**1. Which of the following about atherosclerosis is true:**

1. it occurs in the retinal artery
2. foamy macrophages are seen into the atheromatous plaque
3. thinning of the intima is a feature
4. proliferation of smooth muscle cells in the intima is typical
5. raised HDL is associated with atherosclerosis

**2. Which of the following conditions cause aneurysms:**

1. atherosclerotic plaque formation
2. trauma
3. low blood pressure
4. congenital abnormalities in the media of the arterial wall
5. smoking

**3. The primary anatomic site of pressure regulation in the vascular system is:**

1. aorta
2. arteries
3. arterioles
4. capillaries
5. heart
6. **Complications of chronic hypertension include the following, EXCEPT:**
7. left ventricular hypertrophy
8. congestive heart failure
9. renal failure
10. diabetes mellitus
11. brain hemorrhage
12. **Causes of secondary hypertension include all of the following except:**
13. renal artery stenosis
14. adrenal cortical carcinoma
15. chronic pyelonephritis
16. сolloid goiter
17. chronic glomerulonephritis
18. **Patchy destruction of elastic tissue in the aortic media associated with obliterative endarteritis of vasa vasorum is characteristic of:**
19. Marfan’s syndrome
20. giant cell arteritis
21. syphilitic aortitis
22. polyarteritis nodosa
23. Monckeberg’s sclerosis
24. **Which of the following is the most common cause of death in cases of aneurysm:**
25. Hemopericardium
26. congestive heart failure
27. myocardial infarction
28. aortic stenosis
29. aortic coarctation

**8. The most common cause of abdominal aortic aneurysms is:**

1. trauma
2. atherosclerosis
3. syphilis
4. hypertension
5. cystic medial necrosis

**9. Aneurysms of the aortic arch are mostly caused by:**

1. atherosclerosis
2. tuberculosis
3. syphilis
4. congenital defects
5. fungi

**10. Which of the following does not appear to be a risk factor in the development and complications of atherosclerosis:**

1. male gender
2. diabetes mellitus
3. hypertension
4. alcoholism
5. smoking

**11. Following injury produced by cutting the toe nail too short, a 70-year-old diabetic woman developed infection that progressed to gangrene of the left great toe. The most likely vascular disease process is:**

1. infectious arteritis
2. thrombophlebitis
3. arteriosclerosis
4. phlebosclerosis
5. thromboangitis obliterans

**12. The major cause of pulmonary thromboemboli is:**

1. hypertension
2. heart failure
3. atherosclerosis
4. thrombophlebitis
5. varicose veins

**13. Severe (malignant) hypertension is characterized by:**

1. hyperplastic arteriolosclerosis
2. aortic insufficiency
3. Marfan’s syndrome
4. calcific aortic stenosis
5. thromboangiitis obliterans

**14. Which of the following factors sugest an undulating course of atherosclerosis:**

1. multilayer plaques
2. monolayer plaque
3. plaques at different stages of development
4. lipidic streaks
5. plaques with calcification

**15. The stages of myocardial infarction are:**

1. hemorrhagic
2. edematous
3. necrotic
4. vascularization
5. organization

**16. Liposclerotic stage of atherosclerosis is characterized by:**

1. formation of atheromatous mass
2. the growth of connective tissue around the lipidic deposites
3. plaque ulceration
4. destruction of elastic and argyrophilic membranes
5. formation of blood clots

**17. Acute coronary occlusion is followed by:**

1. myocardial gangrene
2. myocardial infarction
3. brown atrophy
4. myocardial hypertrophy
5. heart lipomatosis

**18. Which of the following factors are important in the development of atherosclerosis:**

1. hypoglycemia
2. hypercholesterolemia
3. hypertension
4. hypercalcemia
5. hyperlipidemia

**19. Manifestations of atherosclerosis are:**

1. metaplasia
2. calcification
3. amyloidosis
4. lipidic streaks
5. fibrous plaque

**20. Chronic cerebral ischemia due to cerebral artery atherosclerosis is accompanied by:**

1. cerebral cortex cells degeneration
2. extensive bleeding in the brain
3. atrophy of the cerebral cortex
4. hypertrophy of cortical cells
5. the development of dementia

**21. Fibrous plaques, in contrast to streaks are characterized by:**

1. plaque protruding the intima
2. plaques are at the level of the intima
3. white color
4. yellow color
5. plaque ulceration

**22. Which atherosclerotic stages are characterized by calcification:**

1. prelipidic stage
2. lipidic stage
3. ulcerative stage
4. liposclerotic stage
5. atheromathous stage

**23. Which of the following organs are mostly affected by atherosclerosis:**

1. kidney
2. liver
3. brain
4. intestine
5. lung

**24. Myocardial infarction size is determined by:**

1. the degree of arterial stenosis
2. the age of the patient
3. the possibility of collateral circulation
4. functional tension of myocardium
5. thickness of the walls of the heart
6. **Abdominal aortic aneurysm may be complicated by:**
7. aortic thrombosis
8. Leriche syndrome
9. Myasnikov syndrome
10. Budd-Chiari syndrome
11. internal bleeding
12. **Kidney atherosclerosis is characterized by:**
13. kidneys are markedly increased
14. kidney are decreased
15. macronodular surfaces
16. micronodular surfaces
17. kidneys are lardy
18. **Which of the following are myocardial infarction complications:**
19. cardiac tamponade
20. heart defect
21. asystole
22. brown atrophy
23. lung edema
24. Which of the following atherosclerotic stages are clinically manifested:
25. prelipidic stage
26. fatty streaks stage
27. atheromatous stage
28. ulcerative stage
29. fatty dots
30. Which atherosclerotic stage can be complicated by aneurysm:
31. lipidic stage
32. fibro-lipidic stage
33. atheromatous stage
34. ulcerative stage
35. necrotic stage

**30. Morphological manifestations of heart atherosclerosis include:**

1. myocardial infarction
2. postinfarction cardiosclerosis
3. cardiac valvulopathy
4. brown atrophy of heart
5. heart lipomatosis
6. **Obstructive atherosclerosis of the femoral artery may be followed by:**
7. ischemia
8. varicose veins
9. elephantiasis
10. gangrene
11. anemia
12. **Subendocardial myocardial infarction may be complicated by:**
13. fibrinous pericarditis
14. parietal thrombosis
15. hemopericardium
16. thromboembolism
17. heart “in cuirass”

**33. Tick the complications that may arise in atherosclerotic plaque ulceration:**

1. artery thrombosis
2. phlebothrombosis
3. atheromatous detritus embolism
4. pulmonary infarction
5. acute arterial occlusion

**34. Slow atherosclerotic narrowing of the heart arteries may lead to:**

1. myocardial infarction
2. diffuse cardiosclerosis
3. macrofocal cardiosclerosis
4. acute cardiac failure
5. chronic cardiac failure

**35. Which of the following organs diseases may develop symptomatic hypertension?**

1. kidney pathology
2. pituitary pathology
3. brain pathology
4. liver pathology
5. spleen pathology

**36. Gross appearance of myocardial infarction is:**

1. red color
2. white color
3. white color with a hemorrhagic rim
4. triangular shape
5. irregular shape

**37. Coronary artery thrombosis is followed by:**

1. gangrene
2. infarction
3. hemosiderosis
4. lipomatosis
5. brown atrophy

**38. Specify atherosclerosis particularly associated with hypertension:**

1. it is limited
2. it is a widespread
3. circular arrangement of fibrous plaques in arteries
4. muscular arteries are affected
5. skip affection of elastic arteries

**39. Tick the changes in the arteries, which characterize hypertensive disease:**

1. elastofibrosis
2. dystrophic calcification
3. plasmatic infiltration
4. hyalinosis
5. atherocalcinosis
6. **Symptomatic hypertension may develop in the following cases:**
7. respiratory diseases
8. liver disease
9. kidney disease
10. CNS diseases
11. vascular diseases

**41. Which of the following factors are directly involved in hypertensive disease pathogenesis:**

1. morphological factor
2. humoral factor
3. reflexogenic factor
4. ontogenetic factor
5. allergic factor

**42. Tick the types of hypertension according to the character of its course:**

1. cerebral hypertention
2. cardiac hypertention
3. benign hypertention
4. malignant hypertention
5. renal hypertention

**43. Which pathological processes may develop in the myocardium due to hypertension:**

1. myocardial infarction
2. gangrene
3. hemorrhage
4. atrophy
5. vicarious hypertrophy

**44. Specify the"severe triad" of diseases that human suffer nowadays:**

1. essential hypertension
2. myocarditis
3. atherosclerosis
4. rheumatic fever
5. ischemic heart disease

**45. Specify the myocardial infarction complications:**

1. lung edema
2. acute ventricular aneurysm
3. cardiogenic shock
4. ventricular fibrillation
5. all of the listed

**46. Which of the following are acute morphological changes that can develop in the kidneys due to arterial hypertension:**

1. arteriolar hyalinosis
2. parenchymatous atrophy
3. infarcts
4. arteriolonecrosis
5. arteriolosclerosis

**47. Specify the types of cardiosclerosis:**

1. postinfarction
2. macrofocal
3. vicarious
4. microfocal
5. infectious

**48. Which of the following processes is characteristic for arterial hypertension:**

1. thrombophlebitis
2. phlebothrombosis
3. elastofibrosis
4. atherocalcinosis
5. all of the listed

**49. Which myocardial infarction stage may be complicated by rupture of heart wall:**

1. allergic stage
2. functional stage
3. necrotic stage
4. organization stage
5. ossification stage

**50. The following changes develop in the kidney in benign hypertension:**

1. shrinkage
2. macronodular surface
3. arteriolohyalinosis
4. arteriolosclerosis
5. Kimmelstiel-Wilson syndrome

**51. The** **location of myocardial infarction is in the:**

1. left ventricle ;
2. right atrium;
3. left atrium;
4. right ventricle ;
5. interventricular septum

**52. The following microscopic changes DOES NOT characterize myocardial infarction:**

1. necrotic myocardial fibers with preserved cell borders and absence of nuclei
2. missing transverse striations of cardiomyocytes
3. increased transverse diameter of myocardial fibers and hyperchromatic, irregular, stellate nuclei
4. perivascular aschoff granulomas ;
5. vegetations along chordae and valve .

**53. Hematuria and lumbar pain appeared in a patient on the 7-th day of myocardial infarction. What pathological process developed in the kidneys and what was the cause:**

1. renal infarction
2. acute pyelonephritis
3. thromboembolism due to the left ventricle parietal thrombus
4. thromboembolism due to aortic vegetations on the surface of the valve
5. thromboembolism due to leaflet mitral vegetation

**54.Morphological manifestations of acute ischemic heart disease are:**

1. atrophy of the heart
2. ischemic dystrophy of cardyomyocytes
3. infarction
4. chronic cardiac aneurysm
5. cardiosclerosis

**55. Myocardial infarction stages are:**

1. ischemic stage
2. necrotic stage
3. functional stage
4. compensatory stage
5. organization stage

**56. Direct causes of myocardial infarction are:**

1. intramural bleeding in the atherosclerotic plaque
2. coronary artery thrombosis
3. coronary artery spasm
4. coronary artery sclerosis
5. myocardial metabolic disorders

**57. Morphological manifestations of chronic ischemic heart disease:**

1. macrofocal cardiosclerosis
2. microfocal cardiosclerosis
3. acute myocardial infarction
4. chronic cardiac aneurysm
5. acute cardiac aneurysm

**58. Most common causes of death in chronic ischemic heart disease are:**

1. heart wall rupture and pericardial tamponade
2. cerebral hemorrhage
3. renal failure
4. chronic cardiovascular failure
5. thromboembolic complications

**59. Most common causes of death in acute ischemic heart disease are:**

1. cardiogenic shock
2. ventricular fibrilation
3. acute cardiovascular insufficiency
4. cerebral hemorrhage
5. acute posthaemorrhagic anemia

**60. Most common sudden death causes in myocardial infarction:**

1. angina pectoris
2. ventricular fibrilation
3. pericardial tamponade
4. cardiogenic shock
5. ventricular aneurysm

**61. Myocardial infarction complication are the following:**

1. fibrinous pericarditis
2. aortic aneurysm
3. parietal cardiac thrombosis
4. cardiac rupture
5. aortic coarctation

**62. Renal type of essential hypertension is characterized by:**

1. hydronephrosis
2. arteriolar hyalinosis
3. glomerulosclerosis
4. arteriolosclerotic nephrosclerosis
5. pyelonephritis

**63. Which are the arterioles changes in the chronic benign essential hypertension:**

1. fibrinoid necrosis
2. sclerosis
3. hyalinosis
4. inflammation
5. thrombosis

**64. What arterioles damage develops in hypertensive crisis:**

1. infiltration of plasma
2. fibrinoid necrosis
3. thrombosis
4. hyalinosis
5. sclerosis

**65. What are the most common causes of death in chronic ischemic heart disease:**

1. respiratory failure
2. chronic heart failure
3. thromboembolic complications
4. rhythm disorders
5. renal insufficiency

**66. Ischemic cerebral infarction may develop in obstructive atherosclerosis of the following arteries:**

1. intracerebral arteries
2. renal arteries
3. vertebral arteries
4. carotid arteries
5. pulmonary arteries