

Name: _____ Class: _____ MS120/121 _____ Date: _____
09/08/2020 ID: A

MS 120/121 EKG/Cardiology

Multiple Choice Identify the choice that best completes the statement or answers the question.

__A__ 1. Which heart chamber receives oxygenated blood from the lungs?

- a. Left atrium b.
- Right atrium c.
- Left ventricle d.
- Right ventricle

__C__ 2. What is the principal sign of coronary artery disease?

- a. Damaged heart valves b. Inflammation of the blood
- vessels c. Reduction of the blood supply to the
- myocardium d. An irregular heartbeat

__A__ 3. A bruit noted during auscultation in the area of a blood vessel often is a sign of

- a. an aneurysm.
- b. an embolus. c.
- phlebitis. d. a
- thrombus.

__A__ 4. The _____ are the blood vessels that carry oxygen-rich blood from the lungs to the heart.

- a. pulmonary veins b.
- pulmonary arteries c.
- superior vena cava d.
- inferior vena cava

__C__ 5. The _____ is the saclike membrane surrounding the heart.

- a. endocardium b.
- bundle of His c.
- pericardium d.
- sinoatrial node

__D__ 6. Sensitive tissue in the right atrium wall that initiates the heartbeat is known as the

- a. tricuspid. b.

atrioventricular node. c.
bundle of His. d.
sinoatrial node.

__B__ 7. Blood vessels branching from the aorta to carry oxygen-rich blood to the heart muscle are called
a. venae cavae. b.
coronary arteries. c.
carotid arteries. d.
renal arteries.

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__C__ 8. In the conduction system of the heart, which of the following is responsible for collecting the
electrical energy that stimulated the atria to
contract? a. Purkinje fibers b. Bundle of His c.
Atrioventricular node d. Sinoatrial node

__D__ 9. The signal from the AV node is picked up by which of the following?
a. Atrioventricular node
b. Aorta c. Purkinje fibers
d. Bundle of His

__B__ 10. The part of the conduction system of the heart that wraps around the outer walls of the ventricles
is/are the a. bundle
branches. b. Purkinje
fibers. c. bundle of
His. d. aorta.

__B__ 11. The blood vessel branching from the heart that carries deoxygenated blood to the lungs is called the
a. vena cava. b.
pulmonary artery. c.
carotid artery. d. renal
artery.

__A__ 12. The blood vessel that carries deoxygenated blood to the heart is called the
a. vena cava. b.
pulmonary artery. c.

carotid artery. d. renal artery.

A 13. Which drug is used to treat congestive heart failure?

- a. Digoxin (Lanoxin) b. Fluoxetine (Prozac) c. Gemfibrozil (Lopid) d. Triazolam (Halcion) e. Warfarin (Coumadin)

E 14. Which of the following is an anticoagulant?

- a. Digoxin (Lanoxin) b. Fluoxetine (Prozac) c. Gemfibrozil (Lopid) d. Triazolam (Halcion) e. Warfarin (Coumadin)

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B 15. What is another name for a heart attack?

- a. CVA b. MI c. MS d. CHF

C 16. Thrombi form in the coronary arteries because of

- a. a complication of cardiovascular medication. b. an inherited factor. c. inflammation at the site of an atherosclerotic plaque. d. a DVT.

C 17. A patient with chronic kidney disease has hypertension. What BP reading should this patient have to be within a healthy range?

- a. Below 118/78 mm Hg b. 122/86 mm Hg c. Below 130/80 mm Hg d. 142/86 mm Hg

__D__ 18. Patients diagnosed with stage 1 hypertension are first prescribed a(n)

- a. ACE inhibitor.
- b. beta blocker.
- c. low-dose aspirin each day.
- d. diuretic.

__C__ 19. An example of a calcium channel blocker is

- a. Cozaar.
- b. Lotensin.
- c. Cardizem.
- d. Tenormin.

__E__ 20. Women have different symptoms of heart disease because

- a. they ignore initial indicators of heart disease.
- b. women tend to develop an evenly spread layer of plaque.
- c. they experience localized plaque buildup.
- d. atheroma builds up in smaller vessels.
- e. B and D

__A__ 21. Which statement is true about CK levels in a patient with an MI?

- a. The more severe the cardiac damage, the longer it takes for CK levels to peak.
- b. Levels begin to increase almost immediately after myocardial damage.
- c. CK levels return to normal within 18 hours.
- d. CK levels are not predictive of the extent of cardiac damage.

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__D__ 22. +Lifestyle changes recommended for patients who have had an MI include

- a. controlling hypertension.
- b. eating a low-fat, restricted-sodium diet.
- c. exercising five days a week.
- d. All of the above

__E__ 23. What should the medical assistant do if she notes that a patient has an elevated BP?

- a. Record the first reading for the physician to review.
- b. Check

the cuff size to make sure it matches the patient's arm. c. Check the BP reading in both arms. d. Wait 20 minutes and then recheck the reading. e. Both B and C should be done.

B 24. A DVT typically is diagnosed by
a. x-ray films that pick up calcification. b. Doppler studies that measure the rate of blood flow through a vessel. c. PT blood tests. d. troponin levels.

B 25. Which statement is true about a Doppler study? a. It requires IV injection of a dye. b. It picks up the speed of RBCs as they travel through the vessel. c. It must be performed in a hospital. d. All of the above are true.

D 26. You are providing patient education on a transesophageal echocardiogram. What should you include? a. The patient will be asleep during the procedure. b. The procedure does not provide as clear a picture as a regular echocardiogram. c. The patient will be hospitalized for the procedure. d. The patient must swallow the sonogram device.

B 27. What structure forms the first layer of the heart?
a. Parietal pericardium
b. Epicardium c.
Myocardium d.
Endocardium

A 28. What is the only artery in the body that contains deoxygenated blood?
a. Pulmonary artery b.
Aorta c. Right coronary
artery d. Left coronary
artery

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E 29. Which of the following is part of the normal cardiac cycle?
a. Atrial contraction b.

Ventricular contraction c.
Recovery d. Heart rest e.
All of the above

B 30. For individuals not at risk, which of the following LDL levels is recommended?

- a. Less than 180 mg/dL
- b. 100 to 129 mg/dL c.
- Below 70 mg/dL d. 190
- mg/dL or higher

C 31. Following an MI, when do CK levels reach peak values?

- a. At the time chest pain begins b. Within 3 to 12
- hours of the onset of chest pain c. Within 24 hours
- d. 48 to 72 hours after the onset of chest pain

B 32. In patients with diabetes or chronic kidney disease, the goal blood pressure reading is

- a. no more than 140/90 mm Hg.
- b. no more than 130/80 mm Hg.
- c. no more than 120/75 mm Hg.
- d. no more than 110/65 mm Hg.

C 33. What best describes the condition when the blood pressure adjusts sluggishly or not at all to rapid changes in position? a. Chronic obstructive

- pulmonary disease b. Congestive heart
- failure c. Orthostatic hypotension d.
- Orthostatic hypertension

A 34. What procedure is described as a chemical injected into the vein to cause irritation and scarring inside the vein, closing it off? a.

- Sclerotherapy b. Endovenous
- ablation therapy c. Vein stripping
- and ligation d. Endoscopic vein
- surgery

C 35. What is the most common site for deep vein thrombosis?

- a. Iliac vein b.
- Femoral vein c. Calf
- veins d. Saphenous
- veins

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D 36. A pulmonary embolism is the most serious complication of this condition and may be the first indication that the condition was present. a. Varicose veins b. Arteriosclerosis c. Atherosclerosis d. Deep vein thrombosis

D 37. Which of the following diseases develops because of widespread atherosclerotic plaque buildup in the arteries outside the heart, especially in the legs? a. Arteriosclerosis b. Atherosclerosis c. Aneurysm d. Peripheral arterial disease

A 38. What type of study may be ordered for patients with intermittent claudication, lack of a pedal pulse, or leg ulcers that refuse to heal? a. Doppler study b. Electrocardiogram c. Holter monitor d. Angiography e. All of the above

D 39. What is the goal of angioplasty? a. To restore blood flow to ischemic myocardial tissue b. To reduce the need for cardiac medication c. To eliminate or reduce the number of angina episodes d. All of the above

A 40. Which of the following has become standard treatment for any patient with a serious arrhythmia who is at risk of sudden death from cardiac arrest? a. Implantable cardioverter-defibrillator b. Cardiac pacemaker c. Cardiac catheterization d. Angioplasty

A 41. Tachycardia is defined as

a. a faster than normal heart rate. b. a condition in which the patient has difficulty breathing when lying down. c. dizzy spells. d. a condition in which the heartbeat is irregular.

B 42. Bradycardia is defined as

a. a faster than normal heart rate. b.
a slower than normal heart rate. c.
chest pain. d. an irregular heartbeat.

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A 43. Systole is defined as

a. the contraction of the chambers of the heart.
b. the relaxation of the chambers of the heart. c.
a pounding or racing heart. d. None of the
above

A 44. On an ECG recording, five 5-mm boxes are seen between the R waves. What is the patient's heart rate per minute?

a. 60 b. 65 c. 70
d. 80

A 45. If the ECG recording appears as a series of small, uniform spikes in the baseline, the medical assistant should a. check for nearby electric appliances. b. ask the patient to lie still. c. help the patient relax and stay warm. d. check the cable connection to the electrodes.

B 46. If the ECG recording appears with the baseline rising and falling, the medical assistant should a. check for nearby electric appliances. b. check electrode attachment. c. continue recording the ECG. d. check the cable connections to the electrodes.

C 47. If the ECG recording appears as a series of irregular, jagged peaks, the medical assistant should a. check for nearby electric appliances. b. make sure all electrodes are in contact with the skin. c. help the

patient relax and stay warm. d. check the cable connections to the electrodes.

B 48. A monitor that a patient wears for 24 hours is called a(n)

- a. 12-lead. b. Holter.
- c. Halter. d. echocardiogram.

A 49. In a standard 12-lead ECG, the measurement of current that the heart muscle produces between the right arm electrode and the left arm electrode is known as the a. standard limb lead I. b. standard limb lead II. c. standard limb lead III. d. augmented lead aV_L .

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B 50. Which deflection from the baseline represents the repolarization of the ventricles?

- a. P wave b. T wave
- c. ST segment d. QRS complex

A 51. What part of the ECG complex represents atrial depolarization?

- a. P wave b. T wave
- c. ST segment d. QRS complex

B 52. _____ is the relaxation phase of the heart.

- a. Systole b. Diastole
- c. Cardioversion d. None of the above

B 53. The _____ control(s) the rate of heart contraction by initiating contractions 60 to 100 times a minute. a. AV node b. SA node c.

bundle of His d.
Purkinje fibers

A 54. Which statement is true about NSR?

- a. It is a regular heart rate that falls within the average range of 60 to 80 bpm.
- b. It is a heart rate less than 60 bpm.
- c. It is a heart rate of greater than 100 bpm.
- d. It is an irregular heart rate that falls within the average range of 60 to 80 bpm.

C 55. The _____ reflects the time between the end of ventricular contraction and the beginning of ventricular recovery.

- a. U wave
- b. QRS complex
- c. ST segment
- d. QT interval

B 56. Which statement is true about ECG paper?

- a. It is not affected by environmental factors, so it is easily maintained in the medical record.
- b. It has horizontal and vertical lines at 1-mm intervals.
- c. Every fifth line measures 6 mm on each side.
- d. None of the above is true.

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B 57. The _____ leads use two limbs to record the heart's electrical activity.

- a. augmented
- b. standard
- c. precordial
- d. chest

A 58. Which statement is true about lead II?

- a. It is recorded as the rhythm strip on a cardiac monitor.
- b. It records tracings between the left arm and left leg.
- c. It records tracings between the left and right arms.
- d. It records the electrical activity of the posterior right ventricle.

D 59. To check the standardization of the ECG machine, the medical assistant depresses the standardization button. The stylus should deflect how many millimeters? a. 20 b. 5 c. 15 d. 10

D 60. Preparation of a patient for an ECG includes
a. placing the electrodes over bony prominences on the arms and legs.
b. making sure the bed is pushed against the wall to stabilize the unit. c.
placing the ground electrode at V_6 . d. instructing female patients to
remove their bra and pantyhose.

C 61. A diary of daily activities is part of the procedure for performing which of the following?
a. Heart scan b. Stress
test c. Holter monitor
d. Pacemaker reading

A 62. The image created on the ECG paper is made by the
a. heated stylus. b. ink cartridge. c.
lead wires. d. felt-tipped pen in the
machine.

A 63. Which cardiac diagnostic tool requires the patient to exercise during the procedure?
a. Stress test b.
Heart scan c.
Holter monitor d.
Event monitor

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C 64. Atrial flutter may occur if
a. the electrical charge does not pass out of the SA node.
b. the ventricles contract repeatedly. c. ectopic atrial beats
occur. d. the patient consumes too much caffeine.

C 65. Which statement is not true about V-fib?

- a. It typically is preceded by V-tach.
- b. It results in death quickly if not treated effectively.
- c. The patient can be stabilized with powerful cardiovascular medications.
- d. It may lead to asystole.

A 66. Which of the following is seen on the ECG strip of a patient with an MI?

- a. Elevated ST segments
- b. Elevated T waves
- c. Extended QRST segments
- d. Absent T wave

B 67. Electron beam tomography helps screen for cardiac risk by

- a. determining the extent of MI damage.
- b. assessing the amount of calcium in the coronary arteries.
- c. measuring the potassium levels in the heart muscle.
- d. determining the strength of the myocardial wall.

C 68. During the diastole cardiac cycle, which of the following occur?

- a. Atria contract and empty of blood
- b. Ventricles contract and empty of blood
- c. The chambers refill with blood
- d. Both A and B
- e. All of the above

B 69. Which of the following is referred to as sinus bradycardia?

- a. A heart rate within the range of 60 to 80 beats per minute
- b. A heart rate below 60 beats per minute
- c. A heart rate above 100 beats per minute
- d. An irregular cardiac rhythm

B 70. Which of the following represents the time from the beginning of atrial contraction to the beginning of ventricular contraction?

- a. QRS complex
- b. PR interval
- c. P wave
- d. Q wave

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D 71. Transverse plane leads on a standard ECG include which of the following?

- a. Lead I b. Lead II
- c. Lead III d. Leads

V_1 to V_6 e. V_R , V_L ,

and V_F

C 72. Which of the following leads records tracings between the left arm and left leg, which reflects the electrical activity of the inferior surface of the left ventricle? a. Lead I b. Lead II c. Lead III d. Lead IV

D 73. Which of the following leads is placed in the fifth intercostal space, at the left midclavicular line?

- a. V_1
- b. V_2
- c. V_3
- d. V_4
- e. V_5

B 74. If a patient has dyspnea or orthopnea, which of the following positions is acceptable for performing an electrocardiogram? a. Semi-supine position b. Semi-Fowler's position c. Prone position d. Dorsal recumbent position e. None of the above

B 75. Which of the following artifacts appears as a series of uniform small spikes on the ECG paper?

- a. Somatic tremor b. Alternating current interference c. Interrupted baseline d. Wandering baseline

D 76. Which of the following may be seen on an ECG when the pathway of the electrical charge is normal, but the rate or rhythm of the heartbeat is altered? a. Biochemical arrhythmia b. Atrial arrhythmia c. Ventricular arrhythmia d. Sinus

arrhythmia e. Atrial flutter

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A 77. Which of the following devices monitors the heart rhythm and delivers a shock to the heart if it detects a dangerous ventricular tachycardia or fibrillation? a. ICD b. Pacemaker c. Holter monitor d. All of the above

C 78. Which of the following is the most critical, life-threatening arrhythmia that can quickly result in death if not treated? a. Atrial arrhythmia b. Ventricular tachycardia c. Ventricular fibrillation d. Sinus arrhythmia e. Biochemical arrhythmia

C 79. Which of the following is not an immediate treatment for a heart attack? a. Administration of nasal oxygen b. Sublingual nitroglycerin c. Non-aspirin analgesic d. Early administration of thrombolytic agents

Completion Complete
each statement.

1. Chronic hypertension may result in left ventricular ___hypertrophy____.

2. Patients with primary ___hypertension___ may be asymptomatic until serious health problems occur.

3. ___L sided heart failure___ causes pulmonary edema, dyspnea, orthopnea, and

tachycardia.

4. A(n) __DVT__ may be a life-threatening problem because of the potential for embolus creation.

5. __Repolarization__ is the part of the electrical conduction process during which the myocardium recovers

from the contraction of the atria and ventricles.

6. Patients with __scleroderma__ experience hardening of blood vessels, which results in ischemia and

fibrotic changes in multiple tissues and organs.

7. Contraction of the atria and ventricles is called __depolarization__.

8. An inherited predisposition for developing aneurysms occurs in patients with __marfans syndromes__.

9. A symptom of chronic peripheral vascular disease is __intermittent claudication__.

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10. The T wave indicates ventricular recovery, or __repolarization__, of the ventricles.

11. ECG paper has horizontal and vertical lines at __1mm__ intervals.

12. Every fifth line on ECG paper, both vertically and horizontally, is darker than the other lines and creates a large square measuring __5mm__ on each side.

13. The first three leads recorded are called the standard, or __bipolar__, limb leads, because they each use two limb electrodes to record the heart's electrical activity.

14. The _cardiac cycle_ is a combination of all of the electric events that occur in the heart during a single

heartbeat

.

15. The electrical activity of the heart is initiated in specialized tissue called the _SA node_, which is

located in the superior-posterior wall of the right atrium.

16. The most distal portions of the electrical system of the myocardium are the _purkinje fibers_.

17. The _baseline_ is the electric recording of the heart at rest.

18. A(n) _premature ventricular contraction_ is an ectopic ventricular beat that occurs without a preceding P wave.

19. In the case of _hypokalemia_, the patient has general malaise and muscle cramps. The condition may

occur if diuretics are used without potassium supplementation.

20. A cardiac _stress test_ is a diagnostic procedure performed to evaluate the patient's myocardial response to measured exercise.

21. An implanted ICD monitors the heart rhythm and automatically performs _cardioversion_ if it detects a

dangerous tachycardia or fibrillation.