Paramedic Emergency Care

Questions and Answers

From Bradys Paramedic Emergency Care 3rd Edition

Cardiovascular Emergencies

1. What is the period when stimulation will not produce any polarization of the heart?
p. 625

A.) Concrete refractory
B.) Relative refractory
C.) Partial refractory
*D.) Absolute refractory

2. What portion of angina patients only feel pain in the chest?
p. 690

A.) 1/2
B.) 2/3
C.) 1/4
*D.) 1/3

3. What is the sac that contains the heart?
p. 603

*A.) Pericardium
B.) Myocardium
C.) Epicardium
D.) Endocardium

4. Which age group is abdominal aneurysm most prevalent in?
p. 705

*A.) 60-70
B.) 30-40
C.) 50-60
D.) 40-50

5. Which condition can be evidenced in the ankles of the patient?
p. 687

*A.) Peripheral/presacral edema
B.) Red blood cell oxygenation
C.) Subtle cardiac disease indicators
D.) Jugular venous distention

6. What is the delay of impulses between the atria and the ventricles?
p. 675

A.) NA block
B.) DI block
*C.) AV block
D.) SA block

7. How many PVC's per minute is considered significant?
p. 663

A.) 5
*B.) 6
C.) 4
D.) 3

8. Which cause of cardiac arrest does NOT require special treatment due to the underlying mechanism of arrest?
p. 701

A.) Traumatic arrest
*B.) ASHD
C.) Hypothermia
D.) Drowning

9. Which medication is NOT used to treat myocardial ischemia and the relief of pain?
p. 711

A.) Oxygen
B.) Nitroglycerin
*C.) Dobutamine
D.) Morphine sulfate

10. What type of rhythm is seen in a patient with sinus tachycardia?
p. 633

A.) Occasionally irregular
B.) Irregularly irregular
*C.) Regular
D.) Regularly irregular

11. Which is NOT a common ratio of conduction with a second-degree AV block?
p. 677

A.) 3:2
B.) 4:3
*C.) 5:5
D.) 2:1

12. What is a rare ratio of impulses allowed by the AV junction in a patient with an atrial flutter?
p. 647

A.) 4:1
*B.) 1:1
C.) 2:1
D.) 3:1

13. Which is NOT considered a cause of wandering pacemaker?
p. 639

A.) Ischemic heart disease
B.) Variant of sinus dysrhythmia
C.) Common in the very young
*D.) Excessive vagal tone

14. Which part of the heart fails that can lead to pulmonary edema?
p. 694

A.) Right ventricle
B.) Left atrium
C.) Right atrium
*D.) Left ventricle

15. What is the average stroke volume?
p. 609

*A.) 70 mL
B.) 60 mL
C.) 90 mL
D.) 80 mL

16. Which medication is NOT used to control or suppress cardiac dysrhythmias?
p. 710

A.) Adenosine
B.) Procainamide
C.) Lidocaine
*D.) Isoproterenol

17. What pressure reading (mmHg) mark the beginning of hypertension?
p. 709

*A.) 140/90
B.) 130/90
C.) 120/80
D.) 110/80

18. Which medication is NOT given to treat the dysrhythmia?
p. 693

*A.) Nalbuphine
B.) Lidocaine
C.) Epinephrine
D.) Verapamil

19. What is the heart rate (bpm) of a patient with an accelerated junction rhythm?
p. 657

A.) 20-60
*B.) 60-100
C.) 100-140
D.) 140-200

20. What is the hear rate (bpm) in a patient with a junctional rhythm?
p. 655

A.) 20-40
B.) 80-100
C.) 60-80
*D.) 40-60

21. What is the mainstay of cardiac arrest therapy?
p. 701

*A.) Basic life support
B.) Pacemaker placement
C.) Medication administration
D.) Surgical removal of affected part

22. Which is NOT a location that the pain of myocardial infarction radiates?
p. 691

A.) Back
B.) Arms
C.) Neck
*D.) Legs

23. Which cranial nerve is involved with the parasympathetic control of the heart?
p. 611

A.) 11th
*B.) 10th
C.) 8th
D.) 9th

24. What degree incline should the MI patient be placed in ideally?
p. 692

A.) 60 degree
B.) 90 degree
C.) 45 degree
*D.) 30 degree

25. What is the smallest part of the arterial system?
p. 608

A.) Arterioles
B.) Arteries
*C.) Capillaries
D.) Venules

26. What is a blood clot that lodges in a pulmonary artery, blocking blood flow through that vessel?
p. 707

A.) Traumatic aortic aneurysm
B.) Dissecting aortic aneurysm
C.) Acute arterial occlusion
*D.) Acute pulmonary embolism

27. What heart rate (bpm) is found in the patient suffering from paroxysmal supraventricular tachycardia?
p. 643

A.) 40-80
B.) 60-90
C.) 100-140
*D.) 150-250

28. Which is NOT a location that a lead is connected to in the field?
p. 617

*A.) Right leg
B.) Left leg
C.) Right arm
D.) Left arm

29. Which is NOT a method of effectively interpreting the ECG strip?
p. 625

A.) Analyze a given rhythm strip according to specific format
B.) Identify dysrhythmia based on similarly established rules
*C.) Eyeballing it looking for a pattern
D.) Memorize the rules for each dysrhythmia

30. What is the sensation that the heart is pounding?
p. 685

*A.) Palpation
B.) Conduction
C.) Dyspnea
D.) Syncope

31. Which can result in cardiac standstill and escape rhythm?
p. 637

*A.) Sinus arrest
B.) Sinus dysrhythmia
C.) Sinus bradycardia
D.) Sinus tachycardia

32. Which valve in the heart separates the left atrium from the left ventricle with two leaflets?
p. 604

A.) Pulmonic
*B.) Mitral
C.) Semilunar
D.) Tricuspid

33. What do the P waves reflect?
p. 627

*A.) Atrial depolarization
B.) Ventricular depolarization
C.) Atrial polarization
D.) Ventricular polarization

34. Which part of the heart is NOT supplied with by the left coronary artery?
p. 607

*A.) Part of the right atrium
B.) Left ventricle
C.) Interventricular system
D.) Part of right ventricle

35. What is the first phase of the cardiac cycle called?
p. 609

A.) Preload
B.) Afterload
*C.) Diastole
D.) Systole

36. What is the appearance of P waves seen in a patient with ventricular escape complexes?
p. 661

*A.) None
B.) Inverted
C.) Fibrillated
D.) Fluttering

37. Which chemical neurotransmitter acts on the heart rate?
p. 611

*A.) Norepinephrine
B.) Dopamine
C.) Epinephrine
D.) Adenosine

38. Which is NOT a dysrhthmia resulting from disorders of conduction?
p. 629

A.) Disturbances of ventricular conduction
B.) Pre-excitation syndrome
*C.) Premature junctional contractions
D.) AV blocks

39. What is the intrinsic rate of self-excitation of the SA node in the heart?
p. 616

A.) 20-40 beats per minute
B.) 40-60 beats per minute
C.) 100-140 beats per minute
*D.) 60-100 beats per minute

40. What is the normal electrical state of cardiac cells?
p. 613

A.) Automatic potential
B.) Action potential
*C.) Resting potential
D.) Polarized potential

41. What is the ballooning of an arterial wall which results from a defect called?
p. 703

A.) Embolism
B.) Dilation
C.) Occlusion
*D.) Aneurysm

42. What is the P-R interval in a patient with a third-degree AV block?
p. 681

A.) Greater than 0.20 sec (diagnostic)
B.) Constant for conducted beats
C.) Progressively longer until the QRS complex is dropped
*D.) No relationship present

43. What is the heart rate (bpm) of the patient in ventricular fibrillation?
p. 669

A.) 40-60
B.) 70-100
*C.) No organized rhythm
D.) 10-30

44. What should the treatment be of a patient who is NOT tolerating the rapid heart rate of paroxysmal junction tachycardia?
p. 659

*A.) Vagal maneuvers
B.) Observe and reassure the patient
C.) Electrical therapy
D.) Pharmacological therapy

45. What is the minimum heart rate (bpm) that must be present before electrical therapy may be initiated to treat paroxysmal supraventricular tachycardia?
p. 645

A.) 130
B.) 140
C.) 120
*D.) 150

46. What is the normal range for the P-R interval?
p. 627

A.) 0.01-0.08 sec
*B.) 0.12-0.20 sec
C.) 0.08-0.13 sec
D.) 0.15-0.30 sec

47. Which step is NOT involved in placing the quick-look paddles?
p. 714

A.) Apply conducting gel to the paddle surface
B.) Turn on oscilloscope power
C.) Observe the monitor and obtain tracing
*D.) Apply electrodes to the skin surface

48. Which is NOT considered a treatment option when confronted with a patient with cardiac arrest secondary to pulseless electrical activity?
p. 703

A.) IV fluid challenge
B.) Rapid transport
*C.) Medication administration
D.) PASG

49. What is the mortality rate from cardiogenic shock with the best technology readily available?
p. 699

A.) 50%-60%
B.) 60%-70%
C.) 70%-80%
*D.) 80%-90%

50. What rate should the pacemaker be set to when using a transcutaneous cardiac pacemaker?
p. 721

A.) 80-100 bpm
*B.) 60-80 bpm
C.) 40-60 bpm
D.) 100-120 bpm

51. What is the heart rate (bpm) of the patient suffering from a paroxysmal junction tachycardia?
p. 659

A.) 260-340
*B.) 100-180
C.) 20-100
D.) 180-260

52. Which condition results in cardiac arrest?
p. 671

*A.) Asystole
B.) Ventricular tachycardia
C.) Junctional rhythm
D.) Atrial fibrillation

53. Which is NOT a factor when calculating cardiac output?
p. 610

A.) Preload
B.) Stroke volume
C.) Heart rate
*D.) Systemic vascular resistance

54. Which condition involves a blood clot in a vein?
p. 708

A.) Hypertensive ancephalopathy
*B.) Deep venous thrombosis
C.) Varicose veins
D.) Peripheral arterial atherosclerotic disease

55. Where are the largest vessels in the body located?
p. 606

A.) Base of the feet
B.) Center of the neck
*C.) Base of the heart
D.) Left of the pelvis

56. What is it called when every other beat is a PVC?
p. 662

A.) Quadrigeminy
B.) Trigeminy
C.) Repetitive
*D.) Bigeminy

57. Which item is NOT something that needs to be used when treating a patient?
p. 685

A.) Known allergies
B.) Serious illness
C.) Current symptoms
*D.) Medical history

58. What level of P-R interval is common to all dysrhythmias that originate in the AV junction?
p. 653

A.) 0.22 sec
B.) 0.42 sec
C.) 0.32 sec
*D.) 0.12 sec

59. Which results from a single electrical impulse originating in the atria outside the SA node, which in turn causes a premature depolarization of the heart before the next expected sinus beat?
p. 641

*A.) Premature atrial contraction
B.) Wandering pacemaker
C.) Paroxysmal supraventricular tachycardia
D.) Atrial flutter

60. What is the atrial rate (bpm) in a patient with atrial fibrillation?
p. 649

A.) 150-550
B.) 250-650
*C.) 350-750
D.) 50-450

61. Which is NOT something you need to determine when confronted with dyspnea in a patient?
p. 684

A.) Duration of the dyspnea
B.) Anything that aggravates the dyspnea
C.) Any associated symptoms
*D.) Maintenance medications for dyspnea

62. Which classification of rhythm irregularity is characterized by group beating?
p. 626

A.) Irregularly irregular
*B.) Regularly irregular
C.) Occasionally irregular
D.) Intermittently irregular

63. Which heart sound is associated with congestive heart failure?
p. 687

A.) S1
B.) S4
*C.) S3
D.) S2

64. What is the most common cause of a first-degree AV block?
p. 675

A.) Necrosis at the AV junction
*B.) Ischemia at the AV junction
C.) Drug toxicity
D.) Degenerative disease at the AV junction

65. Which pulses can be diminished when a dissecting aortic aneurysm occurs?
p. 706

A.) Head and neck
*B.) Lower extremity
C.) Upper extremity
D.) Abdominal

66. Which is the next positive wave after the P wave?
p. 620

A.) R
B.) S
C.) Q
*D.) T

67. What heart rate (bpm) is indicative of sinus bradycardia?
p. 631

A.) 80 or more
*B.) 60 or less
C.) 60-70
D.) 70-80

68. What minimal length QRS complex is commonly seen with disturbances of ventricular conduction?
p. 682

*A.) 0.12
B.) 0.32
C.) 0.22
D.) 0.42

69. What results from the body's attempt to maintain cardiac output?
p. 698

A.) Venous congestion
*B.) Tachycardia
C.) Peripheral edema
D.) Liver engorgement

70. What is the capability of self-depolarization of the pacemaker cells in the heart called?
p. 615

*A.) Automaticity
B.) Conductivity
C.) Polarity
D.) Excitability

71. What degree angle should the patient be placed when checking for jugular venous distention?
p. 686

A.) 25 degree
*B.) 45 degree
C.) 90 degree
D.) 60 degree

72. What is the first step when performing carotid sinus massage?
p. 717-721

A.) Have atropine sulfate readily available
B.) Firmly massage the artery by pressing it against the vertebral body
C.) Maintain pressure on the artery for 15-20 seconds
*D.) Initiate IV, oxygen, and ECG monitoring

73. What timeframe does sudden death occur within?
p. 691

A.) 3 hours
B.) 4 hours
C.) 2 hours
*D.) 1 hour

74. Which pacemaker failure generally results from a pacemaker not capturing?
p. 673

A.) Asystole
*B.) Bradycardia
C.) Fibrillation
D.) Tachycardia

75. Which type of angina is associated with exercise?
p. 689

*A.) Stable
B.) Chronic
C.) Unstable
D.) Acute

76. What is the most common presenting sign of cardiac disease?
p. 683

*A.) Chest pain
B.) Syncope
C.) Dyspnea
D.) Neck pain

77. Which medication increases the force of cardiac contraction and output?
p. 712

A.) Nifedipine
B.) Bretylium
*C.) Digitalis
D.) Propranolol

78. Which type of dysrhythmia originates in the SA node?
p. 628

A.) Atrial flutter
*B.) Sinus arrest
C.) Pre-excitation syndrome
D.) Asystole

79. Which muscular layer in the heart has electrical properties like smooth muscles?
p. 603

A.) Pericardial
B.) Epicardial
*C.) Myocardial
D.) Endocardial

80. Which term refers to the heart rate?
p. 612

*A.) Chronotrophy
B.) Triadotrophy
C.) Inotrophy
D.) Exotrophy

81. What is a graphic recording of the heart's electrical activity?
p. 616

A.) Activitogram
B.) Echocardiogram
*C.) Electrocardiogram
D.) Polarizogram

82. Which chamber of the heart receives oxygenated blood from the superior and inferior vena cavae?
p. 604

A.) Right ventricle
*B.) Right atrium
C.) Left atrium
D.) Left ventricle

83. What power of the vessel's radius is blood flow directly proportionate to according to Poiseuille's Law?
p. 608

*A.) 4th
B.) 2nd
C.) 6th
D.) 8th

84. Which functions to prevent cardiac standstill?
p. 661

A.) Ventricular rescue rhythms
B.) Atrial escape rhythms
C.) Atrial rescue rhythms
*D.) Ventricular escape rhythms

85. Which medication works by dilating peripheral arteries and veins?
p. 693

A.) Morphine sulfate
*B.) Nitroglycerin
C.) Diazepam
D.) Nitrous Oxide

86. In which scenario will fibrillation be more effective?
p. 716

*A.) 4 minutes after onset of fibrillation
B.) 12 minutes after onset of fibrillation
C.) 16 minutes after onset of fibrillation
D.) 8 minutes after onset of fibrillation

87. Which item CANNOT be obtained from a single lead?
p. 618

*A.) Presence of an infarct
B.) Time it takes to conduct the impulse through various parts of the heart
C.) Regularity of the heartbeat
D.) Rate of the heartbeat

88. Which is the most used medication for the treatment of atrial fibrillation?
p. 651

A.) Quinidine
*B.) Diltiazem
C.) Verapamil
D.) Procainamide

89. Which is NOT an indicated usage of emergency synchronized cardioversion?
p. 717

*A.) Perfusing ventricular bradycardia
B.) Rapid arterial fibrillation
C.) Paroxysmal supraventricular tachycardia
D.) 2:1 atrial flutter

90. Which is the most common cause of the acute arterial occlusion?
p. 707

A.) Trauma
*B.) Embolus
C.) Thrombosis
D.) Tumor

91. What is the first thing to look at when analyzing the ECG strip?
p. 626

*A.) Rate
B.) P-R interval
C.) P waves
D.) Rhythm

92. Which is the most severe form of pump failure?
p. 699

A.) Cardiac arrest
B.) Right ventricle failure
*C.) Cardiogenic shock
D.) Left ventricle failure

93. Which medication is NOT generally indicated for use with left ventricle failure?
p. 696-697

A.) Dobutamine
B.) Morphine sulfate
C.) Flurosemide
*D.) Lidocaine

94. What is a progressive, degenerative disease of the medium-sized and large arteries?
p. 688

*A.) Atherosclerosis
B.) Claudication
C.) Angina
D.) Arteriosclerosis

95. Which type of discs connect cardiac muscle fibers and conduct electrical impulses quickly between fibers?
p. 612

A.) Inotrophic
*B.) Intercalcated
C.) Anastomosic
D.) Syncytium

96. What type of pause follows an ectopic beat where the SA node is unaffected and the cadence of the heart is uninterrupted?
p. 653

*A.) Compensatory
B.) Nonpolarizing
C.) Noncompensatory
D.) Polarizing

97. What is the initial charge that should be used in a child when performing defibrillation?
p. 717

A.) 6 joules/kg
B.) 8 joules/kg
C.) 4 joules/kg
*D.) 2 joules/kg

98. What is it called when cardiac depolarization results from cells in the heart depolarize that are not part of the pacemaker cells?
p. 628

A.) Tachycardia
*B.) Ectopic beat
C.) Reentry
D.) Tachydysrhythmia

99. Which type of dysrhythmia tends to have an asymptomatic patient?
p. 682

*A.) Wolff-Parkinson-White syndrome
B.) Bundle branch block
C.) Artificial pacemaker rhythm
D.) Ventricular fibrillation

100. What is the process of passing an electrical current to depolarize a critical mass of myocardial cells?
p. 715

*A.) Defibrillation
B.) Cardiac pacing
C.) Carotid sinus massage
D.) Cardioversion

101. What portion of angina patients only feel pain in the chest?
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C.) 1/4
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106. What heart rate (bpm) is indicative of sinus bradycardia?
p. 631

A.) 80 or more
*B.) 60 or less
C.) 60-70
D.) 70-80

107. What should be the first line of treatment for an unstable patient with ventricular tachycardia?
p. 667

A.) Administer lidocaine
*B.) Cardioversion
C.) DC countershock
D.) Initiate CPR

108. Which type of discs connect cardiac muscle fibers and conduct electrical impulses quickly between fibers?
p. 612

A.) Inotrophic
*B.) Intercalcated
C.) Anastomosic
D.) Syncytium

109. Which condition results in cardiac arrest?
p. 671

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