Questions of test control on the theme: "Coronary insufficiency. Myocardial infarction"

1. **Choose type of adrenoreceptors, which prevails in coronary vessels:**
   1. α-adrenoreceptors
   2. β₂-adrenoreceptors

2. **Activation of β₂-adrenoreceptors of coronary vessels by catecholamins causes:**
   1. Dilation of coronary vessels
   2. Constriction of coronary vessels

3. **When the blood supply is carried out subendocardial layers of the myocardium mainly?**
   1. During systole
   2. During diastole
   3. During the whole cardiac cycle

4. **Anastomoses, providing collateral blood supply of the myocardium, located mainly:**
   1. In the subendocardial layers of the myocardium
   2. In the subepicardial layers of the myocardium
   3. In the middle layers of the myocardium

5. **The widespread acute myocardial infarction of the left ventricle is characterized by:**
   1. Increased end-diastolic pressure of left ventricular
   2. Decreased end-diastolic volume of left ventricular
   3. Decreased stroke volume
   4. Decrease in cardiac output
   5. Increase in ejection fraction

6. **An acute myocardial infarction is characterized by following hematological indexes:**
   1. Neutrophilic leukocytosis
   2. Lymphocytosis
   3. Lymphopenia
   4. Eosinopenia
   5. Increased ESR

7. **Decrease in myocardial contractility in acute myocardial infarction is accompanied by:**
   1. Decreased time of blood flow
   2. Accelerated cardiac activity
   3. Decreased systolic blood pressure
   4. Increased cardiac index
   5. Increased peripheral vascular resistance

8. **An acute myocardial infarction is accompanied by:**
   1. Increased activity of creatine phosphokinase (CPK)
   2. Increased activity of lactate dehydrogenase

3. Decreased myoglobin content
4. Decreased activity of aspartate aminotransferase (ASAT)
5. Decreased content of C-reactive protein
6. Increased prothrombin index

9. Failure of a coronary blood flow can be caused by:
1. Short diastole at tachycardia
2. Decreased perfused pressure in an ischemia zone
3. Reduced blood viscosity
4. Increased intramyocardial pressure during a diastole
5. Increased body mass

10. Which of following agents can induce the coronary arteries spasm?
1. Thromboxane A_2
2. Adenosine
3. Endothelin-1
4. Adrenalin
5. Prostacyclin

11. Choose main mechanisms of ischemic injury of a myocardium:
1. Decreased energy provision of a myocardium
2. Activation of lipid peroxidation of membranes
3. Leakage of lysosomal hydrolytic enzymes
4. Inactivation of phospholipases
5. Disorder of water and electrolytic balance of cardiomyocytes

12. Increased need of a myocardium for oxygen can be caused by:
1. Increased heart rate
2. Activation of parasympathetic system
3. Overwork of heart
4. Raising of blood pressure
5. Increased tension of a ventricular wall

13. Process of repolarization in a ventricle myocardium at a subendocardial ischemia of a myocardium is directed:
1. From an endocardium to an epicardium
2. From an epicardium to an endocardium

14. Process of repolarization in a ventricle myocardium at a subepicardial ischemia of a myocardium is directed:
1. From an endocardium to an epicardium
2. From an epicardium to an endocardium

15. The mean QRS vector at transmural anteroseptal myocardial infarction is mainly directed:
1. Up
2. Back
3. Down

16. The mean QRS vector at transmural inferior (diaphragmatic) myocardial infarction is mainly directed:
1. Up
2. Back
3. Down

17. Choose direct ECG-sign, which reflects the formation of transmural ischemia of myocardium:

    1. Positive coronary T wave   3. Negative coronary T wave

    2. The pathological Q wave   4. ST segment elevation

18. Choose direct ECG-sign, which reflects the formation of transmural ischemic injury of myocardium:

    1. The pathological Q wave   3. ST segment depression

    2. Negative coronary T wave   4. ST segment elevation

19. Choose ECG-sign, which reflects the formation of subendocardial ischemia of myocardium:

    1. Positive coronary T wave   3. ST segment depression

    2. Positive low T wave   4. Negative coronary T wave

20. Choose ECG-sign of subendocardial ischemic injury zone in myocardium, which is recorded over this zone:

    1. Negative coronary T wave   3. ST segment elevation

    2. ST segment depression   4. The pathological Q wave

21. Choose the direct ECG-signs, indicating to 5-7 day acute transmural myocardial infarction:

    1. Ventricular complex QR   4. ST segment elevation

    2. Ventricular complex QS   5. Negative coronary T wave

    3. Positive low T wave

22. Choose ECG-signs, specific for a subacute stage of myocardial infarction:

    1. The pathological Q wave   4. ST segment elevation

    2. Negative coronary T wave   5. Positive asymmetrical T wave

    3. Isoelectric segment ST

23. Choose the direct ECG-signs, specific for ischemic injury stage of myocardial infarction:

    1. ST segment depression

    2. The pathological Q wave

    3. ST segment elevation of a monophasic form

    4. Negative coronary T wave

    5. Positive coronary T wave

24. Which of the following ECG-signs are characteristic of a myocardial infarction in a stage of cicatricial changes:

    1. The pathological Q wave   4. Positive low T wave

    2. ST segment elevation   5. Negative coronary T wave

    3. Isoelectric segment ST

25. Which ECG-leads represent the direct signs of an inferior (diaphragmatic) myocardial infarction of a left ventricle?

1. I	2. II	3. III
4. aVR	5. aVL	6. aVF

26. The direct ECG-signs of a lateral myocardial infarction of a left ventricle are registered in the following leads:

1. I 2. II 3. III 4. aVR 5. aVL 6. aVF
7. V_1 8. V_2 9. V_3 10. V_4 11. V_5 12. V_6 13. V_7 14. V_8 15. V_9

27. The direct ECG-signs of a posterobasal myocardial infarction of a left ventricle are registered in the following leads:

1. I 2. II 3. III 4. aVR 5. aVL 6. aVF 7. V_1
8. V_2 9. V_3 10. V_4 11. V_5 12. V_6 13. V_7 14. V_8 15. V_9

28. The direct ECG-signs of an anterior widespread myocardial infarction of a left ventricle are registered in the following leads:

1. I 2. II 3. III 4. aVR 5. aVL 6. aVF 7. V_1
8. V_2 9. V_3 10. V_4 11. V_5 12. V_6 13. V_7 14. V_8 15. V_9

29. Formation of the positive coronary T wave at a subendocardial ischemia of a myocardium is caused by:

1. Slowing down of repolarization
2. Rapid repolarization
3. Direction of summated vector repolarization to active electrode
4. Direction of summated vector repolarization from active electrode

30. Formation of the negative coronary T wave at a subepicardial ischemia of a myocardium is caused by:

1. Slowing down of repolarization
2. Rapid repolarization
3. Direction of summated vector repolarization to active electrode
4. Direction of summated vector repolarization from active electrode

31. ST segment elevation at a subepicardial ischemic injury is caused by:

1. Slowing down of repolarization
2. Difference of the surface potentials between more negative healthy area of a myocardium and less negative damaged area of a myocardium
3. Direction of a vector of a demarcation current to active electrode
4. Direction of a vector of a demarcation current from active electrode

32. ST segment depression at a subendocardial ischemic injury of myocardium is caused by:

1. Slowing down of repolarization
2. Difference of the surface potentials between more negative healthy area of a myocardium and less negative damaged area of a myocardium

3. Direction of a vector of a demarcation current to active electrode
4. Direction of a vector of a demarcation current from active electrode

33. Formation of a ventricular QS complex at a transmural myocardial infarction is caused by:

1. Decrease of electric activity of a myocardium in a necrotic zone
2. The discontinue of formation of EMF in a necrotic zone
3. The complete loss of a vector of a depolarization of a necrotic zone from a summated vector of a depolarization of ventricles
4. Deflection of a summated vector of a depolarization of ventricles to the side, opposite to a necrosis zone

34. Fibrillation of heart at an widespread acute myocardial infarction can be caused by:

1. Emergence of the ectopic focuses of excitation
2. Increase of degree of an inequality of the refractory periods of various sites of a myocardium
3. Increased tone of parasympathetic nervous system
4. Increased level of extracellular K^+
5. Emergence of the necrotic zones in conductive system of heart
6. Acute dilation of cavities of heart

35. Prolonged ischemia can result in:

1. Decreased perfused pressure in a myocardium
2. Stagnation in a big circle of blood circulation
3. Increased work of heart
4. Violation of systolic and diastolic functions of heart
5. Decreased heart rate

36. Choose principles of pathogenetic therapy of an acute myocardial infarction:

1. Limitation of a zone of a myocardial infarction
2. Decreased need of a myocardium for oxygen
3. Treatment and prevention of complications
4. Correction of an acid-base state and electrolytic balance
5. Improvement of a coronary blood flow
6. Removal of a pain syndrome

37. Point out the most frequent early complications of an acute myocardial infarction:

1. Heart aneurism
2. Dressler's syndrome
3. Thromboembolisms
4. Fibrillation of heart
5. Acute heart failure
6. Cardiogenic shock

38. Choose the most frequent late complications of an acute myocardial infarction:

1. Heart aneurism
2. Dressler's syndrome
3. Thromboembolisms
4. Fibrillation of heart
5. Acute heart failure
6. Cardiogenic shock

39. Metabolic regulation of a tone of coronary vessels is carried out by:
1. pO_2 in arterial blood
2. pCO_2 in arterial blood
3. pH of blood
4. Adenosine
5. Glucose in blood
6. Albumin in plasma

40. Violation of a coronary blood flow can be caused by:
1. Spasm of coronary arteries under the influence of vasoconstrictors
2. Decreased lumen of coronary arteries units of blood cells
3. Decreased lumen of coronary arteries thrombus, atherosclerotic plaque
4. Decreased caliber of coronary arteries as a result of a thickening of a vascular wall
5. Sensitization of coronary vessels to action of vasodilators

41. For an acute left ventricular failure at a myocardial infarction are characteristic:
1. Increased end-diastolic pressure in a left ventricle
2. Decreased end-diastolic volume in a left ventricle
3. Increased hydrostatic pressure in capillaries of lungs
4. Decreased stroke volume of a left ventricle
5. Increased peripheral vascular resistance

42. Choose compliance of ECG-sign to the reflected by it process in a myocardium at an acute coronary failure:

A. Pathological Q wave
B. Shift of a ST segment from an isoline
C. Coronary T wave

1. Ischemia
2. Ischemic injury
3. Necrosis

43. Draw a conclusion about the stage, depth and location of the myocardial infarction using the following ECG-signs in leads II, III, aVF: ventricular complex QS, ST segment elevation, negative coronary T wave.

44. Draw a conclusion about the stage, depth and location of the myocardial infarction using the following ECG-signs in leads I, aVL, V₅, V₆: ventricular complex QR, isoelectric ST segment, negative coronary T wave.

45. Draw a conclusion about the stage, depth and location of the myocardial infarction using the following ECG-signs in leads V₇, V₈, V₉: ventricular complex QS, ST segment elevation, negative coronary T wave.

46. Draw a conclusion about the stage, depth and location of the myocardial infarction using the following ECG-signs in leads V₁, V₂, V₃: ventricular complex QS, ST segment elevation, negative coronary T wave.