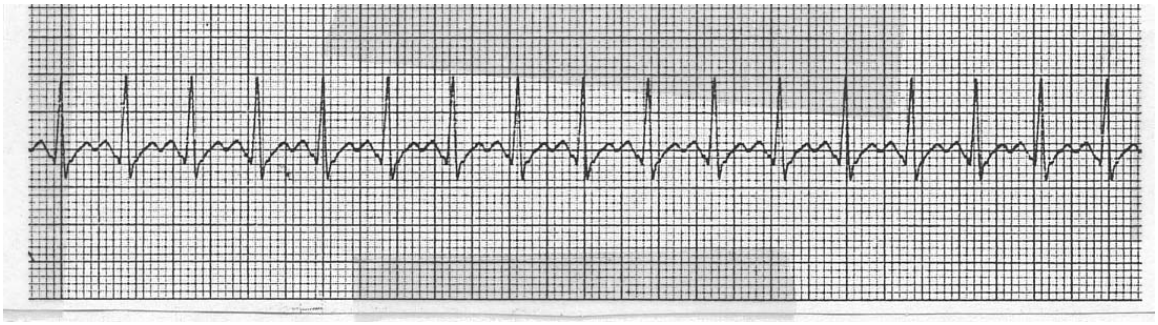


49. The patient whose EKG strip is shown above is a 45-year old female; AAOx3 (alert oriented to person, place, and time); with cool, pale and diaphoretic skin. Her chief complaint is substernal chest pain radiating to her left shoulder for the past two hours. P: 88; B/P: 110/70; R: 24. You administer oxygen and start an IV lifeline. Which of the following would you elect to perform?

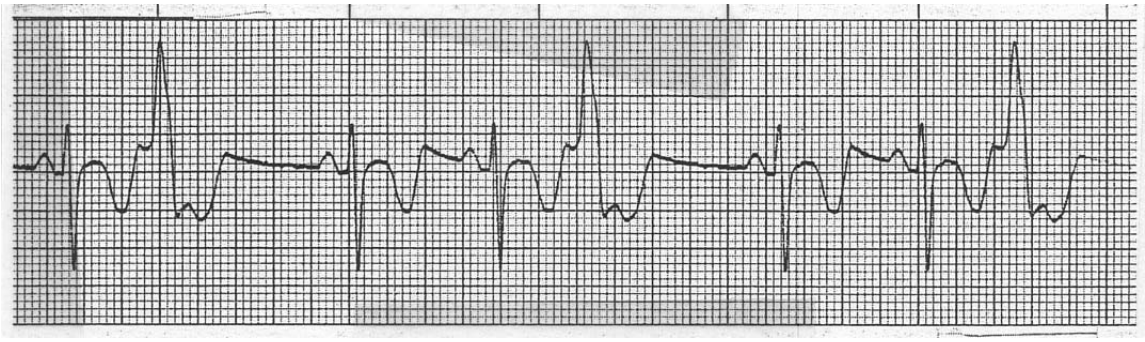
A. Administration of sublingual nitroglycerine
B. Administration of IV morphine sulfate (if NTG unsuccessful).
C. Administration of a bolus of IV lidocaine, followed by a maintenance infusion.
D. Answers a and b only
E. Answers a, b, and c



50. The patient whose ECG strip is shown above is a 65-year-old male; AAOx3; with warm, pale, and dry skin. His only complaint is of feeling "weaker than usual today." P: 50; B/P 110; R: 20 You administer oxygen and start an IV lifeline. Which of the following would you elect to perform?
    A. Administration of atropine in 0.5-1.0 mg increments, every 3-5 minutes to a maximum administration of 0.004mg/kg.
    B. Administration of an isoproterenol IV infusion, titrated to effect.
    C. Administration of an IV lidocaine bolus of 1.5 mg/kg, followed by a maintenance infusion.
    D. Answers a and b only
    E. none of the above; transportation only



51. The patient whose ECG strip is shown above is a 70-year-old female; anxious, fearful, and somewhat disoriented; with cool, pale, and diaphoretic skin. She is complaining of chest pain, nausea, and shortness of breath. Her husband denies any history of trauma. Her breath sounds are clear and equal bilaterally. P: weak and thready at 170; B/P: 80/P; R: 30 and shallow. You administer oxygen and start an IV lifeline. Which of the following would you elect to perform?
    A. Administration of 5 mg of IV diazepam, followed by synchronized cardioversion at 100 ws.
    B. Administration of a fluid challenge of 1000 cc NS.
    C. Administration of an IV dopamine infusion, titrated to a blood pressure of 100 systolic.
    D. Administration of sublingual nitroglycerine, followed by IV morphine sulfate if 3 NTG are unsuccessful.
    E. None of the above, transportation only.



52. The patient whose ECG strip is shown above is a 47-year-old male; AAOx3; with warm, pale, and dry skin. He is complaining of nausea without vomiting for approximately two hours. He denies shortness of breath and chest pain. P: 50; B/P: 100/P; R: 24. You administer oxygen and start an IV lifeline. Which of the following would you elect to perform?

A. Administration of 1.5 mg/kg IV lidocaine, followed every 5 to 10 minutes by a 0.5-0.75 mg/kg bolus, to a maximum dose of 3 mg/kg.
B. Administration of 0.5-1.0 mg atropine, repeated every 3 to 5 minutes as needed, to a maximum of 0.04 mg/kg.
C. Administration of an isoproterenol infusion (if the atropine is unsuccessful) titrated to a heart rate of 80.
D. Answers B and C only.
E. None of the above, transport only.

53. The complaint of substernal chest pressure that does not radiate to the shoulders arms, neck or jaw

A. is usually “stable angina” only.
B. may be “stable” or “unstable” angina.
C. is always to be considered “unstable” or preinfarction angina.
D. is rarely related to cardiac ischemia.
E. is never related to cardiac ischemia (indicates esophageal disease only).

54. Onset of chest pain during physical stress, rapidly relieved by rest,

A. is usually “stable angina” only.
B. may be “stable” or “unstable” angina.
C. is always to be considered “unstable” or preinfarction angina.
D. is rarely related to cardiac ischemia.
E. is never related to cardiac ischemia (indicates esophageal disease only).

55. Onset of chest pain during emotional stress

A. is usually “stable angina” only.
B. may be “stable” or “unstable” angina.
C. is always to be considered “unstable” or preinfarction angina.
D. is rarely related to cardiac ischemia.
E. is never related to cardiac ischemia (indicates esophageal disease only).

56. Onset of chest pain during rest
A. is usually “stable angina” only.
B. may be “stable” or “unstable” angina.
C. is always to be considered “unstable” or preinfarction angina.
D. is rarely related to cardiac ischemia.
E. is never related to cardiac ischemia (indicates esophageal disease only).

57. A myocardial infarction (MI) has occurred when
A. the patient begins to complain of radiating angina.
B. myocardial tissue begins to become ischemic.
C. myocardial tissue begins to become necrotic.
D. Any of the above.
E. None of the above.

58. The most common cause of acute myocardial infraction (AMI) in the adult is
A. cardiac dysrhythmias.
B. coronary artery spasm.
C. acute volume overload.
D. acute respiratory failure.
E. coronary thrombosis.

59. The most common cause of death from AMI is
A. cardiac dysrhythmias.
B. coronary artery spasm.
C. acute volume overload.
D. acute respiratory failure.
E. coronary thrombosis.

60. The location and size of an infarct is dependent on the site of coronary vessel obstruction. The majority of infarcts, however, involve the
A. right ventricle.
B. right atrium.
C. left atrium.
D. left ventricle.
E. aorta.

61. An infarction of only a partial thickness of the heart wall is called

A. a subendocardial infarction.
B. a submural infarction.
C. a second-degree infarction.
D. a transendocardial infarction.
E. a transmural infarction.

62. An infarction of the full thickness of the heart wall is called

A. a subendocardial infarction.
B. a submural infarction.
C. a third-degree infarction.
D. a transendocardial infarction.
E. a transmural infarction.

63. The most common complication in the first few hours of AMI is

A. nausea and vomiting.
B. congestive heart failure.
C. hypertension.
D. hypotension.
E. dysrhythmias.

64. Prehospital management of the uncomplicated MI includes all of the following, except

A. high-flow oxygen and IV initiation.
B. assisting the patient to self-administer any of her or his prescription cardiac medications.
C. ECG and vital sign monitoring.
D. administration of NTG and/or MS.
E. administration of diazepam for extreme agitation or apprehension.

65. Left ventricular failure is caused by various types of heart disease, including

A. AMI or valvular disease.
B. chronic hypertension
C. dysrhythmias.
D. Answers A and B only.
E. Answers A, B, and C.

66. Which of the following statements regarding left ventricular failure is false?
    A. As the left ventricle fails, left atrial pressure rises and is transmitted to pulmonary veins and capillaries.
    B. When pulmonary capillary pressure becomes too high, the capillaries burst, resulting in the hemorrhage that produces pulmonary edema.
    C. Progressive pulmonary congestion will lead to death from hypoxia unless intervention occurs.
    D. Since AMI is a common cause of left ventricular failure, all patients in pulmonary edema must also be evaluated for AMI.
    E. None of the above is false.

67. Lung sounds associated with pulmonary edema caused by left ventricular failure include
    A. rales.
    B. rhonchi.
    C. wheezes.
    D. All of the above.
    E. Answers A and B only.

68. Fluid in the larger airways indicates a more severe degree of pulmonary edema and produces

    A. rales.
    B. rhonchi.
    C. wheezes.
    D. stridor.
    E. snoring.

69. The bronchoconstriction that occurs with pulmonary edema produces

    A. rales.
    B. rhonchi.
    C. wheezes.
    D. stridor.
    E. snoring.

70. Jugular vein distension
    A. is a direct result of left-ventricular failure.
    B. is associated only with right ventricular failure.
    C. is associated only with pericardial tamponade and tension pneumothorax.
    D. may be present if back-pressure from left ventricular failure reflects all the way through the right heart to the venous system.
    E. Both answers A and D.

71. During left ventricular failure there is usually an intense sympathetic discharge in attempt to help the body compensate. This produces the characteristic vital signs associated with left ventricular failure:

A. hypotension, tachycardia, and labored tachypnea.
B. hypotension, bradycardia, and labored tachypnea.
C. elevated blood pressure, tachycardia and labored tachypnea.
D. elevated blood pressure, bradycardia, and labored tachypnea.
E. elevated blood pressure, bradycardia, and Kussmaul's respirations.

72. Which of the following statements regarding prehospital management of acute left ventricular failure with pulmonary edema is false?

A. Administer high-flow oxygen, using positive pressure assistance if the patient can cooperate or has altered mentation.
B. Rotating tourniquets may be applied to enhance venous pooling, especially if you are unable to establish and IV.
C. Establish an IV of D_5W on a microdrip infusion set.
D. If cerebral hypoxia is present (as evidenced by agitation or combativeness), the patient must be placed supine to facilitate cerebral perfusion.
E. medication administration includes NTG, MS, furosemide and aminophylline.

73. The most common cause of right ventricular failure is

A. left ventricular failure.
B. chronic hypertension.
C. COPD.
D. pulmonary embolus.
E. infarct of right atrium or ventricle.

74. Venous congestion from right ventricular failure produces

A. organ engorgement (tender right upper abdominal quadrant from liver engorgement).
B. peripheral edema.
C. fluid accumulation in serous cavities (ascites, pleural, effusions, pericardial effusion).
D. All of the above.
E. Answers B and C only.

75. Which of the following statements regarding prehospital management of right ventricular failure is true?

A. Administer nasal cannula or venture mask oxygen at low flow rates (right ventricular failure is related to COPD).
B. Establish IV access of NS or LR with a large bore catheter (relative dehydration is present as fluid has shifted to serous cavities).
C. Right ventricular failure is usually not a medical emergency unless accompanied by left ventricular failure and pulmonary edema.
D. Both answers A and B are true.
E. None of the above is true.

76. Cardiogenic shock is defined as
A. shock that persists after correction of existing dysrhythmias.
B. shock that persists after correction of hypovolemia.
C. shock that occurs as compensatory mechanisms are exhausted.
D. the most extreme form of pump failure.
E. All of the above.

77. Which of the following statements regarding cardiogenic shock is false?
A. Cardiogenic shock occurs when left ventricular function is so compromised that the heart cannot meet the metabolic needs of the body.
B. Cardiogenic shock is usually due to extensive MI or diffuse ischemia involving 40 percent or more of the left ventricle.
C. The mortality rate for cardiogenic shock is 80 to 90 percent despite any kind of treatment.
D. Any of the signs and symptoms of AMI may accompany cardiogenic shock.
E. None of the above is false.

78. Management of cardiogenic shock includes all of the following, except
A. careful and prolonged stabilization on scene prior to risking transport.
B. securing an open airway and administering high-flow oxygen.
C. supine positioning and IV access.
D. ECG monitoring with appropriate pharmacologic dysrhythmia intervention.
E. IV infusion of dopamine.

79. The definition of sudden death requires that death occur
A. without any warning signs and symptoms.
B. within two minutes of the onset of signs and symptoms.
C. within one hour of the onset of signs and symptoms.
D. within two hours of the onset of signs and symptoms.
E. within the 24 hours following the onset of signs and symptoms.

80. Which of the following statements regarding the management of cardiac arrest is false?

A. Ensuring correct performance of BLS remains an essential responsibility of the ACLS provider.
B. Rapid defibrillation of the patient in V-fib provides the best chance for successful resuscitation.
C. The most sophisticated airway management (endotracheal intubation) is not always needed immediately.
D. It is more difficult to abolish V-fib when it is the primary cause of the arrest (as opposed to V-fib that occurs secondary to the cause of the arrest).
E. External pacing may be used for bradycardias, asystole, or immediately post-defibrillation of V-fib with asystole.

81. Which of the following statements regarding pulseless electrical activity (PEA) [once called electromechanical dissociation(EMD)] is false?

A. PEA/EMD is defined as an organized rhythm without a pulse, and as such, has a better prognosis for resuscitation than that of asystole.
B. PEA/EMD may be caused by massive myocardial damage or cardiac rupture
C. PEA/EMD may be caused by hypovolemia, cardiac tamponade, or acute pulmonary embolism.
D. Consider use of MAST and IV fluid challenge for treatment of PEA/EMD.
E. PEA/EMD requires earlier consideration of transport than other medical cardiac arrest situations.

82. The most common site for an abdominal aneurysm is

A. the ascending aorta.
B. the aortic arch.
C. the descending aorta, where it passes through the diaphragm.
D. the abdominal aorta, below the renal arteries and above the common iliac bifurcation.
E. the abdominal aorta, below the iliac arteries and above the renal artery bifurcation.

83. The most common site for a thoracic aneurysm is

A. the ascending aorta.
B. the aortic arch.
C. the descending aorta, where it passes through the diaphragm.
D. the abdominal aorta, below the renal arteries and above the common iliac bifurcation.
E. the abdominal aorta, below the iliac arteries and above the renal artery bifurcation.

84. In addition to complaints of abdominal, back, and/or flank pain, signs and symptoms of abdominal aortic aneurysms include all of the following, except

A. hypotension.
B. bilateral cramping of the lower extremities.
C. the urge to defecate.
D. a pulsating abdominal mass.
E. decreased femoral pulses.

85. Which of the following statements regarding aortic aneurysm is false?
A. Abdominal aneurysm is ten times more common in men than in women.
B. Abdominal aneurysm is most prevalent in ages 60 to 70.
C. Once begun, an aneurysm may extend to involve all of the thoracic and abdominal aorta, the aortic valve, carotid and subclavian arteries.
D. Aneurysms do not rupture with a precipitating strain or exertion.
E. The most common cause of dissecting aortic aneurysm is hypertension.

86. Signs and symptoms of dissecting aortic aneurysm include all of the following, except
A. intermittent, non-radiating chest pain, characteristically described as "sharp, stabbing, twinges."
B. elevated blood pressure.
C. syncope or CVA.
D. absent or reduced pulses.
E. pericardial tamponade.

87. Malignant hypertension (also called hypertensive emergency or hypertensive crisis) occurs in less than one percent of patients with hypertension. Signs and symptoms of malignant hypertension include

A. restlessness, confusion, or somnolence (prolonged drowsiness or fatigue).
B. blurred vision and/or headache.
C. nausea and vomiting.
D. Answers A and B only.
E. Answers A, B, and C.

88. Malignant hypertension is marked by a rapid
A. decrease in diastolic blood pressure (with widening pulse pressure).
B. increase in diastolic blood pressure (usually equal to or greater than 130 mm Hg).
C. decrease in systolic blood pressure with increased diastolic blood pressure (a narrowing pulse pressure).
D. Both answers B and C.
E. None of the above.

89. Hypertension-related emergencies include all of the following, except

A. pulmonary edema from left ventricular failure.
B. deep vein thrombophlebitis.
C. dissecting aortic aneurysm.
D. toxemia of pregnancy.
E. cerebral vascular accident.

90. Your patient is regularly taking the prescription medication Lanoxin. This medication indicates a medical history that may include all of the following, except

A. congestive heart failure.
B. atrial fibrillation.
C. atrial flutter.
D. chronic ventricular ectopy.
E. paroxysmal supraventricular tachycardias.

91. Your patient is regularly taking the prescription medication Inderal. This medication indicates a medical history that may include all of the following, except

A. congestive heart failure or heart blocks.
B. atrial dysrhythmias.
C. ventricular dysrhythmias.
D. angina pectoris.
E. hypertension.

92. Which of the following statements regarding the precordial thump is false?

A. The precordial thump is sometimes effective in causing ventricular depolarization and resumption of organized rhythm.
B. The precordial thump is recommended for the witnessed onset of ventricular tachycardia.
C. Defibrillation of the pediatric myocardium may result in tissue injury. Therefore, a precordial thump is attempted prior to defibrillation in all pediatric cardiac arrests.
D. The precordial thump is recommended in complete AV block with ventricular asystole when a pulse can be produced with rhythmic thumps.
E. The precordial thump is recommended for the witnessed onset on ventricular fibrillation but should not dely defibrillation.

93. The precordial thump is delivered to the mid-sternum with a fist (thumb-up) from a height of
    A. 2 to 4 inches.
    B. 4 to 8 inches.
    C. 8 to 10 inches.
    D. 10 to 12 inches.
    E. 14 to 20 inches.

94. Which of the following statements regarding defibrillation is false?
    A. Successful conversion after defibrillation is less likely in the presence of hypoxia, acidosis, hypothermia, electrolyte imbalance or drug toxicity.
    B. A larger (obese) adult will always require a higher energy setting for defibrillation than an emaciated or normal-weight adult.
    C. Transthoracic resistance decreases with repeated countershocks, allowing more energy to be delivered to the heart at the same energy setting.
    D. Larger paddles are thought to be more effective and cause less myocardial damage in the adult patient.
    E. The creams or pastes used must be those made specifically for defibrillation, not for ECG monitoring.

95. The energy recommendation for the initial defibrillation of an adult in ventricular fibrillation is

    A. 10 joules per kilogram.
    B. 4 joules per kilogram.
    C. 2 joules per kilogram.
    D. 360 joules.
    E. 200 to 300 joules.

96. The energy recommendation for the initial defibrillation of the pediatric patient in ventricular fibrillation is
    A. 10 joules per kilogram.
    B. 4 joules per kilogram.
    C. 2 joules per kilogram.
    D. 360 joules.
    E. 200 to 300 joules.

97. The energy recommendation for the second defibrillation of the pediatric patient in ventricular fibrillation is
    A. 10 joules per kilogram.
    B. 4 joules per kilogram.
    C. 2 joules per kilogram.
    D. 360 joules.
    E. 200 to 300 joules.

98. Emergency synchronized cardioversion is indicated for treatment of a patient decompensating secondary to any of the following, except

A. perfusing ventricular tachycardia
B. non-perfusing ventricular tachycardia.
C. paroxysmal supraventricular tachycardias.
D. rapid atrial fibrillation.
E. 2:1 atrial flutter.

99. The synchronizing circuit in a defibrillator allows delivery of a countershock programmed to coincide with the occurrence of the

A. P wave.
B. Q wave of the QRS.
C. R wave of the QRS.
D. S wave of the QRS.
E. T wave.

100. The energy setting for the initial synchronized countershock when one is treating unstable PSVT is

A. 25 joules.
B. 200 joules.
C. 50 joules.
D. 100 joules.
E. 360 joules.

101. The energy setting for the initial synchronized countershock when one is treating unstable ventricular tachycardia is

A. 25 joules.
B. 200 joules.
C. 50 joules.
D. 100 joules.
E. 360 joules.

102. Carotid sinus massage is used to convert a paroxysmal supraventricular tachycardia into a sinus rhythm by stimulation of

A. the baroreceptors in the carotid artery, resulting in increased vagal tone.
B. the baroreceptors in the carotid artery, resulting in decreased vagal tone.
C. the blood brain barrier, resulting in increased vagal tone.
D. the blood brain barrier, resulting in decreased vagal tone.
E. the sympathetic nervous system, resulting in a slowing of the tachycardia.

103. Which of the following statements regarding carotid artery massage is false?

A. Never massage both carotids simultaneously.
B. When the carotid pulses are unequal, massage the side with the stronger pulse.
C. Massage is contraindicated if carotid bruits are present.
D. Massage is contraindicated if the patient has a history of CVA.
E. Massage should continue for no longer than 15 to 20 seconds.

104. Complications of correctly performed carotid sinus massage include

A. production of dysrhythmias (PVC's, V-tach or V-fib, asystole).
B. interference with cerebral circulation resulting in syncope, seizure, or CVA.
C. increased parasympathetic tone resulting in bradycardias, nausea, or vomiting
D. Correctly performed carotid sinus massage does not cause complications.
E. Answers A, B, and C.

105. Transcutaneous cardiac pacing (TCP) is recommended for symptomatic

A. bradycardia.
B. high-degree AV blocks.
C. atrial fibrillation with slow ventricular response.
D. Answers A and B only.
E. Answers A, B, and C.