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ПАТОЛОГИЧЕСКАЯ АНАТОМИЯ. ТЕСТОВЫЕ ЗАДАНИЯ

PATHOLOGICAL ANATOMY. MULTIPLE CHOICE QUESTIONS

Пособие
для студентов учреждений высшего образования,
обучающихся по специальности 7-07-0911-01 «Лечебное дело»

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Пособие содержит тестовые задания по учебной дисциплине «Патологическая анатомия». Материал распределен на тематические разделы, постановка вопросов соответствует клиническому направлению кафедры.

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INTRODUCTION

Pathological anatomy occupies a central role in medical education, bridging basic science and clinical practice by elucidating the structural changes underlying disease processes. As a discipline, it provides the essential framework for comprehending the etiology, progression, and morphological manifestations of diseases, forming the cornerstone of diagnostic medicine. However, mastering pathological anatomy presents significant challenges due to its extensive scope and the necessity of correlating theoretical knowledge with real-world clinical scenarios. This manual addresses these challenges by offering a carefully structured collection of test questions designed to enhance comprehension, retention, and practical application.

Developed to support students in both general and systemic pathology courses, this guide serves as a tool for knowledge reinforcement, self-assessment, and the cultivation of diagnostic reasoning. The questions encompass core topics in pathological anatomy, ensuring thorough preparation for laboratory sessions, examinations, and future medical practice. By engaging with these materials, students can systematically strengthen their understanding of disease mechanisms and their morphological correlates.

Aligned with the standard curriculum for medical students, this manual draws upon the latest advancements in pathological anatomy, incorporating current research, clinical guidelines, and teaching methodologies from leading medical institutions. The content reflects modern diagnostic criteria and evidence-based practices, ensuring relevance in today's evolving medical landscape.

The test questions cover a broad spectrum of pathological processes — from fundamental principles to complex systemic diseases — with varying difficulty levels to accommodate different stages of learning. Topics include cellular injury, inflammation, neoplasia, and organ-specific pathologies, allowing students to progress from foundational concepts to advanced clinical correlations.

A distinctive feature of this manual is its emphasis on developing analytical skills essential for pathology and clinical medicine. Beyond rote memorization, the questions encourage critical thinking, pattern recognition, and the ability to synthesize morphological findings with clinical data — a crucial competency for future physicians.

Whether used for independent study or as a supplementary resource in lectures and tutorials, this manual offers a dynamic and effective approach to mastering pathological anatomy. By integrating self-assessment with active learning, it empowers students to build confidence, refine their diagnostic acumen, and excel in both academic and professional settings.

GENERAL PATHOLOGICAL ANATOMY

1. PARENCHYMAL INTRACELLULAR DEGENERATIONS

1. Specify the favorable outcome of "granular" dystrophy:
a) Transformation into mucoid swelling
b) Hypotrophy of cell ultrastructures
c) Transformation into hyaline-droplet dystrophy
d) Transformation into hydropic dystrophy
e) Development of necrosis

2. Specify the main pathogenetic mechanism of parenchymal dystrophy:
a) Reduction of oxygen intake into the cell
b) Enhancement of cell functional activity
c) Reduction of synthetic processes in the cell
d) Enhancement of glycolytic processes in the cell
e) Energy deficit in the cell

3. Give the definition of the term "dystrophy":
a) A disorder of metabolism leading to damage to cellular structures
b) Disruption of oxygen supply to cells and tissues
c) Local cell and tissue necrosis
d) Restoration of lost structures
e) Increased arterial blood flow to an organ

4. Specify one of the manifestations of corneal dystrophy (keratosis):
a) Mucoid swelling
b) Leukoplakia
c) Glycogenosis
d) Lipoidosis
e) Hyalinosis

5. In the development of parenchymal fatty dystrophy in the heart, the following is observed:
a) Enhancement of myocardial contractile ability
b) No change in cardiac activity
c) Development of cardiac insufficiency
d) Improvement in the regulation of cardiac rhythm
e) Improvement in myocardial blood supply

6. In hyaline-droplet dystrophy of the renal tubular epithelium, the following develops:

a) Proteinuria
b) Oxaluria
c) Uraturia
d) Lipiduria
e) Phenylketonuria

7. Name the pathomorphological (microscopic) change that characterizes hydropic dystrophy:

a) Appearance of fat droplets in the cytoplasm
b) Appearance of protein droplets in cell cytoplasm resembling hyaline
c) Appearance of droplets in cell cytoplasm and interstitial tissue resembling horn substance
d) Appearance of vacuoles with transparent fluid in connective tissue fibers and interstitial tissue
e) Appearance of vacuoles with transparent fluid in cell cytoplasm

8. The term "tiger heart" is used to refer to:

a) Fatty dystrophy
b) Granular dystrophy
c) Hyaline-drop dystrophy
d) Hydropic dystrophy
e) Carbohydrate dystrophy

9. Name the pathomorphological change that characterizes hyaline-droplet dystrophy:

a) Appearance of granules in cell cytoplasm
b) Appearance of vacuoles in cell cytoplasm
c) Appearance of fat droplets in interstitial tissue
d) Appearance of large droplets of hyaline-like protein in cell cytoplasm
e) Appearance of large fat droplets in cell cytoplasm

10. Specify the most common morphogenetic mechanism of parenchymal kidney dystrophy:

a) Transformation
b) Abnormal synthesis
c) Decomposition
d) Infiltration
e) Sclerosis

11. In the outcome of generalized corneal dystrophy (keratosis), the following develops:

a) Addison's disease
b) Hyalinosis
c) Ichthyosis
d) Senile amyloidosis
e) Gaucher's disease

12. The development of the following thesaurismosis is associated with a carbohydrate metabolism disorder:

a) Phenylketonuria
b) Wilson disease
c) Gaucher's disease
d) Glycogen storage disease
e) Niemann-Pick disease

13. Specify an unfavorable outcome of hydropic dystrophy:

a) Focal coagulation necrosis
b) Focal liquefactive necrosis
c) Development of hyaline-drop dystrophy
d) Replacement of cytoplasm with lipids
e) Filling of cytoplasm with horny masses

14. To detect parenchymal lipidosis, the staining method used is:

a) Picrofuchsin mixture according to Van Gieson
b) Silver salt impregnation
c) Sudan III
d) PAS reaction
e) Hematoxylin and eosin

15. Foci of keratinization of multilayered flat non-keratinizing epithelium are called:

a) Hyalinosis
b) Amyloidosis
c) Petrifactions
d) Leukoplakia
e) Dysplasia

16. Parenchymal lipidosis is associated with a disorder of metabolism of:

a) cholesterol
b) neutral fat
c) hemoglobin

d) cytoplasmic fat
e) bilirubin

17. Hydropic dystrophy is a manifestation of:
a) lipid metabolism disorder
b) protein metabolism disorder
c) calcium metabolism disorder
d) copper metabolism disorder
e) carbohydrate metabolism disorder

18. Name a parenchymal dysproteinosis:
a) hyaline-droplet dystrophy
b) amyloidosis
c) fatty dystrophy
d) hyalinosis
e) carbohydrate dystrophy

19. Specify one of the possible mechanisms of fat accumulation in cells during fatty dystrophy:
a) overfiltration
b) transformation
c) normal synthesis
d) recomposition
e) recanalization

20. Hyaline-droplet dystrophy is characterized by:
a) most commonly develops in the brain
b) increase in the volume of mitochondria
c) appearance of inclusions in the form of protein drops in cell cytoplasm
d) nucleus greatly enlarged
e) alteration in water-salt metabolism

21. The most common cause of myocardial fatty dystrophy is:
a) inflammation
b) tumor growth
c) hypoxia
d) amyloidosis
e) tissue edema

22. Name the primary pathogenetic factor of dystrophy:
a) regeneration
b) enzyme pathology

c) trauma
d) atrophy
e) hypertrophy

23. The development of hyaline-droplet dystrophy of renal tubular epithelium is based on:
a) nuclear breakdown
b) hyperplasia of mitochondria
c) denaturation of cytoplasmic proteins
d) liquefactive necrosis
e) chromatin condensation

24. The following statements are true for fatty parenchymal dystrophy of the myocardium:
a) figurative name "tiger heart"
b) myocardium appears clay-like in color
c) transverse striation is visible on the endocardial side of the left ventricle
d) the most common development mechanism is decomposition
e) all answers are correct

25. Specify a statement characterizing the concept of "dystrophy":
a) one of the types of cell damage
b) general body reaction
c) changes in organ volume
d) unlimited cell proliferation
e) local death

26. Characteristics of corneal dystrophy include:
a) deposition of lime inside the cells
b) excessive keratinization
c) cell necrosis
d) development of a tumor
e) reduction in cell size

27. Name the clinical manifestation of hyaline-droplet dystrophy of renal tubular epithelium:
a) anuria
b) hypertension
c) nephrotic syndrome
d) hematuria
e) oliguria

28. Name the disease in which there is hydropic dystrophy of hepatocytes:

a) alcoholism
b) cholelithiasis
c) viral hepatitis
d) cirrhosis
e) liver necrosis

29. The main mechanisms of the development of hydropic dystrophy of the kidneys include everything except:

a) disruption of water-electrolyte and protein metabolism
b) alteration of colloid osmotic pressure inside the cell
c) increased permeability of membranes
d) hyperplasia of the nucleus
e) activation of lysosomal hydrolytic enzymes

30. Microscopic signs of myocardial fatty dystrophy include everything except:

a) dusty cell obesity
b) large-droplet cell obesity
c) hypertrophy of cardiomyocytes
d) mitochondrial breakdown
e) focal nature of changes

31. Diseases associated with the development of fatty liver dystrophy include everything except:

a) fatty liver disease
b) diabetes mellitus
c) obesity
d) influenza
e) alcoholism

32. Fatty dystrophy occurs as a result of:

a) infiltration
b) perverted synthesis
c) transformation
d) decomposition
e) all answers are correct

33. Name a clinical manifestation of fatty dystrophy:

a) increased organ function
b) reduced organ function

c) elevated body temperature
d) pallor of the skin
e) maintenance of organ function

34. Insufficiency of enzymes in a cell leads to:
a) tumors
b) storage diseases
c) rheumatic diseases
d) diseases of the female reproductive organs
e) traumatic diseases

35. Parenchymal dysproteinoses include:
a) hyaline-droplet dystrophy
b) mineral dystrophy
c) amyloid dystrophy
d) fibrinoid swelling
e) mucoide swelling

36. Parenchymal dystrophies develop as a result of:
a) phagocytosis
b) paranecrosis
c) pinocytosis
d) autolysis
e) decomposition

37. Name the macroscopic signs of fatty liver dystrophy:
a) reduced size
b) uneven surface
c) flabby, yellowish appearance
d) dense consistency
e) organ deformation

38. The outcome of hydropic dystrophy is:
a) transformation and mucoid swelling
b) focal liquefactive necrosis
c) transformation into hyalinosis
d) regression
e) transformation into corneal dystrophy

39. Fatty dystrophy most commonly develops in the:
a) liver
b) brain

c) intestines
d) bones
e) spleen

40. Characteristics of organs in fatty dystrophy include everything except:
a) increased size
b) flabby consistency
c) yellowish color
d) organ dysfunction
e) organ displacement

41. All mechanisms of fatty dystrophy development in organs are true except:
a) in the kidney - infiltration
b) in the myocardium - decomposition
c) in the liver - infiltration
d) in the myocardium - transformation
e) all answers are incorrect

42. Hydropic dystrophy of the epithelium of proximal and distal renal tubules is manifested by all of the following except:
a) changes in the epithelium of the main segments of the nephron - vacuolization
b) nuclear condition - displacement toward the cell membrane
c) the prevailing mechanism of development - infiltration
d) the outcome of hydropic dystrophy - irreversibility of the process
e) it is a morphological manifestation of nephrotic syndrome

43. The color of the liver on section in fatty dystrophy is:
a) red
b) bluish
c) yellowish
d) green
e) beige

44. Specify the outcome of hydropic dystrophy:
a) corneal dystrophy
b) hyaline-droplet dystrophy
c) focal coagulation necrosis
d) focal liquefactive necrosis
e) regression

45. The most common site for the development of corneal dystrophy is the:

a) lungs
b) skin
c) liver
d) heart
e) stomach

46. Disturbances in kidney function in hyaline-drop dystrophy of tubular epithelium are manifested as:

a) calciumuria
b) phenylketonuria
c) proteinuria
d) oxaluria
e) uraturia

47. Depending on the type of metabolic disorder, the following types of dystrophies are distinguished, except:

a) protein
b) fatty
c) carbohydrate
d) parenchymal
e) mineral

48. Characteristics of fatty dystrophy include:

a) appearance of protein drops in the cytoplasm
b) reduction in cell size
c) enhancement of cell function
d) enlarged nuclei
e) appearance of lipid vacuoles in the cytoplasm

49. Name the predominant morphogenetic mechanisms of fatty dystrophy development in organs:

a) in the kidney - infiltration
b) in the myocardium - decomposition
c) in the liver - infiltration
d) all answers are correct
e) all answers are incorrect

50. Specify the mechanism of fat accumulation in cells in obesity:

a) infiltration

b) pinocytosis
c) endocytosis
d) parapexis
e) decomposition

51. A synonym for ballooning dystrophy is:
a) hyaline-droplet dystrophy
b) focal liquefactive necrosis
c) focal coagulation necrosis
d) total cell necrosis
e) corneal epithelial dystrophy

52. Name the morphogenetic mechanism of protein dystrophies:
a) atrophy
b) phagocytosis
c) necrosis
d) sclerosis
e) fibrosis

53. Give a characteristic of fatty liver dystrophy:
a) increased organ size
b) fatty dystrophy at the periphery of liver lobules
c) yellow color on section
d) most common development mechanism in the liver is infiltration
e) all answers are correct

54. Specify the types of dystrophies based on localization:
a) local
b) stromal-vascular
c) isolated
d) general
e) localized

55. Give a definition of the term "dystrophy":
a) local death
b) the morphological expression of tissue metabolism disturbance
c) change in organ volume
d) a complex vascular-mesenchymal reaction of the body
e) unlimited cell proliferation

2. MESENCHYMAL DEGENERATIONS

1. Indicate the changes in organs in the case of general obesity:
a) fatty liver dystrophy
b) brown atrophy of the liver
c) brown induration of the lungs
d) brown atrophy of the myocardium
e) brown induration of the kidneys

2. Choose the statement that is true for kwashiorkor:
a) fatty liver in the liver
b) alipotropic obesity in the liver
c) the predominant mechanism of dystrophy development is decomposition
d) hydropic dystrophy developed in the liver
e) hyaline-droplet dystrophy developed in the liver

3. For arterial hypertension with predominant involvement of the brain and kidneys, all of the following are characteristic except:
a) arteriolosclerotic nephrosclerosis
b) primarily shrunken kidneys
c) hyalinosis in the arterioles of the kidneys and brain
d) changes in arterioles and small arteries due to fibrinoid necrosis
e) glomeruli in the kidneys are hyalinized, with some of them hypertrophied

4. The following features are characteristic of mucoid swelling, except:
a) develops in blood vessel walls
b) develops in organ stroma
c) develops in case of croupous pneumonia
d) reversible process
e) characterized by the metachromasia phenomenon

5. The following feature is characteristic of fibrinoid swelling:
a) develops in parenchymal cell
b) develops in organ stroma, vessel walls
c) never develops in rheumatic diseases
d) reversible process
e) characterized by the metachromasia phenomenon

6. The following feature is characteristic of hyalinosis:
a) develops in parenchymal cells of organs
b) often develops in myocardial infarction
c) reversible process

d) characterized by the metachromasia phenomenon
e) has a widespread character in arterial hypertension and diabetes mellitus

7. White (fatty) kidneys with a nodular surface are characteristic of:
a) arteriolosclerotic nephrosclerosis
b) amyloidosis of the kidneys
c) glomerulonephritis
d) necrotic nephrosis
e) primarily shrunken kidneys

8. The most common cause of death in amyloidosis is:
a) chronic kidney failure
b) chronic lung failure
c) chronic enteric failure
d) chronic cerebral failure
e) chronic adrenal insufficiency

9. The following macroscopic changes may be observed in generalized amyloidosis, except:
a) reduced kidney size
b) enlarged kidney size
c) reduced spleen size
d) enlarged spleen size
e) greasy sheen of the liver on section

10. The morphological feature of heart changes in obesity is:
a) "tiger" heart
b) fat tissue beneath the endocardium
c) "hairy" heart
d) adipose tissue beneath the epicardium
e) valve insufficiency

11. Specify the process that will ultimately lead to hyalinosis:
a) edema
b) grainy dystrophy
c) amyloidosis
d) hyperpigmentation
e) fibrinoid swelling

12. The following staining method is used to detect amyloid in organs and tissues:
a) Sudan III

b) hematoxylin and eosin
c) Congo red
d) silver impregnation
e) picric fuchsin staining by Van Gieson

13. Systemic vascular hyalinosis develops in cases of:
a) abdominal typhoid
b) arterial hypertension
c) sepsis
d) croupous pneumonia
e) gastric ulcer

14. The following staining method is used to demonstrate the metachromasia phenomenon:
a) thioflavines
b) gentian violet
c) toluidine blue
d) picric fuchsin
e) hematoxylin

15. Name the morphological type of obesity:
a) alimentary
b) hyperplastic
c) cerebral
d) symmetric
e) upper

16. Amyloid is not deposited in the following parts of the kidneys:
a) glomeruli
b) in the tubules
c) in the capsule
d) in the stroma
e) in the vessels

17. Give the definition of stromal-vascular (mesenchymal) dysproteinoses:
a) manifestation of protein metabolism disorders in connective tissue
b) manifestation of lipid metabolism disorders in connective tissue
c) manifestation of protein metabolism disorders in cell cytoplasm
d) manifestation of lipid metabolism disorders in cell cytoplasm
e) manifestation of metabolic disorders in parenchyma and stroma of organs

18. The macroscopic appearance of organs and tissues in mucoid swelling is:

a) enlarged, flabby
b) enlarged, dense
c) reduced, flabby
d) reduced, dense, with fine-grained surface
e) visually unchanged

19. Hyalinosis of heart valves in rheumatism develops as a result of:

a) mucoid swelling
b) amyloidosis
c) hyaline-drop dystrophy
d) fibrinoid swelling
e) inflammation

20. The basis of fibrinoid swelling is the following alteration of connective tissue:

a) edema
b) accumulation of fat
c) degradation of connective tissue fibers
d) thickening of the ground substance
e) sclerosis

21. Name the type of hyalinosis by prevalence:

a) hyalinosis of connective tissue proper
b) hyalinosis of blood vessels
c) hyalinosis of the spleen capsule
d) systemic hyalinosis
e) hyalinosis of heart valves

22. Specify the diseases in which fibrinoid swelling has a systemic character:

a) infectious diseases
b) rheumatic diseases
c) tumors
d) obesity
e) cachexia

23. Indicate the changes in the kidneys caused by widespread arteriolar hyalinosis:

a) organ enlargement
b) congestion

c) shrinking and deformation of the organ
d) infarction
e) amyloidosis

24. Specify the morphogenetic mechanisms of fibrinoid swelling:
a) resorption
b) infiltration
c) transformation
d) perverted synthesis
e) decompensation

25. The classification of amyloidosis depending on causes and mechanisms of development, except:
a) idiopathic
b) hereditary
c) senile, tumor-related
d) peri-reticular, peri-collagenous
e) secondary

26. Name the staining used to detect amyloid by the fluorescent method:
a) hematoxylin and eosin
b) silver salt impregnation
c) Congo red
d) Schiff's iodine potassium iodide (IKI)
e) thioflavin T

27. Amyloid is most commonly deposited in the organs in secondary amyloidosis, except:
a) spleen
b) adrenal glands
c) liver
d) kidneys
e) heart

28. Indicate the process in the kidneys that leads to the development of uremia:
a) arteriolosclerotic nephrosclerosis
b) diabetic nephrosclerosis
c) renal amyloidosis
d) atherosclerosis of renal arteries
e) all answers are correct

29. The morphogenetic stages of amyloidosis development are stated correctly, except:

a) pre-amyloid
b) synthesis of amyloid fibrillar protein by amyloblasts
c) formation of a plasma component
d) aggregation of fibrils
e) binding of fibrils with plasma glycoproteins and formation of amyloid

30. Identify the substance whose metabolism is disrupted in stromal-vascular dyslipidoses:

a) cytoplasmic fat
b) neutral cholesterol
c) cholesterol and its esters
d) cytoplasmic and neutral fat
e) cytoplasmic cholesterol

31. Morphological changes in cardiomyocytes in heart obesity:

a) contain fat inclusions
b) hypertrophied
c) contain protein inclusions
d) unchanged
e) compressed by lipocytes

32. Name the type of general disorder of neutral fat metabolism:

a) atherosclerosis
b) atherocalcinosis
c) lipomatosis
d) cachexia
e) regional lipodystrophies

33. Disruption of cholesterol metabolism is observed in the following disease:

a) rheumatism
b) anemia
c) tuberculosis
d) atherosclerosis
e) influenza

34. Specify the alteration of connective tissue fibers characteristic of fibrinoid swelling:

a) sclerosis
b) hyalinosis

c) preserved
d) argentophilic
e) destruction

35. Modern theory of amyloidosis:
a) viral
b) allergic
c) psychosomatic
d) cellular local synthesis
e) genetic

36. Specify the ways of amyloid deposition in the body:
a) senile
b) tumor-related
c) primary
d) peri-reticular, peri-collagenous
e) secondary, primary

37. The structure of amyloid at the electron microscopic level:
a) granular
b) homogeneous
c) fibrillar
d) cellular
e) in the form of deposits

38. Features of idiopathic (primary) amyloidosis:
a) local nature of the process
b) damage to different organs and systems
c) more common than other types
d) found in strictly defined geographical areas
e) predisposition to certain ethnic groups

39. Name the clinical syndrome characteristic of kidney amyloidosis:
a) obesity
b) cachexia
c) Cushing's syndrome
d) hemorrhagic syndrome
e) nephrotic syndrome

40. Definition of stromal-vascular dystrophies:
a) manifestation of metabolism disorders in connective tissue
b) manifestation of metabolism disorders in cell cytoplasm

c) manifestation of metabolism disorders in parenchyma and stroma of organs

d) manifestation of protein metabolism disorders in parenchyma and stroma of organs

e) manifestation of lipid metabolism disorders in parenchyma and stroma of organs

41. The main morphogenetic mechanism of mucoid swelling:

a) perverted synthesis
b) infiltration
c) decomposition
d) transformation
e) resorption

42. Outcome of mucoid swelling:

a) transforms into amyloidosis
b) irreversible
c) transforms into fibrinoid swelling
d) transforms into hyalinosis
e) transforms into mucoid swelling

43. Local hyalinosis develops as a result of:

a) amyloidosis
b) fatty degeneration
c) horny degeneration
d) sclerosis
e) mucoid swelling

44. Name the alteration of connective tissue fibers characteristic of fibrinoid necrosis:

a) degradation of connective tissue fibers
b) carbohydrate transformation
c) reduced vessel permeability
d) hyalinosis
e) amyloidosis

45. For the second stage of acquired splenic amyloidosis, everything is characteristic except:

a) spleen is not enlarged
b) spleen is significantly enlarged
c) amyloid in the white pulp
d) amyloid in the red pulp

e) amyloid deposits along the course of reticular fibers

46. Name the morphogenetic mechanism of amyloidosis:
a) resorption
b) infiltration
c) transformation
d) decomposition
e) abnormal synthesis

47. Name the types of obesity based on the mechanisms of development:
a) alimentary, metabolic
b) lipomatosis
c) cerebral, endocrine
d) upper, middle
e) lower, symmetrical

48. Specify the diseases in which cachexia may develop:
a) atherosclerosis
b) arterial hypertension
c) ischemic heart disease
d) acute pneumonias
e) malignant neoplasms

49. Specify the mechanism of cholesterol deposition in the intima of the aorta in atherosclerosis:
a) phagocytosis
b) infiltration
c) transformation
d) denaturation
e) perverted synthesis

50. Cholesterol can be detected in the aortic intima using the following staining:
a) hematoxylin and eosin
b) Schiff's iodine potassium iodide (IKI) reaction
c) picric fuchsin
d) sudan III
e) Congo red

51. Name the type of stromal-vascular dysproteinosis:
a) mucoid swelling
b) horny degeneration

c) fibrinous inflammation
d) hyaline-drop dystrophy
e) mucoid swelling

52. Specify the morphogenetic mechanism of development of stromal-vascular dystrophies:
a) reduction of membrane potential
b) hypersecretion
c) transformation
d) hyposecretion
e) resorption

53. Specify the characteristic alteration of connective tissue in mucoid swelling:
a) reduced permeability
b) splitting of elastic fibers
c) redistribution and accumulation of glycosaminoglycans
d) thickening of collagen fibers
e) accumulation of fat

54. Hyalinosis of the spleen capsule develops as a result of:
a) inflammation
b) sclerosis of the capsule
c) plasmorrhagia
d) fibrinoid necrosis in the walls of splenic blood vessels
e) hyaline-drop dystrophy

55. Hyaline is:
a) cartilage
b) glycosaminoglycan
c) fibrillar protein containing immune complexes and lipids
d) fibrillar protein containing iron
e) fibrillar protein containing amyloid

56. List the types of vascular hyaline:
a) mixohyalin
b) simple
c) complex
d) lipohyalin
e) correct answers b, c, d

57. Specify the type of metabolism disorder leading to stromal-vascular dystrophies:

a) mixed
b) mineral
c) fatty
d) water-electrolyte
e) enzymatic

58. Fibrinoid swelling is preceded by the following type of dystrophy:

a) mucoid swelling
b) amyloidosis
c) mucoid swelling
d) hyaline-drop dystrophy
e) hyalinosis

59. Name the types of amyloid fibrillar proteins:

a) AF-amyloid
b) ASC1-amyloid
c) AA-amyloid
d) AL-amyloid
e) all answers are correct

60. The development of amyloidosis can be complicated by the following diseases except:

a) arterial hypertension
b) multiple myeloma
c) chronic lung abscess
d) chronic trophic ulcers
e) bronchiectasis

61. The types of amyloidosis, depending on the predominance of involvement of various organs and systems, include all except:

a) nephropathic
b) cardiopathic
c) neuropathic
d) cachectic
e) encephalopathic

62. Specify the typical localization of amyloid in the splenic pulp:

a) in the red pulp
b) in the white pulp
c) in the intima of blood vessels

d) in both red and white pulp
e) in the adventitia of blood vessels

63. Specify the characteristic feature of renal amyloidosis:
a) small, dense kidneys with a finely granular surface
b) large, fatty kidneys
c) amyloid is deposited in the capsule
d) amyloid is deposited in the epithelium of the tubules
e) amyloid is deposited in the renal calyces

64. Specify the main localization of stromal-vascular lipidoses:
a) fat depots
b) stroma of organs
c) parenchyma of organs
d) capsule of organs
e) walls of large blood vessels

65. The main cause of death in heart obesity is:
a) rupture of the left ventricle
b) arrhythmia
c) atrial fibrillation
d) myocardial infarction
e) chronic heart failure

66. Name the type of local disorder of neutral fat metabolism:
a) atherosclerosis
b) lipomatosis
c) obesity
d) regional lipodystrophies
e) cachexia

67. The characteristic alteration of the aorta in atherosclerosis is:
a) smooth, pale-gray, shiny intima
b) intima with yellow spots, stripes, and plaques
c) carbohydrate deposits in the intima
d) bilirubin deposits in the intima
e) neutral fat deposits in the middle layer of the aorta

68. Specify stromal-vascular dysproteinoses that can be sequential stages of connective tissue disorganization:
a) mucoid swelling, amyloidosis
b) mucoid swelling, fibrinoid swelling, hyalinosis

c) mucoid swelling, amyloidosis
d) hyaline-drop dystrophy, amyloidosis
e) mucoid swelling, granular swelling, hyalinosis

69. For mucoid swelling, the following is characteristic:
a) degradation of collagen fibers
b) sclerosis of elastic fibers
c) appearance of protein grains in the cytoplasm
d) redistribution and accumulation of glycosaminoglycans
e) redistribution and accumulation of cholesterol and its esters

70. The main morphogenetic mechanism of hyalinosis development is:
a) resorption
b) decomposition
c) reduction of cell membrane potential
d) perverted synthesis
e) transformation

71. Morphological characteristics of a primary wrinkled kidney (arteriolosclerosis):
a) large, flabby, with a smooth surface
b) small, dense, with a smooth surface
c) small, dense, with a finely granular surface
d) develops as a result of atherosclerosis of the renal artery
e) develops as a result of mucoid swelling

72. The main theory of amyloidosis pathogenesis:
a) immune
b) viral-genetic
c) cellular local synthesis
d) polyetiological
e) modification

73. Name a component of amyloid:
a) fat
b) starch
c) fibrillar protein - F-component
d) potassium
e) water, mineral salts

74. The macroscopic diagnostic method for amyloidosis during autopsy:
a) thioflavin T

b) iodine solution staining
c) Congo red
d) gentian violet
e) hematoxylin and eosin

75. In senile amyloidosis, the following organs and systems are most commonly affected, except:
a) heart
b) arteries
c) pancreas
d) veins
e) brain

76. Name the types of obesity depending on the predominant localization of fat deposition:
a) alimentary, metabolic
b) lipomatosis
c) cerebral, endocrine
d) lipodystrophy
e) lower, symmetrical

77. Cachexia develops with a disturbance in the metabolism of:
a) proteins
b) neutral fat
c) cholesterol and its esters
d) mucoproteins
e) lipoproteins

78. Hyalinosis can develop as a result of:
a) hydropic swelling
b) amyloidosis
c) granular dystrophy
d) plasmorrhagia
e) keratosis

79. Macroscopic changes in the kidneys in diffuse arteriolar hyalinosis:
a) sharp increase in organ size
b) congestion
c) shrinkage and deformation of the organ
d) infarction
e) capsule rupture

80. Outcome of plasma impregnation:
a) transition to amyloidosis
b) keratinization
c) transition to fibrinoid swelling
d) transition to hyalinosis
e) transition to mucoid swelling

81. For the diagnosis of secondary amyloidosis, a biopsy is performed on:
a) gum mucosa
b) rectal mucosa
c) kidneys
d) all answers are correct
e) all answers are incorrect

82. The following type of amyloidosis develops in periodic disease:
a) primary
b) secondary
c) hereditary
d) tumor-like
e) senile

83. Macroscopic characteristics of the heart in obesity:
a) enlarged size due to myocardium
b) enlarged size due to fat deposits
c) enlarged size due to pericardium
d) fat in cardiomyocytes
e) increased contractile capacity of the myocardium

84. Xanthoma cells can be detected using:
a) hematoxylin and eosin
b) periodic acid-Schiff (PAS) reaction
c) Congo red
d) sudan III
e) Van Gieson's picric fuchsin mixture

85. Specify diseases in which cachexia most frequently develops:
a) atherosclerosis
b) arterial hypertension
c) ischemic heart disease
d) chronic infections

e) acute pneumonia

3. MIXED DEGENERATIONS

1. Specify the localization of metabolism disorders in mixed dystrophies:
a) in the parenchyma
b) in the stroma
c) in the parenchyma and stroma
d) intracellularly
e) extracellularly

2. Mixed dystrophies occur with a disturbance in the metabolism of:
a) cholesterol
b) complex proteins and minerals
c) glucose
d) glycogen
e) phenylalanine

3. Specify the groups of endogenous pigments:
a) hemoglobinogenic
b) proteinogenic
c) lipidogenic
d) all answers are correct
e) all answers are incorrect

4. Specify the hemoglobinogenic pigment formed in the norm:
a) hematoidin
b) hemin
c) hemosiderin
d) vitamin E deficiency pigment
e) porphyrin

5. Specify the hemoglobinogenic pigment formed in pathology:
a) hematoidin
b) ferritin
c) hemosiderin
d) bilirubin
e) adrenochrome

6. Specify the hemoglobinogenic pigment containing iron:
a) hematoidin

b) ferritin
c) adrenochrome
d) bilirubin
e) porphyrin

7. Specify the hemoglobinogenic pigments that do not contain iron:
a) bilirubin
b) porphyrin
c) hematoidin
d) all answers are correct
e) all answers are incorrect

8. The pathogenic action of ferritin:
a) vasoparalytic
b) hypertensive
c) stimulates collagenosis
d) neuropathic
e) coagulopathic

9. The Perl's reaction is used to detect:
a) bilirubin
b) hemosiderin
c) apo-ferritin
d) hematoidin
e) sulphohematin

10. Ferritin depots are normal in all of the following organs except:
a) liver
b) lymph nodes
c) ovaries
d) spleen
e) red bone marrow

11. Cells in which ferritin is formed are called:
a) histiocytes
b) monocytes
c) macrophages
d) sideroblasts
e) siderophages

12. Excessive formation of hemosiderin is called:
a) hemolytic anemia

b) hemosiderosis
c) hepatolenticular degeneration
d) hemomelanosis
e) hemochromatosis

13. Name the cause of generalized hemosiderosis:
a) intravascular hemolysis
b) extravascular hemolysis
c) disorder of porphyrin metabolism
d) impaired bile flow
e) cholestasis

14. Name the disease in which generalized hemosiderosis occurs:
a) cirrhosis of the liver
b) glomerulonephritis
c) hemolytic anemias
d) pulmonary hypertension
e) heart defects

15. Specify the main organs where hemosiderin accumulates in generalized hemosiderosis:
a) in the kidneys, ovaries, uterus
b) in the liver, spleen, bone marrow
c) in the lungs, heart, kidneys
d) in the stomach, intestines
e) in the brain and spinal cord

16. Name the cause of local hemosiderosis:
a) intravascular hemolysis
b) extravascular hemolysis
c) disorder of porphyrin metabolism
d) cholestasis
e) biliary stasis

17. Name the pathological condition in which local hemosiderosis occurs:
a) hemolytic anemia
b) hematoma of the brain
c) malaria
d) hemochromatosis
e) poisoning with hemolytic toxin

18. Specify the disease in which hemosiderosis of the lungs occurs:
a) in hemolytic anemia
b) in chronic bronchitis
c) in pulmonary tuberculosis
d) in rheumatic mitral valve disease
e) in chronic abdominal aortic aneurysm

19. Name the appearance of the lungs in hemosiderosis:
a) areas of lung tissue breakdown
b) dense and brown
c) resembling honeycombs and dense
d) cherry-colored and dense
e) increased airiness

20. The localization of sideroblasts and siderophages in the lung parenchyma in hemosiderosis of the lungs is determined in all structures except:
a) alveolar lumens
b) bronchiole lumens
c) bronchial lumens
d) perivascular tissue and lung stroma
e) parietal pleura

21. The color to which hemosiderin granules stain in the Perl's reaction:
a) red
b) orange
c) azure
d) maroon
e) black

22. In the foci of diapedetic hemorrhages, you can find:
a) hemosiderin
b) hemin
c) hemomelanin
d) porphyrin
e) hematoidin

23. Name the types of jaundice based on the mechanism of development:
a) hepatic
b) subhepatic
c) suprahepatic
d) all answers are correct

e) all answers are incorrect

24. Hemosiderosis of the liver occurs in:
a) general hemosiderosis
b) hepatic jaundice
c) subhepatic jaundice
d) fatty liver
e) hemolytic jaundice

25. The localization of hemosiderin in the liver in hemosiderosis is in:
a) capsule
b) Kupffer cells
c) portal vein
d) lipocytes
e) none of the listed structures

26. Subhepatic jaundice is associated with:
a) hemolysis of red blood cells
b) impairment of bilirubin conjugation with glucuronic acid
c) impairment of bile outflow from the liver
d) porphyrin metabolism disorder
e) hemochromatosis

27. Subhepatic jaundice can occur in:
a) viral hepatitis
b) gallstone disease
c) general hemosiderosis
d) congenital porphyria
e) malaria

28. Name the pigment that gives a bronze skin color in Addison's disease:
a) bilirubin
b) lipochrome
c) ceroid
d) melanin
e) biliverdin

29. Define the term "mixed dystrophies":
a) disturbance of metabolic exchange in the parenchyma of organs
b) disturbance of metabolic exchange in the stroma of organs
c) disturbance of protein and carbohydrate metabolism

d) disturbance of complex protein and mineral metabolism in the parenchyma and stroma of organs

e) disturbance of protein and lipid metabolism

30. Brown induration of the lungs is characterized by:

a) hemosiderosis
b) hemorrhages
c) lipofuscinosis
d) melanosis
e) hemomelanosis

31. Name the pigment responsible for the color of the lungs in brown induration:

a) bilirubin
b) hemosiderin
c) hematin
d) melanin
e) lipofuscin

32. Name the pigment formed in the center of a hematoma:

a) bilirubin
b) hematoidin
c) hemosiderin
d) ferritin
e) hematin

33. Name the pigment detected in the base of erosion of the gastric mucosa:

a) hemosiderin
b) sulphohematin
c) ferritin
d) bilirubin
e) lipofuscin

34. List the processes that lead to the development of local hemosiderosis:

a) intravascular hemolysis
b) petechial hemorrhages
c) hematoma formation
d) diapedetic hemorrhages
e) all answers are correct

35. Name the pigment formed in hemolytic anemia:
a) formalin pigment
b) bilirubin
c) hemomelanin
d) lipofuscin
e) sulphohematin

36. Name the pigment belonging to hematin:
a) bilirubin
b) malarial pigment
c) biliverdin
d) adrenochrome
e) ceroid

37. Name the pigment that is produced in excess in malarial coma:
a) lipochrome
b) porphyrin
c) hemomelanin
d) lipofuscin
e) ceroid

38. Specify the type of porphyria:
a) local
b) general
c) congenital
d) intravascular
e) extravascular

39. Proteinogenic pigments include:
a) melanin
b) adrenochrome
c) pigment of enterochromaffin cells' granules
d) all answers are correct
e) all answers are incorrect

40. Name the tissue in which melanocytes and melanophages are not found:
a) epidermis
b) dermis
c) iris of the eye
d) retina of the eye
e) cardiac muscle stroma

41. Type of melanosis by prevalence:
a) congenital
b) acquired
c) local
d) vascular
e) systemic

42. Type of melanosis depending on the cause:
a) idiopathic
b) acquired
c) local
d) primary
e) secondary

43. Name the disease in which widespread melanosis is not observed:
a) Albinism
b) Addison's disease
c) melanoma
d) nevus
e) Graves' disease

44. Name the hormone involved in the development of melanoderma in Addison's disease:
a) corticosteroids (excess)
b) corticosteroids (deficiency)
c) adrenocorticotropic hormone (ACTH)
d) glucagon
e) insulin

45. Specify the type of local melanosis:
a) leukoderma
b) nevus
c) tanning
d) vitiligo
e) Addison's disease

46. Name the changes associated with the weakening or disappearance of pigmentation:
a) albinism
b) leukoderma
c) vitiligo

d) all answers are correct
e) all answers are incorrect

47. Name the acquired disease in which widespread melanosis develops:
a) albinism
b) Addison's disease
c) melanoma
d) nevus
e) Graves' disease

48. The development of Addison's disease occurs with the involvement of:
a) the brain
b) ovaries
c) adrenal glands
d) stomach
e) liver

49. Melanin is formed from:
a) phenylalanine
b) cholesterol
c) tyrosine
d) ceroid
e) myelin

50. Name the pigment that belongs to the group of lipogenic pigments:
a) adrenochrome
b) lipofuscin
c) hemosiderin
d) porphyrin
e) pigment of enterochromaffin cells' granules

51. Name the stage of lipofuscin formation in a cell:
a) stage of lipofuscin formation
b) stage of old lipofuscin
c) stage of mature lipofuscin
d) stage of ceroid formation
e) stage of geluchrom formation

52. Type of lipofuscinosis depending on the cause:
a) undefined
b) secondary

c) idiopathic
d) widespread
e) local

53. Brown atrophy of the myocardium is characterized by:
a) enlargement of the heart
b) epicardial proliferation of adipose tissue
c) presence of hemosiderin in cardiomyocytes
d) reduction in heart volume and mass
e) accumulation of adrenochrome in cardiomyocytes

54. Localization of lipofuscin in the liver:
a) in hepatocytes
b) in stromal cells
c) in the lumen of sinusoids
d) in the vascular wall
e) in bile capillaries

55. In brown atrophy of parenchymatous organs, one of the following pigments accumulates:
a) ceroid
b) hemosiderin
c) lipofuscin
d) melanin
e) hematoporphyrin

56. Macroscopic characteristics of brown atrophy of the liver:
a) the liver is reduced in size, the tissue is clay-like in appearance
b) the liver is reduced in size, the tissue is brown, the margin is leathery
c) the liver is enlarged, the tissue is brown
d) lipochrome accumulates in hepatocytes
e) hemosiderin accumulates in hepatocytes

57. In the cells of skeletal muscle in cachexia, there is an accumulation of:
a) hemosiderin
b) gelanin
c) ferritin
d) lipofuscin
e) hypochrome

58. Name the disease in which there is no disturbance of nucleoprotein metabolism:

a) malaria
b) gout
c) uric acid diathesis
d) urinary stone disease
e) uric acid infarction

59. Name the substances that make up nucleoproteins:

a) protein, glycosaminoglycans
b) protein, DNA, RNA
c) protein, potassium
d) protein, lipofuscin
e) protein, porphyrin

60. The following changes lead to the development of gout:

a) precipitation of uric acid and its salts in tissues
b) hyperuricemia
c) hyperuricosuria
d) all answers are correct
e) all answers are incorrect

61. Specify the tissue changes that occur in response to the precipitation of uric acid salts in gout:

a) necrosis
b) productive inflammation
c) sclerosis
d) all answers are correct
e) all answers are incorrect

62. Name the organ where calcium is deposited:

a) parathyroid glands
b) bones
c) kidneys
d) large intestine
e) liver

63. Name the organs that participate in the excretion of calcium from the body:

a) sweat glands
b) bone marrow
c) colon

d) lungs
e) parathyroid glands

64. Name the hormone that regulates calcium metabolism in the body:
a) insulin
b) adrenocorticotropic hormone
c) PTH
d) calcitonin
e) glucagon

65. Calcium can be detected in tissues using one of the following histochemical methods:
a) PAS reaction
b) Grimelius reaction
c) Von Kossa's method
d) Van Gieson's stain
e) Perl's reaction

66. Name the forms of calcification depending on the mechanism of occurrence:
a) metastatic
b) metabolic
c) dystrophic
d) all answers are correct
e) all answers are incorrect

67. The level of calcium in the blood with metastatic calcification:
a) unchanged
b) lowered
c) increased
d) fluctuates
e) constant

68. The level of calcium in the blood with metabolic calcification:
a) unchanged
b) lowered
c) increased
d) fluctuates
e) hyperkalemia

69. The level of calcium in the blood with dystrophic calcification:
a) unchanged

b) lowered
c) increased
d) fluctuates
e) constant

70. Most commonly, in metastatic calcification, calcium salts are deposited in organs, except for:
a) lungs
b) stomach walls
c) kidneys
d) myocardium
e) brain

71. Ultrastructural localization of primary calcium deposits in the myocardium and kidneys in metastatic calcification:
a) endoplasmic reticulum
b) mitochondria
c) Golgi apparatus
d) cell nuclei
e) cell membranes

72. Characteristics of dystrophic calcification:
a) a local process
b) calcium is deposited in areas of necrosis and dystrophy
c) calcium is deposited in areas of sclerosis
d) all answers are correct
e) all answers are incorrect

73. Mechanism of development of calcareous metastases:
a) lowering of blood calcium levels
b) deposition of calcium salts in necrotic tissues
c) increase in blood calcium levels
d) deposition of calcium salts in areas of sclerosis
e) calciphylaxis

74. The development of rickets is based on a disturbance in the metabolism of:
a) sodium
b) copper
c) phosphorus
d) potassium
e) iron

75. Name the cause of rickets:
a) hypercalcemia
b) hypophosphatemia
c) deficiency of vitamin D
d) excess of vitamin D
e) deficiency of vitamin A

76. Name the cause of rickets in pregnant women:
a) deficiency of ultraviolet radiation
b) low intake of vitamin D with food
c) impaired absorption of vitamin D in the intestine
d) increased consumption of vitamin D with normal intake
e) excess ultraviolet radiation

77. In the gallbladder, stones of the following chemical composition can form:
a) urates
b) oxalates
c) phosphates
d) phleboliths
e) calcium

78. Name the changes that can occur due to the presence of stones in the kidneys:
a) tuberculosis
b) hydronephrosis
c) kidney cancer
d) polycystic kidney disease
e) primary contracted kidney

79. Specify the composition of stones that can form in the urinary tract:
a) calcium
b) urates
c) oxalates
d) phosphates
e) all answers are correct

80. Name the disease that is primarily caused by a disturbance in copper metabolism:
a) Gaucher's disease
b) hemochromatosis

c) Wilson-Konovalov disease
d) melanosis
e) Girke's disease

81. Name the disease in which hypokalemia develops:
a) Addison's disease
b) periodic paralysis
c) Wilson-Konovalov disease
d) Gaucher's disease
e) tuberculosis

4. NECROSIS, APOPTOSIS

1. Definition of the concept "necrosis":
a) organ hypoxia
b) dystrophy
c) organism death
d) hyperemia
e) necrosis of tissues in a living organism

2. Name the stages of the necrotic process:
a) paranecrosis
b) necrobiosis
c) cell death
d) autolysis
e) all answers are correct

3. Definition of the concept "necrobiosis":
a) one of the stages of necrosis
b) autolysis
c) reversible dystrophic changes
d) irreversible dystrophic processes
e) pathobiosis

4. Definition of the concept "paranecrosis":
a) one of the stages of hyalinosis
b) necrobiosis stretched over time
c) similar to dystrophic changes but reversible
d) autolytic tissue melting
e) cell and tissue death in a living organism

5. Definition of the concept "autolysis":
a) one of the stages of necrosis
b) irreversible dystrophic processes
c) decomposition of dead substrate by hydrolytic enzymes
d) necrobiosis stretched over time
e) cell death

6. Name an enzyme involved in the autolysis of the cell nucleus:
a) acid phosphatase
b) DNase (deoxyribonuclease)
c) alkaline phosphatase
d) cytochrome oxidase
e) transferase

7. Specify the cell's ultrastructure that facilitates autolytic enzymatic processes within the cell:
a) Golgi apparatus
b) mitochondria
c) lysosomes
d) endoplasmic reticulum
e) microsomes

8. Type of necrosis developing from the influence of low and high temperatures:
a) indirect
b) toxic
c) trophoneurotic
d) direct
e) vascular

9. Specify a type of indirect necrosis:
a) vascular
b) toxic
c) traumatic
d) wound
e) burn

10. Specify a form of direct necrosis:
a) vascular
b) ischemic
c) traumatic
d) allergic

e) trophoneurotic

11. Specify the causes of direct necrosis:
a) nerve damage
b) cessation of blood flow
c) action of acids, toxins
d) sensitization of the organism
e) formation of immune complexes

12. The causes of indirect necrosis include everything except:
a) actions of physical factors
b) vessel thrombosis
c) obstruction of a vessel by an embolus
d) compression of a vessel by a tumor node
e) immediate-type hypersensitivity reactions

13. Specify etiological types of necrosis:
a) toxic
b) vascular
c) traumatic
d) all answers are correct
e) all answers are incorrect

14. Name a microscopic sign of cell nucleus necrosis:
a) heterolysis
b) pyknosis, karyolysis
c) karyokinesis
d) swelling of mitochondria
e) thickening of nuclear membrane

15. Changes in the stroma of an organ during necrosis:
a) ischemia
b) hyalinosis
c) amyloidosis
d) fibrinoid necrosis
e) hemosiderosis

16. Type of necrosis based on the mechanism of action of the etiological factor:
a) direct
b) gangrene
c) sequestrum

d) bedsore
e) infarct

17. In a sensitized organism, which type of necrosis develops:
a) trophoneurotic necrosis
b) toxic necrosis
c) allergic necrosis
d) traumatic necrosis
e) vascular necrosis

18. Specify the most common localization of fibrinoid necrosis:
a) muscles
b) nervous tissue
c) bone tissue
d) vascular wall
e) adipose tissue

19. Specify the etiological type of necrosis that develops in the Arthus phenomenon:
a) vascular
b) toxic
c) traumatic
d) allergic
e) trophoneurotic

20. Specify the causes of vascular necrosis:
a) vessel thrombosis
b) thromboembolism
c) vessel spasm
d) all answers are correct
e) all answers are incorrect

21. Around the focus of necrosis in living tissues, there is the development of:
a) autolysis
b) tissue hypoxia
c) demarcation inflammation
d) necrobiosis
e) calcification

22. Characteristics of vascular necrosis:
a) direct, caused by catecholamines

b) traumatic
c) indirect, can occur due to shunting of blood flow
d) trophoneurotic
e) allergic

23. Name a disease in which vascular necrosis often occurs:
a) tuberculosis
b) lobar pneumonia
c) influenza
d) anemia
e) arterial hypertension

24. Name the morphological form of necrosis:
a) toxic
b) coagulative
c) traumatic
d) infarct
e) sequestrum

25. When exposed to chemical and physical factors, what will develop:
a) mechanical necrosis
b) vascular necrosis
c) trophoneurotic necrosis
d) traumatic necrosis
e) allergic necrosis

26. Specify the typical localization of colliquative necrosis:
a) bones
b) connective tissue
c) brain
d) spleen
e) myocardium

27. Specify the varieties of coagulative necrosis:
a) caseous
b) Zenker's necrosis of the anterior abdominal wall muscles
c) fibrinoid
d) waxy
e) all answers are correct

28. Name a disease in which fibrinoid necrosis often occurs:
a) intestinal infections

b) rheumatoid arthritis
c) influenza
d) leukemia
e) childhood infections

29. Name a disease in which caseous necrosis develops:
a) intestinal infections
b) atherosclerosis
c) tuberculosis
d) abdominal typhus
e) arterial hypertension

30. Give a microscopic characteristic of the demarcation zone:
a) zone of ischemia
b) accumulation of leukocytes and fullness of blood vessels
c) accumulation of erythrocytes
d) vessel spasm
e) connective tissue capsule

31. Definition of the concept "gangrene":
a) etiological type of necrosis
b) clinical-morphological form of necrosis
c) vascular necrosis
d) necrosis of tissues in contact with the external environment
e) toxic necrosis

32. Specify types of gangrene:
a) dry
b) wet
c) bedsore
d) all answers are correct
e) all answers are incorrect

33. Name an organ where gangrene can develop:
a) lungs
b) brain
c) uterus
d) liver
e) heart

34. Specify the most common localization of wet gangrene:
a) intestines

b) spinal cord
c) heart
d) umbilical cord
e) liver

35. Type of necrosis in tuberculosis:
a) wet
b) waxy
c) coagulative, caseous
d) coagulative, fibrinoid
e) Zenker's necrosis

36. Type of necrosis that develops in the direct abdominal muscles during acute infectious diseases:
a) caseous
b) colliquative
c) waxy
d) fibrinoid
e) cheesy

37. Synonym for total colliquative cell necrosis:
a) fatty degeneration
b) apoptosis
c) hyaline droplet degeneration
d) paranecrosis
e) ballooning degeneration

38. Specify the most common localization of dry gangrene:
a) extremities
b) intestines
c) heart
d) spleen
e) lungs

39. Name the chemical compound that causes the black color of gangrenous tissues:
a) hemomelanin
b) lipofuscin
c) sulfhemoglobin
d) ferrous sulfide
e) hematoidin

40. Characteristics of tissues in dry gangrene:

a) hardening, shriveling
b) well-defined demarcation line
c) tissue dense, dark in color
d) all answers are correct
e) all answers are incorrect

41. Characteristics of tissues in wet gangrene:

a) swelling, edema
b) indistinct demarcation line
c) tissue purplish-black in color
d) all answers are correct
e) all answers are incorrect

42. Microscopic change in the serous membrane of the intestine during gangrene development:

a) fibrinous inflammation
b) sclerosis
c) hyaline degeneration
d) hemosiderosis
e) deposition of hematoidin

43. Specify the most common cause of intestinal gangrene:

a) intoxication
b) thrombosis of mesenteric arteries
c) coprolithiasis
d) coprostasis
e) abdominal adhesions

44. Name a disease in which intestinal gangrene often develops:

a) atherosclerosis
b) pneumonia
c) tuberculosis
d) diabetes mellitus
e) bronchitis

45. Name the type of gangrene that develops on the skin in debilitated children:

a) sequestrum
b) wet gangrene
c) dry gangrene
d) anaerobic gangrene

e) aerobic gangrene

46. Definition of the concept "bedsore":
a) trophoneurotic necrosis
b) etiological type of necrosis
c) a type of hyperplasia
d) a type of infarction
e) allergic necrosis

47. Definition of the concept "sequestrum":
a) a type of gangrene
b) etiological type of necrosis
c) a type of calcification
d) an area of necrosis that has not undergone autolysis and sclerosis
e) clinical-morphological form of necrosis

48. Definition of the concept "infarct":
a) toxic necrosis
b) allergic necrosis
c) direct necrosis
d) vascular necrosis
e) clinical-morphological form of necrosis

49. Specify the most common localization of an infarct:
a) lower extremities
b) heart
c) gallbladder
d) stomach
e) pancreas

50. Name a disease in which vascular necrosis often occurs:
a) tuberculosis
b) atherosclerosis
c) influenza
d) actinomycosis
e) syphilis

51. Synonym for vascular necrosis:
a) infarct
b) dystonic
c) allergic
d) gangrene

e) sequestrum

52. Characteristic outcome of dry necrosis:
a) thrombosis
b) encapsulation
c) scarring
d) petrifaction
e) correct answers b, c, d

53. Characteristic outcome of wet necrosis in the brain:
a) scarring
b) petrifaction
c) mummification
d) ossification
e) cyst formation

54. Unfavorable outcome of necrosis:
a) purulent liquefaction
b) ossification
c) organization
d) encapsulation
e) cyst formation

55. Favorable outcomes of necrosis:
a) organization
b) petrifaction
c) ossification
d) encapsulation
e) all answers are correct

56. Name a variety of necrosis that often develops in the intestines:
a) bedsore
b) dry gangrene
c) wet gangrene
d) noma
e) sequestrum

57. Name a variety of necrosis that often develops in bones:
a) bedsore
b) gangrene
c) infarct
d) sequestrum

e) noma

58. Specify the typical localization of a sequestrum:
a) myocardium
b) lungs
c) bones
d) brain
e) muscles

59. Specify the varieties of necrosis that can develop in the lungs:
a) coagulative necrosis
b) wet gangrene, infarct
c) sequestrum
d) bedsore
e) dry gangrene

60. Name an organ where dry gangrene can develop:
a) extremities
b) lungs
c) small intestine
d) large intestine
e) uterus

61. Specify microscopic changes in the kidneys during infarction:
a) necrosis of glomeruli, necrosis of tubules, vessels
b) glomerular tuft proliferation
c) glomeruli preserved, tubules necrotic
d) necrosis of glomeruli, tubules preserved
e) necrosis of only proximal and distal tubules

62. Histochemical reaction used to detect early signs of myocardial necrosis:
a) Sudan III
b) Toluidine blue
c) Potassium tellurite reaction
d) PAS reaction
e) Van Gieson's picrofuchsin

63. The histochemical reaction with potassium tellurite to detect early signs of myocardial necrosis is based on:
a) early disappearance of glycogen from cardiomyocytes
b) disappearance of lipids

c) appearance of lipid inclusions
d) disappearance of protein
e) appearance of protein grains

64. Specify the change in mitochondria detected in the early stages of myocardial necrosis:
a) condensation
b) rupture of cristae
c) hyperplasia of mitochondria
d) hypertrophy of mitochondria
e) calcium deposition on cristae

65. Name the most common outcome of caseous necrosis:
a) petrifaction
b) hyaline degeneration
c) purulent liquefaction
d) cyst formation
e) ossification

66. Macroscopic appearance of splenic infarction:
a) triangular, red, dense
b) triangular, flaccid, gray
c) round, dense, white
d) triangular, dense, white
e) on the capsule of hemorrhage

67. Characteristic morphological manifestations of follicular necrosis of the spleen in infectious diseases (sepsis, abdominal typhus):
a) karyorrhexis, karyolysis
b) plasmorhexis
c) plasmolysis
d) plasmocoagulation
e) hyaline degeneration

68. Macroscopic condition of the spleen capsule at the site of infarction:
a) sclerosis
b) hyaline degeneration
c) hemorrhage
d) adhesions
e) fibrinous inflammation

69. Clinical manifestation of necrosis of kidney tubular epithelium:

a) anuria (acute kidney failure)
b) chronic kidney failure
c) hematuria
d) proteinuria
e) cylinderuria

70. Name the pathological process in the myocardium that develops with coronary artery thrombosis:
a) colliquative necrosis
b) myocardial infarction
c) sequestrum
d) gangrene
e) hyaline degeneration

71. Name the main etiological factor of epithelial necrosis of proximal and distal kidney tubules (necrotic nephrosis):
a) toxic
b) traumatic
c) chemical
d) thrombosis of the renal artery
e) thromboembolism of the renal artery

72. The most characteristic manifestations of epithelial necrosis of proximal and distal kidney tubules are:
a) karyopyknosis, plasmolysis
b) karyorrhexis, plasmolysis
c) karyolysis, plasmorhexis
d) plasmocoagulation, karyopyknosis
e) karyorrhexis, plasmorhexis

73. Specify the nephron segments that undergo necrosis in necrotic nephrosis:
a) glomeruli
b) collecting tubule epithelium
c) epithelium of straight tubules
d) epithelium of proximal tubules, epithelium of distal tubules
e) tubular epithelium

74. Name the etiological causes of myocardial infarction:
a) thrombosis
b) thromboembolism
c) vascular spasm

d) all answers are correct
e) all answers are incorrect

75. Specify the pathological condition in the lungs resulting from thromboembolism as a favorable outcome:
a) caseous necrosis
b) fibrinoid necrosis
c) infarction
d) waxy necrosis
e) mucoid swelling

76. Name an organ in which only hemorrhagic infarction occurs:
a) spleen
b) liver
c) kidneys
d) lungs
e) heart

77. Name the most common outcome of myocardial infarction:
a) aseptic autolysis
b) petrifaction
c) purulent liquefaction
d) organization
e) cyst formation

78. Specify the pathological condition in the lungs resulting from thromboembolism:
a) hemorrhagic pulmonary infarction
b) general hemosiderosis
c) ischemic infarction
d) gangrene
e) pulmonary tuberculosis

79. Name the mechanism of formation of hemorrhagic rim in myocardial infarction:
a) paralysis of small vessels
b) thrombosis of vessels
c) hyaline degeneration of vessels
d) fibrinoid necrosis of vessels
e) lipid droplet degeneration of cardiomyocytes

80. Name the type of necrosis that occurs in the area of the umbilical cord segment in all newborns when it is clamped:

a) wet gangrene
b) colliquative
c) coagulative
d) dry gangrene
e) bedsore

81. Name the necrosis of the renal tubular epithelium:

a) glomerulonephritis
b) necrotic nephrosis
c) lupoid necrosis
d) pyelonephritis
e) nephrolithiasis

82. All statements are correct regarding the development of myocardial infarction, except:

a) upon macroscopic examination during autopsy, it is diagnosed 2 hours after coronary artery occlusion

b) 3-5-day-old infarction is easily detected on autopsy due to its light gray color

c) typical microscopic changes are detected 8 hours after and are represented by karyolysis and karyorrhexis

d) leukocytic infiltration is most pronounced at 2-4 days after coronary artery occlusion

e) pericarditis more often occurs with transmural infarction than with subendocardial and intramural infarction

83. Choose the correct conclusion:

a) heterolysis - tissue changes associated with the use of a fixative for making histological preparations

b) autolysis - tissue melting with extracellular enzymes

c) fibrinoid necrosis - ischemic necrosis that occurs with the occlusion of vessels by fibrin clots

d) apoptosis - cell death due to the accumulation of protein granules

e) necrobiosis - a stage of apoptosis

84. All types of necrosis are correctly matched with the organs for which they are typical, except:

a) coagulative necrosis - heart, kidneys
b) colliquative necrosis - spleen, lung
c) caseous necrosis - various organs

d) fibrinoid necrosis - vessel walls
e) waxy necrosis - abdominal wall muscles

5. CIRCULATORY DISORDERS. HYPEREMIA. STASIS

1. Give the definition of the concept "bleeding":
a) the exit of blood from the cavity of the heart or the lumen of a vessel into the surrounding environment or body cavities
b) the exit of blood plasma from the lumen of a blood vessel
c) the exit of blood from the cavity of the heart into a body cavity
d) increased vascular permeability
e) the exit of blood plasma proteins from the lumen of a blood vessel

2. Bleeding from the uterus is called:
a) hemorrhage
b) diarrhea
c) metrorrhagia
d) catarrh
e) myomalacia

3. The accumulation of blood in the pericardial cavity is called:
a) hemothorax
b) hemangioma
c) hemopericardium
d) hydrothorax
e) pericarditis

4. The accumulation of blood in the pleural cavity is called:
a) hemopericardium
b) hydrothorax
c) fibrothorax
d) pleuritis
e) hemothorax

5. The accumulation of blood in the abdominal cavity is called:
a) hemopericardium
b) hemoperitoneum
c) ascites
d) peritonitis
e) hamartoma

6. Name the process in which coagulated blood accumulates in tissues with a disruption of their integrity:

a) hematoma
b) ischemia
c) hemangioma
d) hyperemia
e) edema

7. Name the process in which blood accumulates in tissues with the preservation of tissue elements:

a) hemorrhagic infiltration
b) hematoma
c) hemangioma
d) hemosiderosis
e) hemoblastosis

8. Give the definition of the concept "ecchymosis":

a) accumulation of blood in cavities
b) small hematoma
c) bleeding in the skin
d) flat bleeding in the skin, mucous membranes
e) petechial hemorrhages

9. Give the definition of the concept "petechiae":

a) multiple large hemorrhages
b) coalescing hemorrhages in the skin
c) point hemorrhages
d) large hemorrhages in the mucous membranes
e) flat hemorrhages

10. Name the mechanisms of bleeding:

a) vessel rupture
b) erosion of the vessel wall
c) increased permeability of the vessel wall
d) all answers are correct
e) none of the answers are correct

11. The listed pathological processes can contribute to vessel wall rupture, except:

a) injury
b) trauma
c) necrosis

d) inflammation
e) cytomegalovirus

12. Name the pathological process in which heart rupture can occur:
a) regeneration
b) edema
c) hypertrophy
d) myocardial infarction
e) hyalinosis

13. Name a disease in which aortic rupture is possible:
a) rheumatism
b) mitral valve stenosis
c) bronchiectasis
d) syphilis
e) pneumonia

14. Name a disease in which bleeding in the brain is often observed:
a) stenosis of the carotid artery
b) arterial hypertension
c) syphilis
d) iron-deficiency anemia
e) tuberculosis

15. Indicate the type of bleeding in the brain that occurs with arterial hypertension:
a) hemangioma
b) liquefactive necrosis
c) ischemic infarction
d) petechiae
e) hematoma

16. Name the mechanism of hematoma development in arterial hypertension:
a) erosion of the vessel wall
b) rupture of the vessel
c) increased permeability
d) edema
e) hyalinosis

17. Indicate the change in the vessel wall that contributes to its rupture in arterial hypertension:

a) hyalinosis
b) amyloidosis
c) mucoid swelling
d) stasis
e) sludge phenomenon

18. Indicate pathological processes in which erosive bleeding in organs is possible:

a) inflammation
b) necrosis
c) malignant tumor
d) all answers are correct
e) none of the answers are correct

19. Specify the factor that causes damage to the vessel wall in the focus of purulent inflammation:

a) proteolytic enzymes of leukocytes
b) microorganisms
c) edema
d) hyperemia
e) fibrinoid necrosis

20. List diseases in which gastrointestinal bleeding is possible:

a) Crohn's disease
b) stomach ulcer
c) abdominal typhus
d) stomach cancer
e) all answers are correct

21. Pulmonary bleeding is possible in all of the following diseases except:

a) acute abscess
b) atherosclerosis
c) chronic abscess
d) tuberculosis
e) lung cancer

22. Gastrointestinal bleeding is possible in all of the following diseases except:

a) duodenal ulcer
b) mucoviscidosis
c) dysentery
d) colon cancer

e) non-specific ulcerative colitis

23. Specify the characteristic symptom of gastrointestinal bleeding:
a) melena
b) vomiting with "coffee ground" appearance
c) hematuria
d) hemochromatosis
e) melanosis

24. Name the factor that is important in the pathogenesis of diapedetic bleeding:
a) electrolyte disturbances
b) hyperlipidemia
c) increased vascular wall permeability
d) vessel wall rupture
e) erosion of the vessel wall

25. Name a disease in which diapedetic bleeding may occur:
a) Pompe's disease
b) vasculitis
c) Gaucher's disease
d) Niemann-Pick disease
e) overdose of anticoagulants

26. Give the name of the syndrome in which diapedetic bleeding takes on a systemic character:
a) hemolytic
b) diapedetic
c) disseminated coagulopathy
d) hemorrhagic
e) fibrinolytic

27. Specify a favorable outcome of bleeding in the brain:
a) formation of a rusty cyst
b) formation of a fibrous scar
c) liquefactive necrosis
d) inflammation
e) hyalinosis

28. Specify an unfavorable outcome of bleeding as a pathological process:
a) resorption of blood

b) cyst
c) canalization
d) coagulation
e) necrosis

29. List the vessels from which diapedetic bleeding may occur:
a) arterioles
b) venules
c) capillaries
d) all answers are correct
e) none of the answers are correct

30. Give the definition of the concept "plasmorrhagia":
a) blood exit from the lumen of a vessel
b) the exit of blood plasma from the bloodstream
c) accumulation of plasma in body cavities
d) accumulation of blood in tissues
e) vessel wall rupture

31. Give the definition of the concept "plasmatic impregnation":
a) exit of plasma from the bloodstream
b) blood exit from the lumen of a vessel
c) diapedesis
d) impregnation of the vessel wall and surrounding tissues with plasma
e) impregnation of surrounding tissues with blood

32. Specify a disease in which bleeding in the adrenal glands can be a cause of death:
a) meningococcemia
b) atherosclerosis
c) lung cancer
d) stomach cancer
e) pneumonia

33. Specify the pathological process that can develop in the case of extreme vascular permeability:
a) plasmorrhagia
b) atherosclerosis
c) amyloidosis
d) fibrinoid necrosis
e) erosion of the vessel wall

34. List the factors that most commonly lead to damage to microvessels:
a) atherosclerosis
b) tumor processes
c) mucoid swelling
d) muddy swelling
e) immunopathological reactions

35. Specify the outcome of plasmatic impregnation:
a) tumor
b) hematoma
c) hyalinosis
d) amyloidosis
e) atherosclerosis

36. Among the main forms of lymphatic system insufficiency, all but one includes:
a) mechanical
b) functional
c) dynamic
d) associated with impaired drainage function
e) resorptive

37. Name the pathological process that develops in the stroma of organs and tissues in cases of chronic lymphatic stasis:
a) hyalinosis
b) sclerosis
c) amyloidosis
d) infiltration
e) fibrinoid

38. Specify the factor that determines the activation of fibroblasts in cases of chronic lymphatic stasis:
a) dystrophy
b) hyperemia
c) edema
d) hypoxia
e) necrobiosis

39. Provide a description of transudate:
a) turbid
b) clear, containing no more than 2% protein
c) contains red blood cells

d) contains fibrin
e) contains 10% protein

40. Give the name for the diffuse accumulation of edematous fluid in subcutaneous adipose tissue:
a) anasarca
b) ascites
c) polycythemia
d) plethora
e) exudation

41. Give the name for the accumulation of transudate in the pericardial cavity:
a) hairy heart
b) pancaked heart
c) hydropericardium
d) pericarditis
e) hemopericardium

42. Give the name for the accumulation of edematous fluid in pleural cavities:
a) pleuritis
b) hemothorax
c) fibrothorax
d) pneumothorax
e) hydrothorax

43. Give the name for the excessive accumulation of cerebrospinal fluid in the brain's ventricles:
a) encephalitis
b) hydrocephalus
c) hydrocele
d) glioblastoma
e) edema

44. Reduced tissue fluid content is called:
a) dehydration
b) edema
c) hypoplasia
d) hypovolemia
e) atrophy

45. Specify a disease in which dehydration can develop:
a) arterial hypertension
b) cholera
c) hemoblastoses
d) encephalitis
e) stomach cancer

46. Name the main types of circulatory disturbances:
a) hyperemia
b) hemorrhage
c) thrombosis
d) stasis
e) all answers are correct

47. Give the definition of the concept "venous congestion":
a) reduced blood flow to an organ or tissue
b) increased blood flow to an organ or tissue
c) sudden dilation of venous vessels
d) increased blood filling of an organ
e) increased blood filling of an organ due to reduced blood outflow

48. Name a disease that leads to the development of acute total venous congestion:
a) myocardial infarction
b) heart defect
c) chronic ischemic heart disease
d) bronchopneumonia
e) cardiopathic amyloidosis

49. In acute venous congestion in tissues, the following pathological processes are observed, except:
a) plasmatic impregnation
b) plasmorrhagia
c) edema, stasis
d) hyalinosis
e) diapedetic hemorrhages

50. Specify the pathological process that develops in the parenchyma of organs in cases of acute total venous congestion:
a) sclerosis
b) amyloidosis
c) fibrinoid

d) hyalinosis
e) necrosis

51. List the changes observed in the lungs in acute venous congestion:
a) edema, hemorrhages
b) hyalinosis
c) amyloidosis
d) fibrinoid
e) sclerosis

52. Name the predominant change in nephrocytes of the kidneys in acute venous congestion:
a) dystrophy
b) hyalinosis
c) amyloidosis
d) ischemia
e) thrombosis

53. Specify the change in the stroma of organs characteristic of chronic total venous congestion:
a) necrosis
b) sclerosis
c) dystrophy
d) amyloidosis
e) inflammation

54. The development of sclerosis in hypoxia is based on:
a) tissue consolidation
b) stimulation of collagen synthesis by fibroblasts
c) stimulation of amyloid synthesis
d) plasma protein denaturation
e) fatty infiltration

55. For the macroscopic description of a mottled liver in chronic total venous congestion, all are correct except:
a) sharp edges
b) increased in size
c) dense consistency
d) mottled appearance on section
e) smooth surface

56. Specify the microscopic changes that account for the mottled appearance on section of the liver in chronic total venous congestion:

a) expansion and congestion of central parts of lobules
b) regeneration of hepatocytes
c) carbohydrate degeneration of hepatocytes
d) hepatocytes dysplasia
e) hepatocytes metaplasia

57. Name the process that develops in the lungs in chronic total venous congestion:

a) brown atrophy
b) brown induration
c) general hemosiderosis
d) atrophy
e) necrosis

58. Name the pathological process that leads to the development of brown induration in the lungs:

a) edema
b) brown atrophy
c) lipoidosis
d) arterial hypotension
e) arterial hyperemia

59. Factors playing a role in the morphogenesis of brown induration in the lungs are correctly stated, except:

a) stasis fullness
b) hypertension in the small circulation
c) hypoxia
d) nervous-endocrine disorders
e) diapedetic hemorrhages

60. Name the change in the kidneys in chronic total venous congestion:

a) hemosiderosis
b) hyalinosis
c) brown induration
d) sclerosis
e) amyloidosis

61. Name a disease in which mottled liver is encountered as a result of local venous congestion:

a) Budd-Chiari syndrome

b) Paget's disease
c) Hodgkin's disease
d) atherosclerosis
e) Krukenberg's disease

62. The mechanism of the development of localized venous congestion includes:
a) increased venous outflow from part of an organ or part of the body
b) increased venous inflow
c) increased arterial blood flow to an organ
d) heart defect
e) compression of a major vein by a tumor

63. Give the definition of the term "hypovolemia":
a) reduction of blood flow due to acceleration of blood outflow
b) reduction of arterial blood volume
c) reduction of blood flow due to insufficient blood inflow
d) reduction of venous blood volume
e) reduction of tissue fluid volume

64. List the types of hypovolemia depending on the causes of occurrence:
a) angiospastic
b) obstructive
c) compression
d) due to blood redistribution
e) all answers are correct

65. Name a pathological process that can develop as a result of obstructive hypovolemia:
a) sclerosis
b) tumor
c) petrification
d) infarction
e) ossification

66. Specify one of the possible outcomes of thrombosis:
a) fibrinoid swelling
b) suppurative liquefaction
c) lipoid degeneration
d) perforation of the vessel wall
e) malignant transformation

67. Name one of the reasons for the development of compression hypovolemia of an organ:

a) compression of the outflowing vein by a tumor
b) compression of the inflowing vein by a tumor
c) closure of the lumen of the inflowing vessel by a thrombus
d) closure of the lumen of the outflowing vessel by a thrombus
e) spasm of the outflowing vessel

68. Specify the reason for the development of gastrointestinal bleeding in a patient with chronic gastric ulcer:

a) transition of the inflammatory process to the vessel wall in the base of the ulcer
b) erosion of the vessel wall at the base of the ulcer by proteolytic enzymes during suppuration
c) erosion of the vessel wall at the base of the ulcer by gastric juice
d) rupture of the vessel wall at the base of the ulcer
e) diapedesis of erythrocytes from vessels at the base of the ulcer

69. Name the condition in which diapedetic hemorrhage can occur in a newborn:

a) toxoplasmosis
b) birth trauma
c) asphyxia
d) pyloric stenosis
e) patent ductus arteriosus

6. THROMBOSIS. EMBOLISM. INFARCTION.

1. Give the definition of the concept of "thrombosis":

a) circulation of formed elements in the blood
b) intravital blood clotting in the cavities of the heart and/or vessel lumen
c) blood clotting in serous cavities
d) postmortem blood clotting
e) cessation of blood flow

2. Name the macroscopic parts of a thrombus:

a) erythrocytes, fibrin
b) leukocytes, platelets
c) head, body, tail
d) inclusion of potassium and magnesium
e) inclusion of calcium, pigments

3. Specify the type of thrombus depending on its composition:
a) organized
b) white, red
c) with a corrugated surface
d) yellow
e) parietal

4. List the elements that make up a white thrombus:
a) erythrocytes, fibrin, leukocytes
b) blood plasma proteins
c) platelets, leukocytes, fibrin
d) fibrin, erythrocytes
e) platelets, fibrin, erythrocytes

5. List the elements that make up a red thrombus:
a) blood plasma proteins
b) erythrocytes, fibrin, platelets
c) fibrin, leukocytes
d) leukocytes, platelets, fibrin
e) erythrocytes

6. List the elements that make up a mixed thrombus:
a) erythrocytes, leukocytes, fibrin
b) leukocytes, fibrin, blood plasma proteins
c) fibrin, platelets
d) blood plasma proteins, erythrocytes
e) platelets, erythrocytes

7. Name a synonym for DIC syndrome:
a) hemorrhagic syndrome, anemia
b) prethrombotic state
c) thromboembolic syndrome
d) thrombohemorrhagic purpura
e) consumptive coagulopathy

8. Name the conditions that can be complicated by DIC syndrome:
a) extensive trauma
b) pregnancy nephropathy
c) shock
d) all answers are correct
e) all answers are incorrect

9. Name the morphological manifestations of DIC syndrome:

a) thrombi in microcirculatory vessels
b) multiple hemorrhages
c) multiple small foci of necrosis in organs
d) all answers are correct
e) all answers are incorrect

10. Name the common predisposition that contributes to thrombus formation:

a) blood flow disturbance
b) increased blood flow
c) anemia
d) imbalance between the coagulation and anticoagulation systems
e) platelet aggregation

11. Name a local factor that contributes to thrombus formation:

a) inhibition of coagulation factors
b) activation of fibrinogen
c) slowing and disturbance of blood flow
d) changes in blood composition
e) patient's age

12. Name the stage of thrombus formation:

a) hemolysis of erythrocytes
b) plasmorrhagia
c) coagulation of fibrinogen
d) precipitation of platelets
e) leukopedesis

13. Name the favorable outcomes of thrombosis:

a) amyloidosis
b) organization
c) edema
d) calcification
e) organization and calcification

14. Specify the main morphological manifestation of thrombus organization:

a) deposition of amyloid
b) deposition of calcium salts
c) proliferation of connective tissue

d) smoothening
e) vascularization

15. Specify the part of the thrombus where its organization begins:
a) head
b) body
c) tail
d) does not matter
e) back

16. Name the outcome of thrombosis in which fissures lined with endothelium appear in the thrombus:
a) canalization
b) petrification
c) epithelization
d) phlebitis formation
e) organization

17. Name an unfavorable outcome of thrombosis:
a) vascularization
b) canalization
c) suppurative liquefaction
d) calcification
e) lysis

18. In the case of thrombosis of a nutrient artery in an organ, what develops:
a) inflammation
b) edema
c) hyperemia
d) ischemia
e) infarction

19. Thrombosis of the deep veins of the calf can be complicated by:
a) myocardial infarction
b) intestinal infarction
c) gangrene of the lower extremity
d) cerebral artery thromboembolism
e) lung infarction

20. Name the types of thrombi based on their relation to the vessel lumen:

a) parietal
b) mixed
c) vascular
d) elastic
e) hyalin

21. Parietal thrombi are often found in the following locations, except:
a) on the epicardium
b) in large arteries
c) in heart aneurysms
d) in vessel aneurysms
e) in large veins

22. An obstructive thrombus is dangerous for:
a) developing hyperemia
b) developing infarctions and gangrene
c) developing amyloidosis
d) developing nephrotic syndrome
e) developing hemorrhagic syndrome

23. Name the cause of thrombus formation in aortic aneurysms:
a) integrity breach of the vessel's intima
b) thromboembolism
c) venous stasis
d) arterial hyperemia
e) necrosis

24. Specify the location where hyaline thrombi are often found:
a) in the aorta
b) in coronary arteries
c) in veins
d) in the renal artery
e) in microcirculatory vessels

25. Specify the location where laminated thrombi are often found:
a) in capillaries
b) in coronary arteries
c) in the cavity of an aortic aneurysm
d) in veins
e) in the renal artery

26. Give the definition of the concept of "embolism":

a) intravital blood clotting

b) the circulation of particles not normally found in the blood or lymph and their obstruction of vessel lumens

c) blood exiting the vascular bed

d) cessation of blood flow

e) postmortem blood clotting

27. Specify the main mechanism of embolism development:

a) closure of the vessel lumen

b) fatty degeneration

c) pinocytosis

d) karyorrhexis

e) karyolysis

28. Give the definition of "orthograde embolism":

a) movement of the embolus with the blood flow

b) movement of the embolus against the blood flow

c) movement of the embolus from the small circulation to the large circulation, bypassing the lungs

d) movement of the embolus along veins

e) movement of the embolus along arteries

29. Give the definition of "paradoxical embolism":

a) movement of the embolus against the blood flow

b) movement of the embolus with the blood flow

c) movement of the embolus from the small circulation to the large circulation, bypassing the lungs

d) cessation of embolus movement

e) slowed embolus movement

30. Give the definition of "retrograde embolism":

a) movement of the embolus through an open oval window

b) movement of the embolus against the blood flow

c) movement of the embolus with the blood flow

d) movement of the embolus through arteriovenous anastomoses

e) movement of the embolus through lymphatic vessels

31. Name the most common type of embolism in clinical practice:

a) bacterial

b) air

c) gas

d) fatty

e) thromboembolism

32. Name a disease in which bacterial embolism occurs:
a) atherosclerosis
b) malignant tumors
c) sepsis
d) caisson disease
e) bone fractures

33. Name a disease in which tissue embolism occurs:
a) malignant tumors
b) neck injuries
c) bone fractures
d) infectious diseases
e) atherosclerosis

34. Caisson disease can develop in:
a) speleologists
b) pilots
c) mountaineers
d) divers
e) welders

35. Conditions leading to the occurrence of air embolisms:
a) bone injuries
b) neck vein injuries
c) tissue contusion
d) vessel rupture
e) caisson disease

36. The cause of fat embolism development:
a) improper administration of liquid medications
b) ulceration of atherosclerotic plaque
c) femoral fractures
d) burns
e) excessive consumption of fatty foods

37. Fat emboli in the lungs are located:
a) in veins
b) in arteries
c) in capillaries
d) in the pulmonary artery

e) in arteriovenous anastomoses

38. Fat embolism can be diagnosed using the following staining:
a) picric acid
b) PAS reaction
c) sudan III
d) Perls' reaction
e) congo red

39. Thromboembolic syndrome often develops with:
a) childhood infections
b) viral infections
c) cardiovascular diseases
d) stomach diseases
e) accumulation diseases (thaesaurismoses)

40. Specify the locations of thrombi that can be sources of thromboembolism in the systemic circulation:
a) on the valve flaps of the right heart chambers
b) in the cavity of a heart aneurysm
c) in the cavity of an aortic aneurysm
d) all answers are correct
e) all answers are incorrect

41. Name the source of pulmonary artery thromboembolism:
a) thrombi in pulmonary veins
b) thrombi in veins of the lower extremities
c) thrombi in the portal vein
d) thrombi in arteries of the pelvis
e) thrombi in leg arteries

42. Name the mechanism of death in pulmonary artery trunk thromboembolism:
a) rupture of the heart
b) arrest of the heart due to the pulmocoronary reflex
c) asphyxiation
d) acute venous congestion
e) pulmonary edema

43. Give a characteristic of a pulmonary artery embolus:
a) shiny
b) rough surface, freely lying in the vessel lumen

c) layered
d) elastic
e) adhered to the vessel wall

44. Give the definition of "infarction":
a) traumatic necrosis
b) metabolic disorder in tissues
c) vascular necrosis
d) necrosis of an organ communicating with the external environment
e) direct necrosis

45. Name the factor that determines the shape of infarction in organs:
a) organ shape
b) size of the thromboembolus
c) angiarchitecture
d) functional state of the organ
e) reactivity of the organism

46. Infarction most commonly occurs in all of the following organs, except:
a) myocardium
b) brain
c) lungs
d) kidneys
e) lower extremities

47. Name the morphological type of infarct:
a) vascular necrosis
b) white, red
c) triangular
d) thromboembolic
e) as a result of vessel rupture

48. Name the main causes of infarction:
a) due to vessel spasm
b) due to functional overstrain
c) due to thrombosis
d) all answers are correct
e) all answers are incorrect

49. List the organs in which white infarction occurs:
a) intestines, spleen

b) liver, lungs
c) heart, lungs, brain
d) spleen, brain
e) kidneys, liver, retinal

50. Name the organ in which red infarction occurs:
a) lungs
b) spleen
c) brain
d) heart
e) intestines, kidneys

51. Name the organ in which white infarct with a hemorrhagic rim occurs:
a) brain
b) spleen
c) lungs
d) stomach
e) kidney

52. Name a favorable outcome of infarction developing by colliquative necrosis type:
a) suppurative liquefaction
b) canalization
c) vascularization
d) cyst
e) calcification

53. Name a favorable outcome of infarction:
a) organization
b) suppurative liquefaction
c) organ atrophy
d) canalization
e) septic autolysis

54. Name the cause of myocardial infarction:
a) intramural hemorrhage
b) thrombus in the superior vena cava
c) thrombus in the inferior vena cava
d) sudden coronary artery dilation
e) prolonged coronary artery spasm

55. Name a disease in which myocardial infarction often occurs:
a) acute venous congestion
b) heart defect
c) chronic venous congestion
d) anemia
e) arterial hypertension

56. Name a lethal complication of myocardial infarction:
a) heart rupture
b) venous congestion
c) organization
d) chronic heart aneurysm formation
e) pericarditis

57. Name a favorable outcome of myocardial infarction:
a) aseptic autolysis
b) suppurative liquefaction
c) cardiosclerosis
d) hairy heart
e) myocardial hypertrophy

58. Name the cause of lung infarction:
a) rupture of pulmonary veins
b) thrombosis of small branches of the pulmonary artery
c) thrombosis of the main pulmonary artery
d) congestion of small branches of the pulmonary artery
e) thromboembolism of the main pulmonary artery

59. Give a macroscopic description of lung infarction:
a) dark red, triangular in shape
b) often in the lung apex
c) irregular shape, dark red
d) concrete-like consistency
e) round

60. Specify the microscopic difference between lung infarction and preserved tissue:
a) zone of edema, hemorrhage
b) zone of demarcation inflammation
c) zone of necrosis, congestion
d) proliferation of connective tissue
e) lymphomacrophage infiltrate

61. Specify an unfavorable outcome of lung infarction:
a) aseptic autolysis
b) thromboembolic complications
c) sclerosis
d) suppurative liquefaction
e) amyloidosis

62. Specify a favorable outcome of lung infarction:
a) organization
b) septic autolysis
c) cyst formation
d) abscess formation
e) pleuritis

63. Give a macroscopic description of kidney infarction:
a) red
b) red with a white border
c) irregular shape
d) triangular
e) round

64. Give a macroscopic description of spleen infarction:
a) regular shape
b) fibrous deposits on the capsule
c) triangular shape
d) white in color
e) red in color

7. INFLAMMATION

1. Name the main cells in the focus of exudative inflammation:
a) polymorphonuclear leukocytes
b) lymphocytes
c) monocytes
d) labrocytes
e) histiocytes

2. Enumerate the stages of exudative tissue reaction:
a) microcirculatory vessel reaction with impaired blood rheological properties

b) increased vascular permeability at the level of microcirculatory vessels
c) exit of blood formed elements into the focus of exudative inflammation
d) all answers are correct
e) all answers are incorrect

3. Name the mediators of plasma origin:
a) Kallikrein-kinin system
b) Blood coagulation and anticoagulation systems
c) Complement system
d) Kallikrein-kinin system + Blood coagulation and anticoagulation systems + Complement system
e) Kallikrein-kinin system + Blood coagulation and anticoagulation systems

4. Inflammatory cell mediators include all of the following except:
a) interleukins I
b) interleukins II
c) fibrocytes
d) labrocytes
e) collagen

5. Name the cells predominant in purulent exudate:
a) fibroblasts
b) erythrocytes
c) leukocytes
d) macrophages
e) plasma cells

6. Name the type of purulent inflammation:
a) catarrhal
b) croupy
c) abscess
d) putrid
e) diphtheritic

7. Name the tissue changes in the focus of purulent inflammation:
a) sclerosis
b) dystrophy
c) liquefaction
d) hypertrophy
e) atrophy

8. Localization of foci of inflammation in embolic purulent nephritis:

a) cortex, pyramids
b) calices
c) pelvis
d) perinephric connective tissue
e) capsule

9. Specify the shape and color of the foci in the kidney in embolic purulent nephritis:
a) red, round
b) gray, triangular
c) yellow, round
d) red, triangular
e) yellow, triangular

10. In the center of the foci in embolic purulent nephritis, the following pathological process is found:
a) sclerosis
b) atrophy
c) tumor
d) fibrin
e) tissue necrosis

11. Name the disease in which embolic purulent nephritis occurs:
a) angina
b) septicemia
c) dystrophy
d) heart defect
e) septicemia

12. Name the changes in the vessels of the interalveolar septa in croupous pneumonia:
a) empty
b) collapsed
c) congested
d) sclerosed
e) contain emboli

13. The composition of exudate in the alveoli in croupous pneumonia includes all of the following except:
a) erythrocytes
b) fibrin
c) leukocytes

d) necrotized alveolar epithelium
e) labrocytes

14. Name the nature of pleural inflammation in croupous pneumonia:
a) normal appearance
b) sclerosed
c) mucosal inflammation
d) croupous inflammation
e) catarrhal inflammation

15. Name the stethoacoustic phenomenon that occurs in croupous pneumonia:
a) weakened breath sounds
b) accentuation of the first tone over the aorta
c) noise in the projection of the aorta
d) pleural friction sound
e) dry rales

16. The composition of exudate in fibrinous inflammation includes:
a) fibrin
b) polymorphonuclear leukocytes
c) labrocytes
d) fibrin and polymorphonuclear leukocytes
e) transudate

17. In fibrinous inflammation on serous membranes, the following is determined:
a) demarcation line
b) abscess
c) empyema
d) fibrinous plaque
e) sequestrum

18. Name the type of fibrinous inflammation:
a) abscess
b) phlegmon
c) catarrhal
d) diphtheritic
e) mixed

19. The type of fibrinous inflammation on mucous membranes is determined by:

a) the number of vessels
b) depth of necrosis, type of epithelium
c) features of organ stroma
d) location in the parenchymatous organ
e) stage of the disease

20. Specify the type of fibrinous inflammation that occurs on serous membranes:
a) catarrhal
b) diphtheritic
c) phlegmonous
d) serous
e) croupous

21. Localization of catarrhal inflammation:
a) organ stroma
b) serous membranes
c) liver parenchyma
d) mucous membranes
e) organ capsules

22. Mechanism of formation of the liquid part of exudate in exudative inflammation:
a) thixotropy
b) phagocytosis
c) atrophy
d) pinocytosis
e) sclerosis

23. Mechanism of emigration of polymorphonuclear leukocytes in exudative inflammation:
a) transendothelial
b) pinocytosis
c) phagocytosis
d) intraendothelial
e) chemotaxis

24. The types of exudative inflammation, depending on the nature of the exudate, include all of the following except:
a) purulent
b) fibrinous
c) serous

d) catarrhal
e) fibrous

25. In diphtheritic inflammation, the exudate is:
a) purulent
b) putrid
c) serous
d) fibrinous
e) fibrous

26. In diphtheritic inflammation of the tonsils, it is determined by:
a) pus
b) transudate
c) capsule
d) fibrinous plaque
e) sclerosis

27. Define the concept of "inflammation":
a) inflammation is a vascular-mesenchymal tissue response to injury
b) inflammation is the restoration of lost structures
c) inflammation is uncontrolled cell growth
d) inflammation is hyperplasia of cellular ultrastructures
e) inflammation is the circulation of foreign bodies in the bloodstream

28. Name the phases of inflammation:
a) alteration
b) exudation
c) proliferation
d) all answers are correct
e) all answers are incorrect

29. Type of inflammation depending on the predominance of the phase:
a) alterative
b) alternative
c) proliferative
d) recurrent
e) chronic

30. Morphological manifestation of alteration:
a) sclerosis
b) atrophy
c) necrosis

d) hyalinosis
e) fibrosis

31. In dysentery in the rectum, the type of fibrinous inflammation is:
a) putrid
b) catarrhal
c) croupous
d) diphtheritic
e) purulent

32. Specify the factor that is significant in the development of diphtheritic inflammation in dysentery:
a) damaging agent
b) hyperemia
c) action of toxins
d) type of epithelium
e) temperature effect

33. The reason for the formation of cavities in tissues in purulent inflammation is:
a) due to sclerosis
b) due to vascularization
c) due to histolysis
d) due to congestion
e) due to trauma

34. Name the type of inflammation on the epicardium in uremia:
a) purulent
b) putrid
c) fibrinous
d) hemorrhagic
e) catarrhal

35. Figurative name for the heart in chronic renal failure:
a) tiger
b) bull
c) giant
d) droplet
e) hairy

36. Type of inflammation in the stomach and intestines in chronic renal failure:

a) putrid
b) purulent
c) serous-hemorrhagic
d) catarrhal
e) productive

37. Type of exudative inflammation in the kidneys in septicemia:
a) productive
b) serous
c) hemorrhagic
d) purulent
e) fibrinous

38. Variety of exudative inflammation in the pleural cavity in septicemia:
a) furuncle
b) phlegmon
c) empyema
d) carbuncle
e) panniculitis

39. Predominant (cellular) composition of purulent exudate:
a) fibroblasts
b) lymphocytes
c) macrophages
d) leukocytes
e) labrocytes

40. Type of exudative inflammation on serous membranes in acute appendicitis:
a) serous-catarrhal
b) serous-hemorrhagic
c) purulent
d) putrid
e) fibrinous

41. Type of fibrinous inflammation on serous membranes in acute appendicitis:
a) diphtheritic
b) serous-hemorrhagic
c) croupous
d) productive

e) purulent

42. Type of exudative inflammation in the wall of the appendix in acute appendicitis:

a) putrid
b) necrotic
c) petechial
d) purulent
e) fibrinous

43. The subcutaneous fatty tissue is diffusely saturated with greenish-gray liquid, with areas of tissue liquefaction. Name the type of exudative inflammation:

a) serous
b) catarrhal
c) purulent
d) hemorrhagic
e) mucous

44. Name one of the signs of inflammation:

a) cyanosis
b) hyperemia
c) pallor
d) lowering of temperature
e) organ function is not impaired

45. Name hormones that can be classified as anti-inflammatory:

a) somatotropic
b) deoxycorticosterone
c) aldosterone
d) glucocorticoids
e) prolactin

46. Define the term "phlegmon":

a) diffuse purulent inflammation
b) accumulation of pus in a body cavity
c) localized purulent inflammation
d) hematogenous spread of pus
e) pleural inflammation

47. For solid phlegmon, the presence of this characteristic is typical:

a) sclerosis

b) necrosis
c) petrification
d) ossification
e) cyst formation

48. Define the term "cellulitis":
a) phlegmon of the subcutaneous fatty tissue
b) subcutaneous tissue edema
c) localized purulent inflammation
d) inflammation of the meninges
e) gingival inflammation

49. Indicate the peculiarity of the inflammatory reaction in newborns:
a) tendency to limitation
b) rapid recovery
c) generalization of the process
d) tendency to abscess formation
e) lack of hyperemia

50. Name the type of chronic catarrh:
a) serous
b) mucous
c) purulent
d) atrophic
e) hemorrhagic

51. Name a complication of purulent inflammation:
a) sclerosis
b) amyloidosis
c) hyalinosis
d) petrification
e) stone formation

52. The most common outcome of fibrinous inflammation in serous membranes:
a) organization with adhesion formation
b) empyema
c) gangrene
d) purulent liquefaction
e) infarction

53. Name the type of inflammation depending on etiology:

a) acute
b) exudative
c) chronic
d) specific
e) alterative

54. Give the name to the layer of an abscess that produces pus:
a) granulation tissue
b) pus cells
c) pyogenic membrane
d) sinus fistulas
e) acute abscesses

55. The most common cause of aseptic purulent inflammation:
a) staphylococci
b) purulent microorganisms
c) Mycobacterium tuberculosis
d) fungi
e) chemical substances

56. Accumulation of serous exudate in the pleural cavity can lead to:
a) lung gangrene
b) lung infarction
c) lung collapse
d) lobar pneumonia
e) lung abscess

57. Name the type of exudative inflammation that has only an acute course:
a) putrefactive
b) hemorrhagic
c) purulent
d) fibrinous
e) catarrhal

58. Name the phase of the exudation stage:
a) blood sequestration
b) increased vascular permeability
c) thromboembolus formation
d) blood deposition
e) cellular infiltrate formation

59. Name a feature that is not characteristic of inflammation:

a) fever
b) cyanosis
c) organ enlargement
d) pain
e) functional impairment

60. Name the morphological type of necrosis characteristic of specific inflammation:

a) colliquative
b) caseous
c) gangrene
d) waxy
e) fibrinoid

61. Give the definition of "productive inflammation":

a) inflammation characterized by severe tissue damage
b) inflammation characterized by the formation of purulent exudate
c) inflammation characterized by the formation of fibrinous exudate
d) inflammation characterized by the proliferation of histiocytic and hematogenous cells
e) a process characterized by the proliferation of epithelial elements

62. Name the clinico-anatomical feature of productive inflammation:

a) acute course
b) predominance of productive tissue reaction
c) predominance of exudative tissue reaction
d) outcome – death
e) outcome – resorption

63. Name the type of tissue reaction that predominates in productive inflammation:

a) exudation
b) sclerosis
c) proliferation
d) alteration
e) destruction

64. Give a characterization of the proliferation phase:

a) tissue damage
b) circulatory disturbance
c) phagocytosis

d) cell proliferation in the inflammation zone
e) exudate formation

65. List the cells involved in phagocytosis:
a) neutrophils, macrophages
b) lymphocytes
c) histiocytes
d) erythrocytes
e) eosinophils

66. Name the types of phagocytosis in areas of productive inflammation:
a) pinocytosis
b) cytopemphysis
c) incomplete, complete
d) endocytobiosis
e) correct answer not present

67. Origin of cells in the inflammatory infiltrate:
a) hematogenous
b) lymphogenous
c) neurogenic
d) histogenic
e) embryonic

68. Name cells of histogenic origin in areas of productive inflammation:
a) endothelial, fibroblasts
b) lymphocytes
c) eosinophils
d) macrophages
e) monocytes

69. Name cells of hematogenous origin in areas of productive inflammation:
a) endothelial
b) lymphocytes, monocytes, macrophages
c) fibroblasts
d) histiocytes
e) adventitial

70. Types of cellular infiltrate in areas of productive inflammation, all listed except:
a) focal, diffuse

b) giant cell, plasma cell
c) neutrophilic, fibrinous
d) macrophage, epithelioid cell
e) polymorphonuclear

71. Name the characteristic outcome of productive inflammation:
a) sepsis
b) tissue liquefaction
c) sclerosis
d) ulceration
e) formation of fistulas

72. Name types of productive inflammation:
a) interstitial
b) granulomatous
c) polyps, acute condylomas
d) all answers are correct
e) all answers are incorrect

73. Name the type of productive inflammation that develops in the myocardium in syphilis:
a) interstitial
b) granulomatous, specific
c) granulomatous, nonspecific
d) polypoid
e) condylomatosis

74. Name the type of productive inflammation that develops in the myocardium in rheumatism:
a) interstitial
b) granulomatous, nonspecific
c) parenchymal
d) polypoid
e) condyloma

75. Name the type of productive inflammation that develops in the brain in typhoid fever:
a) interstitial
b) granulomatous, nonspecific
c) intermediate
d) polypoid
e) condylomatosis

76. Name the type of productive inflammation that develops on glandular epithelium:

a) interstitial
b) granulomatous
c) intermediate
d) polypoid
e) condylomatosis

77. Name the type of productive inflammation that is characteristic of rabies:

a) interstitial
b) granulomatous, nonspecific
c) intermediate
d) polypoid
e) granulomatous, specific

78. Name the type of productive inflammation that develops in the liver in tuberculosis:

a) interstitial
b) granulomatous, nonspecific
c) intermediate
d) polypoid
e) granulomatous, specific

79. Name the type of productive inflammation that develops in the liver in alveococcosis:

a) interstitial
b) granulomatous, specific
c) granulomatous, nonspecific
d) polypoid
e) condylomatosis

80. Name the type of productive inflammation that is characteristic of syphilis:

a) interstitial
b) granulomatous, specific
c) granulomatous, nonspecific
d) polypoid
e) condylomatosis

81. Name the type of productive inflammation that is characteristic of leprosy:

a) interstitial
b) granulomatous, specific
c) granulomatous, nonspecific
d) polypoid
e) condylomatosis

82. Name the type of productive inflammation that is characteristic of scleroderma:

a) interstitial
b) granulomatous, specific
c) granulomatous, nonspecific
d) polypoid
e) condylomatosis

83. Name the type of productive inflammation that develops around foreign bodies:

a) interstitial
b) granulomatous, specific
c) granulomatous, nonspecific
d) polypoid
e) condylomatosis

84. Characteristics of intermediate inflammation:

a) diffuse cellular infiltrate in subcutaneous adipose tissue
b) focal cellular infiltrate in subcutaneous adipose tissue
c) focal or diffuse cellular infiltrate in the stroma of parenchymal organs
d) diffuse cellular infiltrate in the cells of parenchymal organs
e) diffuse cellular infiltrate in the stroma of hematopoietic organs

85. Features of intermediate inflammation:

a) predominance of productive tissue reaction
b) focal cellular infiltrate in the stroma of parenchymal organs
c) diffuse cellular infiltrate in the stroma of parenchymal organs
d) all answers are correct
e) all answers are incorrect

86. Name the macroscopic sign of interstitial inflammation:

a) macroscopically the organs are unchanged
b) macroscopically the organs are grossly deformed
c) small abscesses in the stroma of parenchymal organs

d) diffuse cellular infiltrate in the stroma of parenchymal organs
e) focal erythrocyte infiltrates in the stroma of parenchymal organs

87. Name the organs in which interstitial inflammation most commonly develops:
a) spleen, lymph node
b) brain, skin
c) heart, lungs, liver
d) skeletal muscle
e) stomach, intestine

88. Specify the characteristic outcome of interstitial inflammation:
a) edema
b) infarction
c) necrosis
d) sclerosis
e) amyloidosis

89. Specify the characteristic outcome of interstitial productive myocarditis:
a) large focal cardiosclerosis
b) myocardial infarction
c) cardiomyopathy
d) small focal diffuse cardiosclerosis
e) amyloidosis

90. Give the definition of the term "granuloma":
a) a nodule composed of aggregates of eosinophils
b) syphilid
c) a nodule composed of a collection of neutrophils
d) a nodule composed of aggregates of cells of the mononuclear-macrophage system
e) a nodule composed of aggregates of basophils

91. Indicate the variety of granulomatous processes depending on the pathogenesis:
a) immune
b) acute
c) subacute
d) chronic
e) recurrent

92. The cells participating in cellular cooperation in an immune granuloma are listed correctly, except for:

a) lymphocytes
b) macrophages
c) epithelioid cells
d) erythrocytes
e) fibroblasts

93. Name the cells that predominate in a non-immune granuloma:

a) a large number of basophils
b) eosinophils
c) labrocytes
d) giant cells of foreign bodies
e) plasma cells

94. Name the acute infectious diseases that lead to granulomatous inflammation:

a) typhoid fever
b) paratyphoid fever
c) rabies
d) all answers are correct
e) none of the answers are correct

95. Name the features of granulomas that develop around animal parasites:

a) accumulation of neutrophils
b) extensive necrosis
c) prevalence of giant cells of foreign bodies
d) prevalence of Langhans giant cells
e) prevalence of basophils

96. Name the feature of granulomas that develop around foreign bodies:

a) exudative tissue reaction
b) productive tissue reaction
c) abscess formation
d) prevalence of Langhans giant cells
e) prevalence of Touton giant cells

97. Name the type of phagocytosis that develops in granulomas in chronic infectious diseases:

a) incomplete
b) incomplete

c) complete
d) endocytobiosis
e) pinocytosis

98. Name the changes in the liver that are characteristic of a multilocular echinococcus:
a) reduction in the size of the liver
b) flabby consistency
c) non-specific granulomatous inflammation develops around the parasite
d) exudative tissue reaction develops around the parasite
e) specific granulomatous inflammation develops around the parasite

99. The peculiarity of the outcome of inflammation around animal parasites:
a) alteration
b) exudation
c) encapsulation, petrification
d) hyalinosis
e) amyloidosis

100. Name the condition of the body that is accompanied by the development of a productive reaction in specific inflammation:
a) weak resistance of the body
b) anergy
c) persistent immunity
d) relative resistance of the body to the pathogen
e) immunodeficiency

101. Name the cells that predominate in a tuberculous granuloma:
a) neutrophils
b) fibroblasts, plasma cells
c) Langhans cells, epithelioid cells, lymphoid cells
d) Virchow cells
e) Mikulicz cells

102. Give a microscopic characteristic of a tuberculous granuloma:
a) absence of vessels and collagen fibers
b) caseous necrosis in the center of the granuloma
c) a large number of epithelioid cells
d) lymphocytes, Langhans giant cells
e) all of the above are correct

103. Name the type of necrosis that is characteristic of inflammation in tuberculosis:

a) waxy
b) infarction
c) gangrene
d) liquefactive
e) caseous

104. Name the type of tuberculous granuloma when the alteration stage predominates:

a) epithelioid-cell
b) necrotic
c) lymphoid-cell
d) giant-cell
e) polymorphic-cell

105. Name the tissue reaction that is characteristic of tuberculosis in the presence of immunity:

a) alterative
b) productive
c) exudative
d) necrotic
e) alterative-exudative

106. Name the type of tissue reaction when the body is highly sensitive to Mycobacterium tuberculosis:

a) productive-necrotic
b) productive
c) mixed
d) alterative-exudative
e) productive-infiltrative

107. The most common location of a solitary (single) gumma:

a) stomach
b) intestine
c) aorta
d) brain
e) bones

108. Name the stage of syphilis in which the productive-necrotic reaction predominates:

a) primary stage

b) early congenital syphilis
c) secondary stage
d) tertiary syphilis
e) late congenital

109. Morphological expression of tertiary syphilis:
a) gummas in internal organs
b) hard chancre
c) leukocytic infiltration of vessels
d) syphilids
e) white pneumonia

110. Macroscopic appearance of the aortic intima in syphilitic mesoaortitis:
a) striated
b) glazed
c) appearance of shagreen skin
d) smooth
e) greasy

111. Characteristics of syphilitic mesoaortitis:
a) involvement of the inner membrane
b) exudative tissue reaction
c) involvement of the outer and middle membranes of the aorta
d) main changes occur in the abdominal aorta
e) there are never any changes in the aortic arch

112. Name the segments of the aorta affected in tertiary syphilis:
a) abdominal segment
b) aortic bifurcation
c) ascending part of the thoracic segment of the aorta, aortic arch
d) descending part of the thoracic segment of the aorta
e) all answers are correct

113. Specify the condition of vasavasorum in syphilitic mesoaortitis:
a) unchanged
b) full-blooded
c) asleep
d) thrombosed
e) productive vasculitis

114. Specify a possible complication of syphilitic mesoaortitis:

a) mitral valve defect
b) cardiosclerosis
c) aortic arch aneurysm
d) abdominal aortic aneurysm
e) tricuspid valve defect

115. Name the cause of death in patients with syphilitic mesoaortitis:
a) myocardial infarction
b) rupture of the thoracic aorta aneurysm
c) rupture of the abdominal aorta aneurysm
d) adrenal insufficiency
e) bleeding in the brain

116. Name the disease in which Mikulich cells are found in the granuloma:
a) tuberculosis
b) syphilis
c) leprosy
d) skleroma
e) glanders

117. Name the granuloma in which Virchow's cells are found:
a) in tuberculosis
b) in syphilis
c) in leprosy
d) in skleroma
e) in glanders

8. TISSUE REPAIR, REGENERATION AND ADAPTATION

1. Give the definition of the concept of "adaptation":
a) transition of one type of tissue to another
b) sclerosis
c) life processes aimed at preserving the species
d) reduction in the mass of an organ
e) false hypertrophy

2. Give the definition of the concept of "compensation":
a) restoration of tissue in place of lost tissue
b) life processes aimed at preserving the species
c) increase in the mass of an organ

d) individual reactions aimed at restoring impaired function
e) metaplasia

3. Give the definition of the concept of "regeneration":
a) transition of one type of tissue to another
b) increase in the volume of cells, tissues, organs
c) replacement of the focus of necrosis with connective tissue
d) restoration of the structure of tissue elements instead of the deceased
e) reduction in the volume of cells

4. Give the definition of the concept of "hypertrophy":
a) tissue necrosis
b) restoration of tissue in place of lost tissue
c) reduction in the volume of cells
d) replacement by connective tissue
e) enlargement of the volume of cells, tissues, organs

5. Give the definition of the concept of "hyperplasia":
a) reduction in the volume of cells, tissues
b) stroma overgrowth in place of parenchyma
c) restoration of tissue in place of lost tissue
d) enlargement of the number of structural elements of tissue, cells
e) reduction in the number of structural elements of tissue, cells

6. Give the definition of the concept of "atrophy":
a) reduction of fat
b) restoration of tissue in place of lost tissue
c) sclerosis
d) in-life reduction in the size of organs, tissues, cells
e) transition of one type of tissue to another

7. Name the phase of the development of compensatory-adaptive processes:
a) phase of hyperemia
b) phase of normalization
c) phase of subsidence
d) phase of exhaustion
e) phase of organization

8. Name a compensatory-adaptive process:
a) inflammation
b) regeneration

c) hyperemia
d) dystrophy
e) tumor

9. Morphological changes in decompensation of cardiac activity are listed correctly, except for:
a) brown atrophy of the myocardium
b) fatty degeneration of the myocardium
c) heart obesity
d) accumulation of lipofuscin
e) metastatic calcification

10. Name the type of wound healing:
a) adhesion
b) autogenous regeneration
c) metaplasia
d) through secondary intention
e) inflammation

11. Name the type of pathological regeneration:
a) hyporegeneration
b) hypertrophy
c) amyloidosis
d) hemochromatosis
e) aregeneration

12. Name the process related to pathological regeneration:
a) compensatory hypertrophy
b) metaplasia
c) atrophy
d) amyloidosis
e) sclerosis

13. List the types of regeneration:
a) physiological
b) youthful
c) senile
d) reparative
e) physiological and reparative

14. List the types of reparative regeneration:
a) complete (restitution)

b) completed
c) pathological
d) incomplete (substitution)
e) complete (restitution) and incomplete (substitution)

15. Name the morphological form of regeneration:
a) cellular
b) vicarious
c) atrophy
d) complex
e) simple

16. Morphological characteristics of the regeneration process in the heart during myocardial infarction:
a) formation of scar in the infarct area
b) narrowing of the cavities
c) proliferation of adipose tissue in the epicardium
d) formation of heart defect
e) pathological hypertrophy

17. Name the cells where only intracellular regeneration occurs:
a) hepatocytes
b) nephrocytes
c) cardiomyocytes
d) epidermis
e) endothelium

18. Ways of implementing regenerative hypertrophy:
a) sclerosis
b) hyperplasia of cells
c) atrophy
d) hyperplasia of cell ultrastructures
e) hyperplasia of cells and ultrastructures of cells

19. Path of implementing regenerative hypertrophy in the myocardium:
a) stroma proliferation
b) hyperplasia of cell ultrastructures
c) proliferation of adipose tissue in the epicardium
d) dilatation of cavities
e) narrowing of cavities

20. Path of implementing regenerative hypertrophy in the liver:

a) hyperplasia of cells
b) stroma proliferation
c) hepatocyte dystrophy
d) hypoplasia of cell ultrastructures
e) cirrhosis formation

21. Type of regeneration to which changes in the surviving myocardium during infarction belong:
a) substitution
b) regenerative hypertrophy
c) regenerative hyperplasia
d) mixed
e) metaplasia

22. Macroscopic characteristics of myocardial hypertrophy:
a) decrease in heart size
b) increase in fat under the epicardium
c) enlargement of heart size
d) sharp vascular congestion
e) twisting of blood vessels

23. Name the process that occurs with true organ hypertrophy:
a) proliferation of adipose tissue
b) stroma proliferation
c) enlargement of parenchymal mass
d) sclerosis of the capsule
e) reduction in organ volume

24. Signs of eccentric hypertrophy of the myocardium:
a) heart cavities of normal size
b) narrowing of heart cavities
c) decrease in fat in the epicardium
d) fatty degeneration of cardiomyocytes
e) correct answer not present

25. Give the definition of the concept of "restitution":
a) incomplete regeneration
b) compensation of a defect with tissue identical to the one that perished
c) replacement of a defect with a scar
d) regenerative hypertrophy
e) stroma proliferation

26. Give the definition of the concept of "substitution":

a) incomplete regeneration
b) compensation of a defect with tissue identical to the one that perished
c) replacement of a defect with fat
d) complete regeneration
e) brown atrophy

27. All of the following are types of hypertrophy (hyperplasia) based on the mechanism of origin, except:

a) working
b) mixed
c) neurohumoral
d) vicarious
e) hypertrophic overgrowths

28. Microscopic signs of myocardial hypertrophy are listed correctly, except:

a) increase in the size of cardiomyocytes
b) enlargement of the number of cardiomyocytes
c) increase in the size of nuclei of cardiomyocytes
d) increase in the amount of stroma
e) correct answer not present

29. Give the definition of the concept of "vicarious hypertrophy":

a) hypertrophy of one of the paired organs after the removal of the second
b) hypertrophy of an organ with increased workload
c) hypertrophy of an organ with replacement of part of it with scar tissue
d) neurohumoral hypertrophy
e) hypertrophic overgrowths

30. Name the organ in which the development of vicarious hypertrophy is possible:

a) liver
b) pituitary gland
c) spleen
d) kidney
e) testes

31. Pathway of regenerative hypertrophy:

a) phagocytosis
b) atrophy
c) hyperplasia of cells

d) metaplasia
e) sclerosis

32. Microscopic characteristics of cardiomyocytes around the post-infarction scar:
a) regenerative hypertrophy
b) regenerative hyperplasia
c) brown atrophy
d) fatty degeneration
e) necrosis

33. Name the staining used to identify scar tissue in the myocardium and the result of the staining:
a) Sudan III, blue color
b) Sudan IV, yellow color
c) Congo red, red color
d) picrofuchsin according to Van Gieson, red-orange color
e) gentian violet, lilac color

34. Electron microscopic characteristics of hypertrophied cardiomyocytes in the stage of stable compensation:
a) increase in the number of myofilaments
b) increase in the number of mitochondria
c) increase in the size of mitochondria
d) all answers are correct
e) all answers are incorrect

35. Composition of inclusions in the cytoplasm of cardiomyocytes in decompensation:
a) fat
b) glycogen
c) amyloid
d) hemosiderin
e) myoglobin

36. Name the mechanism of development of glandular hyperplasia of the endometrium:
a) working
b) hypertrophic overgrowths
c) neurohumoral
d) vicarious
e) mixed

37. Microscopic signs of glandular hyperplasia of the endometrium are listed correctly, except:

a) thickening of the endometrium
b) thinning of the endometrium
c) glands of convoluted shape
d) cystically stretched glands
e) hyperplasia of stromal cells

38. Name the pathological process detected in the heart of a patient with rheumatic heart disease who died of heart failure:

a) concentric hypertrophy of the heart
b) eccentric hypertrophy of the heart
c) hairy heart
d) hyalinosis of the myocardium
e) fatty heart

39. Name the organ that undergoes compensatory hypertrophy in prostate adenoma:

a) kidney
b) ureter
c) testes
d) bladder
e) urethra

40. Name the process of organization:

a) amyloidosis
b) dystrophy
c) hyperplasia
d) scar formation
e) metaplasia

41. The most common localization of a scar in the myocardium:

a) right ventricle
b) left ventricle
c) right atrium
d) left atrium
e) trabecula of the right ventricle

42. Type of bronchial epithelium formed during metaplasia:

a) ciliated
b) glandular

c) cylindrical
d) multilayered squamous
e) transitional

43. Name the background process in the bronchi as a result of which epithelial metaplasia occurs:
a) chronic bronchitis
b) tumor
c) injuries
d) necrosis
e) cysts

44. Name the pathological process often occurring against the background of epithelial metaplasia:
a) inflammation
b) necrosis
c) cancer
d) amyloidosis
e) dystrophy

45. Correctly listed types of local atrophy, except:
a) dysfunctional
b) due to insufficient blood supply
c) due to pressure
d) oncological
e) under the influence of physical and chemical factors

46. Name a synonym for general atrophy:
a) obesity
b) cachexia
c) brown atrophy
d) necrosis
e) dwarfism

47. Name the pathological process that develops in the brain with obstruction of cerebrospinal fluid outflow:
a) meningitis
b) encephalitis
c) hydrocephalus
d) edema
e) swelling

48. Name the type of atrophy depending on its prevalence:
a) simple
b) complete
c) partial
d) complex
e) local

49. Give an example of dysfunctional atrophy:
a) brown atrophy of the lungs
b) brown atrophy of the myocardium
c) cachexia of the optic nerve after eye removal
d) muscle atrophy with motor neuron death
e) cortical atrophy of the brain in atherosclerosis

50. Signs of brown atrophy of the myocardium:
a) twisted course of vessels
b) accumulation of lipofuscin in cells
c) reduction of heart mass
d) all answers are correct
e) all answers are incorrect

51. When obstructed urine outflow in the kidneys, the development of:
a) hydrocephalus
b) shrunken kidney
c) hydronephrosis
d) pyelonephritis
e) glomerulonephritis

52. Name the type of atrophy to which hydronephrosis can be attributed:
a) due to insufficient blood circulation
b) general
c) dysfunctional
d) neurotic
e) due to pressure

53. Microscopic characteristic of brown atrophy of the liver:
a) deformation
b) fatty infiltration
c) lipofuscin in hepatocytes
d) sharp posterior edge
e) increase in size

54. Name the organs in which vicarious hypertrophy develops:

a) testes
b) adrenal glands
c) liver
d) heart
e) brain

55. Name the organs in which brown atrophy occurs:

a) spleen
b) skeletal muscles
c) kidneys
d) stomach
e) lungs

56. Name the organ undergoing atrophy under conditions of prolonged use of prednisolone:

a) testes
b) ovaries
c) kidneys
d) adrenal glands
e) prostate

57. Name the organ undergoing atrophy under conditions of prolonged insulin use:

a) heart
b) spleen
c) testes
d) pancreatic islets
e) fundic glands of the stomach

58. Name the organ that undergoes atrophy when the lumen of the ureter is blocked by a stone:

a) bladder
b) prostate gland
c) kidney
d) adrenal gland
e) urethra

59. Name the reasons for the development of hydronephrosis:

a) blockage of the ureteral lumen by a stone
b) tumor of the ureter

c) congenital stricture of the ureter
d) all answers are correct
e) all answers are incorrect

60. Macroscopic signs characteristic of hydronephrosis are listed correctly, except:
a) dilation of the pelvis and calyces
b) enlargement of kidney size
c) decrease in kidney size
d) thinning of the layers of the kidney
e) sclerosis of kidney tissue

61. Name the type of atrophy that develops in the muscles of the limbs with gradual closure of the femoral artery lumen by an atherosclerotic plaque:
a) atrophy due to insufficient blood circulation
b) dysfunctional
c) due to inactivity
d) due to reduced load
e) neurotic

62. Name the macroscopic sign of brown atrophy of the liver:
a) enlarged sizes
b) rounded anterior edge
c) sharp anterior edge
d) rounded posterior edge
e) sizes are not changed

63. Electron microscopic signs of hypertrophied cardiomyocytes in the stage of heart failure decompensation are listed correctly, except:
a) increase in the number of myofilaments
b) increase in the number of mitochondria
c) increase in the size of mitochondria
d) breakdown of mitochondria and appearance of lipid inclusions in the cytoplasm
e) reduction in nuclear size

64. Name the disorder of lipid metabolism that leads to general atrophy:
a) obesity
b) cachexia
c) hemochromatosis
d) fatty degeneration of the myocardium

e) lipodystrophy

65. Name the tissue in which metaplasia most frequently occurs:
a) nervous
b) renal
c) epithelial
d) cardiac
e) hematopoietic

66. Name the regulatory mechanism of regeneration:
a) humoral
b) immunological
c) nervous
d) functional
e) physiological

67. Pathways of regeneration of small vessels are listed correctly, except:
a) budding
b) branching
c) division
d) autogenous neoplasia
e) heterogeneous neoplasia

68. Components of granulation tissue are listed correctly, except:
a) newly formed small vessels
b) young mesenchymal cells
c) fibroblasts
d) glycogen
e) hematogenous cells

69. Give the definition of the term "granulation tissue":
a) young, cell-rich connective tissue with thin-walled blood vessels
b) tissue rich in pigment granules
c) immature adipose tissue
d) islets of hematopoietic tissue
e) coarse-fibered scar tissue

70. Stages that make up the regeneration of connective tissue are stated correctly, except:
a) formation of granulation tissue
b) proliferation of young mesenchymal elements and formation of microvessels

c) maturation of granulation tissue
d) formation of coarse-fibered scar tissue
e) formation of adipose tissue

71. Give the definition of the term "keloid":
a) excessive formation of collagen fibers with subsequent hyalinosis
b) accumulation of fat in the scar
c) appearance of cartilaginous tissue in the scar
d) marked tissue swelling
e) insufficient formation of collagen fibers

72. Provide examples of neurohumoral hypertrophy (hyperplasia):
a) glandular hyperplasia of the endometrium
b) gynecomastia
c) acromegaly
d) all answers are correct
e) all answers are incorrect

73. Definitions of processes are stated correctly, except:
a) regeneration — restoration of structural elements of tissue in place of dead ones
b) metaplasia — replacement of the focus of necrosis with connective tissue
c) hypertrophy — increase in the volume of cells, tissues, organs
d) hyperplasia — increase in the number of structural elements of tissue, cells
e) atrophy — lifelong reduction in the size of organs, tissues, cells

74. Name the disease in which the right ventricle of the heart hypertrophies:
a) chronic obstructive pulmonary emphysema
b) chronic glomerulonephritis
c) aortic heart disease
d) adenomatous hyperplasia of the prostate
e) renal artery stenosis

75. Name the disease in which the left ventricle of the heart hypertrophies:
a) chronic obstructive pulmonary emphysema
b) chronic glomerulonephritis
c) tricuspid heart disease
d) adenomatous hyperplasia of the prostate
e) renal artery stenosis

76. Name the disease in which the bladder hypertrophies:
a) chronic obstructive pulmonary emphysema
b) chronic glomerulonephritis
c) aortic heart disease
d) adenomatous hyperplasia of the prostate
e) renal artery stenosis

77. Provide an example of pathological regeneration:
a) formation of a scar in the place of a myocardial infarction
b) regenerative hypertrophy of the lung
c) formation of excess bone callus
d) hypertrophy of cardiomyocytes around the scar
e) hyperplasia of ganglion cell ultrastructures

9. TUMORS. PART 1

1. The characteristics of a malignant tumor do not include:
a) pathological process characterized by cell proliferation
b) pathological process characterized by uncontrolled cell proliferation
c) tumor is characterized by a disturbance of differentiation
d) invasive growth is characteristic
e) metastasis is characteristic

2. Types of atypism in a tumor:
a) cellular and tissue
b) biochemical
c) antigenic
d) all answers are correct
e) all answers are incorrect

3. Secondary changes in tumors do not include:
a) inflammation
b) areas of necrosis
c) areas of calcification
d) liquefaction
e) invasion

4. Characteristics of the microscopic structure of a tumor:
a) tumors are composed of atypical cells
b) tumors exhibit properties of cellular and tissue atypism

c) tumors have parenchyma and stroma
d) tumors exhibit invasive growth
e) tumors metastasize

5. Structures represented in the stroma of a tumor:
a) connective tissue of the organ
b) blood vessels
c) nerve fibers
d) all answers are correct
e) all answers are incorrect

6. Types of morphological atypism:
a) complete
b) incomplete
c) cellular
d) tissue
e) cellular and tissue

7. Manifestations of tissue atypism in tumors do not include:
a) cell polymorphism
b) disturbance of the ratio of parenchyma and stroma
c) disturbance of the shape and size of epithelial structures
d) disturbance of polarity and layering of epithelium
e) absence of basal membrane in epithelial complexes

8. Tumors for which only tissue atypism is characteristic:
a) for malignant tumors
b) for benign tumors
c) for malignant and benign tumors
d) for mesenchymal tumors
e) for epithelial tumors

9. Manifestations of cellular atypism in malignant tumors that can be detected at the light microscopic level:
a) cell polymorphism
b) hyperchromatism of their nuclei
c) polymorphism of nuclei
d) all answers are correct
e) all answers are incorrect

10. All manifestations of cellular atypism detected at the ultrastructural level are listed correctly except:

a) absence of mitochondria in tumor cells
b) change in shape, size, and location of mitochondria
c) change in nuclear membrane
d) multiple arrangement of chromatin under the nuclear envelope
e) damage to membrane contacts between the nucleus, mitochondria, and endoplasmic reticulum

11. Principles of morphological classification of tumors:
a) nosological
b) histogenetic
c) histogenetic + by level of differentiation
d) by level of differentiation
e) nosological + histogenetic + by level of differentiation

12. Degree of differentiation of malignant tumors:
a) I degree
b) II degree
c) III degree
d) well-differentiated
e) IV degree

13. Types of tumors based on their degree of maturity:
a) lymphoid tissue tumors
b) borderline tumors
c) mesenchymal tumors
d) epithelial tumors
e) organ-specific tumors

14. Types of tumors based on their histogenesis:
a) epithelial tumors
b) mesenchymal tumors
c) hematopoietic tissue tumors
d) all answers are correct
e) all answers are incorrect

15. Characteristics of tumors with expansive growth:
a) invasion into adjacent tissues
b) formation of a pseudocapsule
c) formation of vascular loops
d) necrosis of surrounding tissues
e) sclerosis of surrounding tissues

16. Characteristics of appositional growth of a tumor:
a) multiple foci of neoplastic transformation
b) single focus of neoplastic transformation
c) formation of a capsule
d) formation of a pseudocapsule
e) merging of multiple foci of necrosis

17. Characteristics of infiltrating growth of a tumor:
a) growth of the tumor into surrounding tissues
b) formation of a pseudocapsule around the tumor
c) formation of a capsule around the tumor
d) multiplicity of foci of tumor growth
e) fusion of multiple foci of tumor growth

18. Theories of the etiology of tumors do not include:
a) theory of local cellular synthesis
b) viral-genetic
c) physico-chemical
d) disontogenetic
e) polyetiological

19. Principles underlying the morphological classification of epithelial tumors:
a) histogenesis
b) histogenesis
c) degree of maturity
d) organ specificity
e) all listed features

20. Types of epithelial tumors based on their histogenesis:
a) tumors from glandular epithelium
b) tumors from squamous epithelium
c) tumors from transitional epithelium
d) all answers are correct
e) all answers are incorrect

21. Benign tumor from squamous and transitional epithelium:
a) adenoma
b) fibroadenoma
c) polyp
d) papilloma
e) condyloma

22. Papillomas are not found in:
a) mucous membrane of the urethra
b) mucous membrane of the true vocal cords
c) mucous membrane of the bladder
d) skin
e) small intestine

23. Macroscopic features of papillomas:
a) spherical shape
b) nipple-like surface
c) does not protrude above the surface
d) smooth surface
e) correct answers a, b

24. Microscopic features of papillomas:
a) tissue atypism is present
b) increased number of layers of epithelium
c) disturbed polarity of the epithelium and basal membrane
d) polarity, complexity of the epithelium, and basal membrane are preserved
e) correct answers a, b, d

25. Consequences of trauma to papillomas:
a) bleeding
b) ulceration
c) malignization
d) inflammation
e) all answers are correct

26. Benign tumor from glandular epithelium:
a) papilloma
b) fibroma
c) adenoma
d) scleroma
e) condyloma

27. Most common localization of adenomas:
a) skin
b) true vocal cords
c) mucous membrane of the stomach
d) mucous membrane of the bladder
e) mucous membrane of the gallbladder

28. A true tumor includes the following polyp:
a) allergic polyp
b) hyperplastic polyp
c) adenomatous polyp
d) sarcoma
e) melanoma

29. Macroscopic features of adenoma:
a) tumor in the form of a nodule within a capsule
b) tumor without a capsule
c) endophytic growth with a stalk
d) saucer-shaped tumor
e) tumor in the form of a disc with ulceration in the center

30. Microscopic features of adenoma include all of the following except:
a) has organoid structure
b) fibrous structure
c) parenchyma of the tumor is represented by glandular formations
d) stroma of the tumor may be developed to varying degrees
e) basal membrane, polarity, and complexity of the epithelium are preserved

31. Histological variants of adenoma:
a) acinous
b) tubular
c) cystic
d) all answers are correct
e) all answers are incorrect

32. In the malignancy of papilloma, the development of:
a) adenocarcinoma
b) transitional cell carcinoma
c) fibrosarcoma
d) sarcoma
e) melanoma

33. In the malignancy of adenoma, the development of:
a) adenocarcinoma
b) transitional cell carcinoma
c) squamous cell carcinoma
d) adenomatous polyp
e) sarcoma

34. Define the term "cancer":
a) malignant tumor
b) malignant tumor of mesenchymal origin tissues
c) malignant tumor of epithelial origin
d) sarcoma variant
e) benign tumor of epithelial origin

35. Name precancerous processes:
a) adenomatous polyps
b) epithelial dysplasia
c) epithelial metaplasia
d) adenomas
e) all answers are correct

36. Forms of intraepithelial cancer where stroma is absent and basal membrane is preserved:
a) medullary cancer
b) scirrhus
c) in situ carcinoma
d) squamous cell carcinoma
e) adenocarcinoma

37. Histological variants of in situ carcinoma depending on histogenesis:
a) adenocarcinoma
b) squamous cell carcinoma
c) transitional cell carcinoma
d) all answers are correct
e) all answers are incorrect

38. Consequences of in situ carcinoma:
a) regression
b) progression to invasive cancer
c) progression to papilloma
d) progression to adenoma
e) recurrence

39. Malignant tumor of squamous epithelium:
a) papilloma
b) squamous cell carcinoma
c) adenoma
d) adenocarcinoma

e) condyloma

40. Manifestations of morphological atypism in squamous cell carcinoma:

a) cellular
b) intracellular
c) no disruption of cell polarity and basal membrane observed
d) antigenic atypism
e) biochemical atypism

41. Characteristics of the growth pattern of poorly differentiated squamous cell carcinoma in hollow organs:

a) exophytic
b) endophytic
c) expansive
d) all answers are correct
e) all answers are incorrect

42. Possible locations of squamous cell carcinoma:

a) lungs
b) heart
c) larynx
d) cervix
e) correct answers a, c, d

43. Preferential metastatic route of squamous cell carcinoma:

a) lymphatic
b) hematogenous
c) implantation
d) perineural
e) mixed

44. Malignant tumor of glandular epithelium:

a) adenoma
b) papilloma
c) adenocarcinoma
d) squamous cell carcinoma
e) transitional cell carcinoma

45. Variants of adenocarcinoma depending on histological structure:

a) acinous
b) tubular

c) trabecular
d) papillary
e) correct answers are all

46. Variants of adenocarcinoma depending on the level of differentiation:
a) low-grade and high-grade
b) acinar and tubular
c) tubular
d) trabecular
e) papillary

47. Characteristics of the growth pattern of well-differentiated adenocarcinoma in a hollow organ:
a) exophytic
b) endophytic
c) invasive
d) all answers are correct
e) all answers are incorrect

48. Possible locations of adenocarcinoma:
a) stomach
b) lungs
c) breast
d) intestine
e) correct answers are all

49. Preferential metastatic route of adenocarcinoma:
a) lymphatic
b) hematogenous
c) implantation
d) perineural
e) mixed

50. Methods of investigation that most accurately determine the organ specificity of a tumor:
a) immunohistochemical
b) microscopic
c) histochemical
d) ultrastructural
e) all answers are correct

51. Name malignant epithelial tumors of the liver:
a) adenocarcinoma
b) hepatocellular carcinoma
c) squamous cell carcinoma
d) hepatosarcoma
e) MALT

52. Name a non-organ-specific malignant tumor of the liver:
a) adenocarcinoma
b) hepatocellular carcinoma
c) squamous cell carcinoma
d) hepatosarcoma
e) cholangiocellular carcinoma

53. Name a feature confirming the organ specificity of hepatocellular carcinoma:
a) lipid vacuoles in cancer cells
b) glycogen in cancer cells
c) droplets of bile in cancer cells
d) tubular structures in the cytoplasm of cancer cells
e) intracellular canaliculi

54. Name a malignant epithelial tumor that develops in the kidneys:
a) angiosarcoma
b) liposarcoma
c) lipoma
d) nephroblastoma
e) mucinous carcinoma

55. Name the features of clear cell renal cell carcinoma cells:
a) granules of glycogen in the cytoplasm
b) lipid droplets in the cytoplasm
c) a large number of mitochondria
d) developed endoplasmic reticulum
e) neuroendocrine granules in the cytoplasm

56. Name characteristic secondary changes for clear cell renal cell carcinoma:
a) papillomatosis
b) hemorrhages
c) foci of necrosis
d) liquefaction

e) correct answers b, c

57. Name the characteristic route of metastasis for clear cell renal cell carcinoma:

a) hematogenous
b) endocytobiosis
c) perineural
d) lymphatic
e) implantation

58. Indicate the period for which the development of nephroblastoma is characteristic:

a) at any age
b) in childhood
c) during embryogenesis
d) in adulthood
e) in old age

10. TUMORS. PART 2

1. Tumor growth etiology theories include all of the following except:

a) viral-genetic
b) polyetiological
c) dysregulatory hormonal
d) theory of cellular local synthesis
e) physicochemical

2. Mechanisms of activation of cellular oncogenes:

a) amplification
b) point mutation + alteration
c) proliferation + point mutation
d) alteration + amplification
e) amplification + point mutation

3. Name the stages of chemical carcinogenesis:

a) alteration
b) initiation + proliferation
c) promotion
d) proliferation
e) initiation + promotion

4. Oncoproteins include all of the following except:
a) homologs of growth factors
b) homologs of growth factor receptors
c) tyrosine kinase
d) nuclear
e) ATP-ase

5. Name a precancerous process:
a) atrophy
b) hypertrophy
c) aplasia
d) regeneration
e) dystrophy

6. Name the main principle of morphological classification of tumors:
a) histogenetic
b) immunological
c) polyetiological
d) ultrastructural
e) physicochemical

7. The histogenetic principle of tumor classification is based on:
a) macroscopic structure of the organ
b) biochemical characteristics of tissues
c) anatomical structure of the organ
d) histological structure of the original tissue
e) ultrastructural features of the tissue

8. Define the term "tumor atypism":
a) metabolic disorders
b) changes in antigenic composition
c) specific properties that distinguish the tumor from normal cells and tissues
d) growth disturbance
e) alteration in growth

9. Name types of atypism in tumors:
a) morphological
b) histochemical, biochemical
c) antigenic
d) all options are incorrect
e) all options are correct

10. Define the term "tumor":

a) transition of one tissue type to another
b) uncontrolled proliferation of cells losing the ability to differentiate
c) proliferation of cells accompanied by increased organ function
d) proliferation of cells accompanied by suppression of organ function
e) cell proliferation

11. Name tumor antigens:

a) Australia antigen
b) transplantation-type isoenzymes
c) embryonic antigens, Australia antigen
d) RNA virus
e) transplantation-type isoenzymes, embryonic antigens

12. Name the types of tumors that differ in the degree of differentiation:

a) large
b) small
c) slow-growing, fast-growing
d) benign, malignant
e) expansive, endophytic

13. The character of tumor growth in relation to surrounding tissues includes all of the following except:

a) invasive
b) expansive
c) endophytic
d) infiltrating
e) appositional

14. Name the character of growth of benign tumors in relation to surrounding tissues:

a) exophytic
b) expansive
c) endophytic
d) infiltrating
e) invasive

15. Name the character of growth of malignant tumors in relation to surrounding tissues:

a) exophytic
b) expansive
c) endophytic

d) infiltrating
e) multicentric

16. The growth of a tumor within the wall of a hollow muscular organ is called:
a) exophytic
b) expansive
c) endophytic
d) infiltrating
e) invasive

17. The growth of a tumor into the lumen of a hollow muscular organ is called:
a) exophytic
b) expansive
c) endophytic
d) infiltrating
e) invasive

18. Give the name of the type of growth of a tumor as a single node:
a) expansive
b) unicentric
c) multicentric
d) exophytic
e) endophytic

19. Give the name of the type of growth of a tumor as multiple nodes:
a) expansive
b) multicentric
c) unicentric
d) multiple
e) appositional

20. Name types of morphological atypism in tumors:
a) antigenic
b) ultrastructural
c) cellular, tissue
d) histochemical
e) correct answer is absent

21. To secondary changes in tumors belong all of the following except:
a) atrophy, dystrophy

b) necrosis, ulceration
c) liquefaction
d) hemorrhage
e) petrification

22. Name manifestations of cellular atypism:
a) cellular and nuclear polymorphism, atypical mitoses
b) cellular and nuclear monomorphism
c) normal mitoses
d) small nuclei of the same shape
e) change of the type of epithelium

23. To the signs of cellular atypism belong all of the following except:
a) characteristic for tumors with moderate differentiation
b) characteristic for malignant tumors
c) expressed cellular polymorphism
d) nuclear-cytoplasmic index shifted toward the nucleus
e) cells and nuclei of the same shape and size

24. Name features of tissue atypism:
a) characteristic only for benign tumors
b) characteristic only for malignant tumors
c) characteristic for tumors with locally destructive growth
d) expressed in a violation of the ratio of parenchyma and stroma
e) the ratio of parenchyma and stroma does not change

25. Give a characteristic of benign tumors:
a) expansive growth, characterized by tissue atypism
b) infiltrating growth
c) exophytic and endophytic growth
d) give metastases and recurrences
e) correct answer is absent

26. To the main characteristics of malignant tumors belong all of the following except:
a) expansive growth
b) infiltrating growth
c) exophytic and endophytic growth
d) give metastases and recurrences
e) characterized by tissue and cellular atypism

27. Name the ways of metastasis of malignant tumors:

a) lymphogenous
b) hematogenous
c) implantation
d) perineural
e) all answers are correct

28. Name the main factor determining the appearance of metastases:
a) nervous system
b) increasing anaplasia of the tumor
c) tumor penetration into the vessel wall
d) metastasis gene
e) APUD system

29. Specify the essence of metastasis:
a) destruction of tumor cells
b) embolism by tumor cells
c) ischemia
d) hyperemia
e) necrosis of the primary tumor node

30. The essence of the Willis tumor field theory:
a) presence of metastases in the tumor field
b) recurrence of the tumor
c) appearance of primary-multiple foci of proliferates, with further tumor transformation of proliferates, and their merging into one node
d) appearance of a large node from the very beginning, occupying the entire field
e) correct answer is absent

31. The essence of tumor progression according to Foulds:
a) complex manifestation of signs of malignancy
b) rapid development of secondary changes in tumors
c) extensive metastasis
d) appearance of tumor properties in cells through selection and mutation of clones
e) appearance of recurrences

32. Name the cells responsible for specific anti-tumor defense:
a) macrophages
b) T-lymphocytes
c) NK cells
d) correct answer is absent

e) all answers are correct

33. Give the name of a tumor arising from derivatives of two or three germ layers:

a) lipoma
b) sarcoma
c) angiofibroma
d) teratoma
e) leiomyosarcoma

34. Name the main structural components of a tumor determined by histological examination:

a) center
b) periphery
c) invasion zone
d) parenchyma, stroma
e) vessels

35. Name the features of the structure of organoid tumors:

a) well-developed parenchyma and stroma
b) poorly developed stroma
c) poorly developed parenchyma
d) encountered only in stromal tumors
e) encountered only in parenchymal tumors

36. Name the features of the structure of histoid tumors:

a) well-developed parenchyma
b) poorly developed stroma
c) early necrosis and ulceration
d) rapid growth
e) all answers are correct

37. Give the name of tumors arising from embryonic displacements:

a) organoid
b) histoid
c) homologous
d) heterologous
e) heterotopic

38. Give a morphological characteristic of fibroma:

a) benign tumor of connective tissue
b) malignant tumor of connective tissue

c) grows only on the skin
d) organ-specific tumor
e) benign tumor of epithelium

39. Give a characteristic of desmoid:
a) a variety of glioma
b) a variety of lipoma
c) localized in the aponeurosis of the anterior abdominal muscles, recurs
d) localized on the head, does not recur
e) occurs mainly in boys

40. Give a characteristic of benign tumors of fibrous tissue:
a) to identify histogenesis, staining with picropus is used
b) types - fibroma, histiocytoma
c) expansive growth, tissue atypism
d) infiltrative growth, to identify histogenesis, the PAS reaction is used
e) correct answers are a, b, c

41. Give a characteristic of benign tumors of fatty tissue:
a) to identify histogenesis, staining with Sudan III, IV is used
b) types - lipoma, hibernoma
c) expansive growth, tissue atypism
d) infiltrative growth, to identify histogenesis, the PAS reaction is used
e) correct answers are a, b, c

42. For lipoma, all of the following are characteristic except:
a) benign tumor of fatty tissue
b) benign tumor of brown fat
c) expansive growth, tissue atypism
d) use Sudan III staining for identification
e) use Sudan IV staining for identification

43. Name a benign tumor of fatty tissue:
a) histoma
b) fibroma
c) hibernoma
d) histiocytoma
e) desmoid

44. Name benign tumors of muscular tissue:
a) granular cell tumor
b) rhabdomyoma

c) leiomyoma
d) all answers are correct
e) all answers are incorrect

45. Give a characteristic of leiomyoma:
a) tumor from myoblasts
b) smooth muscle tumor
c) grows invasively, tissue atypism
d) occurs only in women in the uterus
e) organ-specific tumor

46. Characteristics of fibromyoma include all of the following except:
a) benign tumor of fibrous and muscular tissue
b) benign tumor only of muscular tissue
c) a variety of leiomyoma with well-developed stroma
d) especially common in the uterus
e) often undergoes secondary changes (liquefaction, petrification)

47. Give a characteristic of rhabdomyoma:
a) malignant tumor of striated muscle
b) benign tumor of striated muscle
c) grows invasively, cellular and tissue atypism
d) grows invasively, only tissue atypism
e) occurs only in the tongue

48. Tumors of vascular origin include all of the following except:
a) angiosarcoma
b) lymphangioma
c) granular cell tumor
d) glomus angioma
e) hemangioma

49. Give a characteristic of cavernous hemangioma:
a) benign tumor of vascular origin
b) develops from cavernous tissue
c) grows expansively, tissue atypism
d) all answers are correct
e) all answers are incorrect

50. Give the name of a benign tumor of cartilaginous tissue:
a) chordoma
b) chondroma

c) choristoma
d) chondrosarcoma
e) osteoma

51. Give the name of a benign tumor of bone tissue:
a) Abricosov tumor
b) Berkitt tumor
c) osteosarcoma
d) osteoma
e) Bracket tumor

52. Give a characteristic of osteoma:
a) tumor from cartilaginous tissue
b) low degree of differentiation
c) benign tumor of bone tissue
d) metastasizes primarily hematogenously
e) grows invasively, tissue atypism

53. Characterize fibrosarcoma:
a) divided into soft and dense
b) divided into differentiated and undifferentiated, invasive growth pattern
c) metastasizes by all possible pathways
d) implantation and lymphogenic metastasis
e) correct answer is absent

54. Localization of the first metastases of fibrosarcoma of soft tissues of the thigh:
a) liver
b) kidney
c) spleen
d) lungs
e) inguinal lymph nodes

55. Localization of the first metastases of fibrosarcoma of the small intestine:
a) liver
b) kidney
c) spleen
d) lungs
e) lymph nodes of the mesentery of the intestine

56. The following belong to tumors of muscle tissue, except:

a) rhabdomyoma, leiomyoma
b) malignant hemangioma
c) leiomyosarcoma
d) malignant granular cell tumor
e) rhabdomyosarcoma

57. All of the following are characteristics of leiomyosarcoma, except:
a) malignant tumor of smooth muscle tissue
b) low degree of differentiation
c) cellular and tissue atypism
d) metastasizes primarily perineurally
e) recurs

58. Characterize rhabdomyosarcoma:
a) malignant tumor of striated muscle tissue
b) high degree of differentiation
c) tissue atypism
d) metastasizes primarily lymphogenically
e) first metastases to regional lymph nodes

59. The following are features of angiosarcoma, except:
a) distinguish malignant hemangiopericytoma and hemangioendothelioma
b) first metastases to regional lymph nodes
c) metastasizes hematogenously
d) invasive growth
e) rapid recurrence

60. Characteristics of malignant tumors of adipose tissue include all of the following, except:
a) divided into malignant hemangioma and liposarcoma
b) low degree of differentiation
c) cellular and tissue atypism
d) correct answers
e) incorrect answers

61. The characteristics of liposarcoma include all of the following, except:
a) malignant tumor of brown fat
b) low degree of differentiation
c) metastasizes hematogenously
d) invasive growth, recurrence
e) invasive growth, metastasis

62. Characterize malignant tumor of brown fat:
a) called malignant hemangioma
b) low degree of differentiation
c) invasive growth, metastasis, and recurrence
d) correct answers
e) incorrect answers

63. Name the precancerous process that can lead to melanoma:
a) vitiligo
b) nevus
c) hyperkeratosis
d) acanthosis
e) dermatitis

64. Name the types of nevi:
a) epithelioid
b) compound
c) borderline
d) blue
e) all correct answers

65. The locations of melanoma include all of the following, except:
a) skin
b) meninges of the brain
c) adrenal glands
d) pigmented layer of the eye
e) no correct answer

66. All statements related to melanoma are true, except:
a) malignant tumor of melanin-producing tissue
b) metastasizes only hematogenously
c) metastasizes hematogenously and lymphogenously
d) infiltrative growth
e) recurs

67. According to the classification, tumors of the central nervous system include:
a) brain tumors
b) spinal cord tumors
c) tumors of the autonomic nervous system
d) neuroectodermal and meningeal-vascular tumors

e) correct answer is absent

68. To neuroectodermal tumors belong all of the following, except:
a) neuronal
b) meningeal sarcomas
c) astrocytic
d) oligodendroglial
e) ependymal

69. Characterize astrocytomas:
a) benign tumor of meningeal-vascular origin
b) benign neuroectodermal tumor
c) malignant neuroectodermal tumor
d) invasive growth, recurrence
e) invasive growth, tissue and cellular atypism

70. Name ependymal tumors:
a) medulloblastoma
b) ependymoma, ependymoblastoma
c) glioblastoma, ganglioneuroma
d) choroid papilloma, choroid carcinoma
e) arachnoid endothelioma

71. Name the disease that belongs to systemic neoplastic diseases of hematopoietic tissue:
a) leukemia
b) sarcoma
c) cancer
d) anemia
e) lymphoma

72. Lymphosarcoma belongs to:
a) precancerous disease
b) immune inflammation
c) regional neoplastic disease of hematopoietic tissue
d) systemic neoplastic disease of hematopoietic tissue
e) malignant tumor of mesenchymal origin

73. Define the term "leukemia":
a) regional neoplastic disease of hematopoietic tissue
b) malignant tumor of epithelial origin
c) systemic neoplastic disease of hematopoietic tissue

d) malignant tumor of mesenchymal origin
e) precancerous blood disease

74. Hemoblastoses can include:
a) dysplasia of bone tissue
b) retroperitoneal sarcoma
c) Hodgkin's lymphoma
d) acute leukemia
e) Kaposi's sarcoma

75. Cellular elements that make up malignant lymphomas:
a) only stromal elements
b) epithelial cell elements
c) only lymphoid cells
d) undifferentiated blood cells
e) hematopoietic cell elements and stromal cells

76. Synonym for the term "leukemia":
a) malignant lymphoma
b) leukemia
c) dysplasia
d) sarcoma
e) anemia

77. List the organs where tumor cells proliferate in the initial stage of hemoblastosis:
a) in hematopoietic organs
b) in the cardiovascular system
c) in the musculoskeletal system
d) in the respiratory system
e) in the gastrointestinal tract

78. Name the reasons for the rapid enlargement of organs in leukemia:
a) formation of granulomas
b) edema
c) congestion
d) sclerosis
e) metastasis of tumor cells

79. Name the factors for the development of chronic myeloid leukemia:
a) absence of autosomal pair 13 chromosomes
b) intoxication with benzo(a)pyrene

c) presence of the Philadelphia chromosome
d) ionizing radiation
e) intoxication with benzo(a)pyrene, presence of the Philadelphia chromosome

80. Leukemic leukemia is indicated by the following changes:
a) 100,000 leukocytes in 1 μl of blood
b) 25,000 leukocytes in 1 μl of blood
c) absence of leukemic cells in the blood
d) occasional leukemic cells in the blood
e) "wolf-like" cells in the blood

81. Subleukemic leukemia is indicated by the following changes:
a) 100,000 leukocytes in 1 μl of blood
b) 25,000 leukocytes in 1 μl of blood
c) absence of leukemic cells in the blood
d) occasional leukemic cells in the blood
e) rheumatoid factor in the blood

82. Leukopenic leukemia is indicated by the following changes:
a) 100,000 leukocytes in 1 μl of blood
b) 25,000 leukocytes in 1 μl of blood
c) absence of leukemic cells in the blood
d) occasional leukemic cells in the blood
e) "wolf-like" cells in the blood

83. Aleukemic leukemia is indicated by the following changes:
a) 100,000 leukocytes in 1 μl of blood
b) 25,000 leukocytes in 1 μl of blood
c) absence of leukemic cells in the blood
d) occasional leukemic cells in the blood
e) rheumatoid factor in the blood

84. Name the principles of modern classification of leukemias:
a) change in the number of leukocytes in the blood
b) degree of differentiation of tumor cells and the nature of the course
c) histogenesis of leukemic cells
d) features of clinical treatment
e) change in the number of leukocytes in the blood + degree of differentiation of tumor cells and the nature of the course + histogenesis of leukemic cells

85. Name the principles of dividing leukemias into acute and chronic:

a) duration of the course
b) degree of differentiation of tumor cells and the nature of the course
c) histogenesis of leukemic cells
d) number of leukocytes in peripheral blood
e) localization of leukemic infiltrates

86. Proliferation of undifferentiated or poorly differentiated blast cells of the blood is characteristic of:
a) Hodgkin's lymphoma
b) Pompe's disease
c) acute leukemia
d) anemia
e) lymphosarcoma

87. Proliferation of differentiated leukemic blood cells is characteristic of:
a) Hodgkin's lymphoma
b) Kaposi's sarcoma
c) acute leukemia
d) chronic leukemia
e) Burkitt's tumor

88. Name the cytogenetic forms of chronic leukemia:
a) lymphocytic, monocytic
b) erythremia
c) leukemic, myelocytic
d) myelocytic
e) leukopenic

89. Name the forms of acute leukemia:
a) megakaryoblastic
b) lymphoblastic, myeloblastic
c) myeloma
d) megakaryoblastic, myeloblastic
e) megakaryoblastic, lymphoblastic, myeloblastic

90. List chronic leukemias:
a) myeloma
b) lymphoblastic leukemia
c) Franklin's heavy chain disease
d) myeloma, Franklin's heavy chain disease
e) correct answer is absent

91. Indicate the type of chronic leukemia:
a) Hodgkin's lymphoma
b) Sezary's disease
c) lymphoblastic
d) lymphosarcoma
e) myeloblastic

92. Name the leukemia of monocytic origin:
a) Hodgkin's lymphoma
b) lymphosarcoma
c) histiocytosis
d) myeloid leukemia
e) erythromyelosis

93. Name chronic lympholeukemias:
a) Waldenstrom's macroglobulinemia
b) myeloma
c) lymphoblastic leukemia
d) cutaneous lymphomatosis
e) myeloma, Franklin's heavy chain disease

94. Histogenetic form of chronic leukemia:
a) leukemic
b) erythremia
c) myeloblastic
d) leukocytic
e) leukopenic

95. Name the reason for the development of anemia in leukemia:
a) "porphyric" spleen
b) diffuse hyperplasia of lymphoid tissue
c) displacement of red bone marrow
d) diffuse hypoplasia of lymphoid tissue
e) leukemic infiltration of blood vessel walls

96. Among the main causes of death in patients with chronic leukemia are not:
a) secondary infections, sepsis
b) intracranial hemorrhage
c) hepatic and renal failure
d) blast crisis

e) chronic heart failure

97. A sudden increase in the number of blasts and individual mature elements in the absence of transitional maturing forms qualifies as:

a) blast crisis
b) anemia
c) leukemic relapse
d) aplasia of the bone marrow
e) fatty degeneration of the bone marrow

98. Name the general pathological process that underlies the appearance of leukemic infiltrates in organs:

a) chronic venous congestion
b) sclerosis
c) metastasis
d) displacement of the red marrow from the bone marrow
e) portal hypertension

99. List the complications that occur in leukemias due to immune system disturbances:

a) intracranial hemorrhage
b) sepsis, secondary infection, ulcerative-necrotic changes in the gastrointestinal tract
c) acute adrenal insufficiency
d) acute heart failure
e) acute respiratory failure

100. In the organs of hematopoiesis during acute leukemia, there are:

a) leukemic infiltrates from mature (cytic) elements
b) sclerosis of the bone marrow
c) hypoplasia of the bone marrow
d) leukemic infiltrates from blast cells
e) metaplasia of the bone marrow into bone tissue

101. Name the form of acute leukemia in children:

a) chloroleukemia
b) Hodgkin's lymphoma
c) Paget's disease
d) histiocytosis
e) Cesari's disease

102. Indicate the form of acute leukemia that occurs only in children:

a) congenital leukemia
b) lymphocytic leukemia
c) Paget's disease
d) histiocytosis
e) Cesari's disease

103. Macroscopic characteristics of the appearance of the bone marrow of tubular bones in patients with acute undifferentiated leukemia:
a) red juicy
b) pioid
c) yellow
d) obliteration of the bone marrow cavity
e) rusty

104. Name characteristic complications of acute leukemia:
a) acute heart failure
b) acute renal failure
c) leukemic pneumonitis, leukemic meningitis
d) myocardial infarction
e) acute respiratory failure

105. Name the stages of the course of chronic myeloid leukemia:
a) monoclonal stage, polyclonal stage
b) stage of red dystrophy
c) stage of yellow dystrophy
d) stage of advanced changes
e) prodromal stage

106. Name a sign of exacerbation of chronic leukemia:
a) pulmonary thromboembolism
b) blast crisis
c) acute heart failure
d) acute renal failure
e) ascites

107. Specify the cells that appear in the blood in the terminal stage of chronic myeloid leukemia:
a) myelocytes
b) reticular cells
c) blast cells
d) Berezovsky-Sternberg cells
e) myeloma cells

108. Macroscopic appearance of the bone marrow in a patient with chronic myeloid leukemia:

a) yellow
b) red with foci of yellow color
c) pioid
d) with a rusty tint
e) yellow with foci of red color

109. Name the forms of lympholeukosis with predominant skin lesions:

a) Waldenstrom's disease
b) heavy chain disease
c) Cesari's disease
d) myeloma
e) Hirchke's disease

110. Name the characteristic manifestations of multiple myeloma:

a) pulmonary and cardiac failure
b) osteoporosis, paraproteinemia
c) Wilson-Jones protein in the urine
d) obesity
e) increase in the number of leukocytes in the blood

111. Myeloma cells produce:

a) α-globulin
b) albumin
c) parathormone
d) paraprotein
e) serotonin

112. The presence of Bence-Jones protein in the urine is characteristic of:

a) myeloblastic leukemia
b) myelocytic leukemia
c) multiple myeloma
d) lymphocytic leukemia
e) megakaryoblastic leukemia

113. Name the leukemia, the frequent complication of which is amyloidosis:

a) lymphoblastic leukemia
b) multiple myeloma

c) myelocytic leukemia
d) lymphosarcoma
e) myeloblastic leukemia

114. Multiple myeloma, by quantitative changes in the blood, belongs to:
a) leukemic leukemia
b) subleukemic leukemia
c) leukopenic leukemia
d) aleukemic leukemia
e) blast crisis

115. Specify the mineral metabolism disorder often seen in multiple myeloma, caused by osteoporosis:
a) hypernatremia
b) hyperphosphatemia
c) hyperkalemia
d) hypercalcemia
e) hypokalemia

116. Specify the causes of death in patients with multiple myeloma:
a) focal pneumonia, renal failure
b) ischemic stroke
c) myocardial infarction
d) cardiovascular failure
e) hepatic failure

117. The figurative name of the spleen in Hodgkin's lymphoma:
a) marble
b) porphyric
c) fatty
d) mottled
e) hyperplastic

118. Name cells that have diagnostic value in Hodgkin's lymphoma:
a) small and large Hodgkin cells, Berezovsky-Sternberg giant cells
b) erythrocytes
c) myeloid cells
d) eosinophils
e) plasmablasts

119. Specify the organ where leukemic metastases most commonly persist during treatment with cytostatic drugs:

a) brain
b) heart
c) kidneys
d) pancreas
e) spleen

120. Name the form of acute leukemia in children with a favorable outcome:
a) monocytic
b) T-lymphoblastic
c) B-lymphoblastic
d) myeloblastic
e) undifferentiated

121. Name the most common cause of death in Hodgkin's lymphoma:
a) bleeding into various organs
b) secondary infection
c) bleeding
d) osteoporosis
e) necrotic nephrosis

122. List complications characteristic of chronic lympholeukemia:
a) bleeding
b) organ infarctions
c) infectious diseases
d) renal failure
e) heart failure

123. The Philadelphia chromosome is detected in:
a) acute myeloid leukemia
b) chronic lympholeukemia
c) chronic myeloleukemia
d) acute undifferentiated leukemia
e) promyelocytic leukemia

124. Sezary's disease is:
a) regional lymphoma
b) paraproteinemic leukemia
c) thrombocytopathy
d) anemia
e) thrombocytopenia

125. Blast crisis is:
a) appearance of individual blast cells in the blood
b) appearance of blast cells in the bone marrow
c) appearance of blast cells in the blood in the first stage of chronic leukemia
d) multitude of blast cells in the blood in acute leukemia
e) many blast cells in the blood in the second stage of chronic leukemia

126. Pioide bone marrow is observed in:
a) chronic lympholeukemia
b) Burkitt's lymphoma
c) acute myeloleukemia
d) Sezary's disease
e) chronic myeloleukemia

127. For the diagnosis of acute leukemias, the following are used:
a) blood smear
b) bone marrow aspirate
c) general condition of the patient
d) biochemical blood analysis
e) radiological method

128. The etiology of leukemia is:
a) viral
b) infectious
c) chemical
d) physical
e) multifactorial

129. Acute leukemia is characterized by the proliferation of:
a) undifferentiated and poorly differentiated bone marrow cells
b) highly differentiated blood cells
c) B cells
d) mature plasma cells
e) immature B cells and plasmablasts

130. Specify the period during which acute leukemia can transition to chronic:
a) with a treatment duration of more than 1 month
b) with a treatment duration of more than 3 months
c) with a treatment duration of more than 1 year
d) under the influence of treatment
e) never

131. Leukemic relapse occurs in:
a) acute myeloleukemia
b) chronic myeloleukemia
c) Sezary's disease
d) Rustitsky-Kahler's disease
e) Waldenstrom's disease

132. Name the changes in the gastrointestinal tract in leukemia:
a) atrophy
b) ulcerative-necrotic
c) ischemic
d) hypertrophic
e) dystrophic

133. Name a variant of Hodgkin's lymphoma with a relatively favorable course:
a) variant with suppression of lymphoid tissue
b) nodular sclerosis
c) mixed-cell variant
d) Hodgkin's sarcoma
e) variant with predominance of lymphoid tissue

134. The "starry sky" pattern in microscopic examination of a lymph node is characteristic of:
a) Hodgkin's lymphoma
b) multiple myeloma
c) Sezary's disease
d) African lymphoma
e) lymphosarcoma

11. TUMORS. PART 3

1. Identify the organ-specific cancer of the breast:
a) non-infiltrating intraductal
b) intraductal
c) nodular
d) diffuse
e) infiltrating

2. Name the condition that can serve as a background for the development of non-infiltrating intraductal breast cancer:

a) dysgormonal dysplasia
b) atrophy
c) sclerosis
d) hypertrophy
e) fibroma

3. Name the histological variants of non-invasive intraductal breast cancer:

a) squamous cell without keratosis
b) solid
c) small cell
d) glandular
e) solid, glandular

4. Specify the histological variant of non-infiltrating intraductal breast cancer:

a) squamous cell
b) polypoid
c) nodular
d) small cell
e) spindle cell

5. Specify a characteristic feature of the occurrence of breast cancer:

a) rarely occurs multicentrically
b) occurs at a young age
c) metastasizes rapidly
d) often occurs multicentrically
e) ulcerates early

6. Name the microscopic feature of nodular breast cancer:

a) has an expansive growth
b) metastasizes late
c) no secondary changes
d) has a polyp-like appearance
e) calcified areas are detected

7. Specify the characteristics of Paget's disease:

a) involvement of the nipple and areola
b) hematogenous metastasis
c) no involvement of the nipple and areola

d) first metastases to the liver
e) characterized by calcification

8. Provide a macroscopic classification of breast cancer:
a) polypoid
b) nodular
c) diffuse
d) intraductal
e) polypoid, nodular

9. Name the cancer that spreads on the surface of the breast:
a) pancancerous
b) diffuse
c) plate-like
d) squamous cell
e) superficial

10. List the main histological types of breast cancer:
a) infiltrating
b) non-infiltrating
c) special types
d) all answers are correct
e) all answers are incorrect

11. Specify the group of lymph nodes where metastases of breast cancer are not detected:
a) axillary
b) anterior chest
c) subclavian
d) submandibular
e) parasternal

12. Specify the organs where hematogenous metastases of breast cancer are not detected:
a) in bones
b) in the lungs
c) in the brain
d) in the liver
e) in the kidneys

13. Specify the periods during which recurrences are more likely to occur after the removal of breast cancer:

a) in the first months
b) recurrences are not typical
c) after 3-5 years and later
d) after 25-30 years and later
e) after 1 year

14. List the diseases that may precede the development of stomach cancer:

a) chronic ulcer
b) enteritis
c) chronic ulcer, gastric polyp
d) chronic ulcer, chronic gastritis
e) chronic ulcer, gastric polyp, chronic gastritis

15. Give the name of the changes in the gastric mucosa that immediately precede cancer:

a) hyperplasia
b) dysplasia
c) erosion
d) acute ulcer
e) atrophy

16. The clinical-anatomical classification of stomach cancer is based on all of the following except:

a) survival rate
b) location of the tumor
c) character of tumor growth
d) macroscopic form of the tumor
e) histological type of the tumor

17. Specify the section of the stomach where cancer is most often localized:

a) greater curvature
b) fundal
c) cardiac
d) pyloric
e) anterior wall

18. Name the main clinical-anatomical form of stomach cancer based on the character of growth:

a) predominantly exophytic growth
b) nodular

c) diffuse
d) plate-like
e) ulcerated

19. Name the main clinical-anatomical forms of stomach cancer:
a) massive
b) predominantly exophytic growth
c) peripheral
d) mixed character of growth
e) predominantly exophytic growth, mixed character of growth

20. The following are not included in the forms of stomach cancer with predominantly exophytic growth:
a) plate-like
b) polypoid
c) fungoid
d) ulcerated cancer
e) diffuse

21. Name the ulcerative form of stomach cancer with exophytic growth:
a) infiltrative-ulcerative
b) predominantly ulcerative
c) total
d) round ulcer
e) focal

22. Name the ulcerative form of stomach cancer with endophytic growth:
a) diffuse with limited involvement
b) plate-like
c) saucer-shaped cancer
d) infiltrative-ulcerative
e) massive

23. Specify the exophytic form of stomach cancer that is the least commonly recognized:
a) fungoid
b) papillomatous
c) saucer-shaped cancer
d) predominantly ulcerative cancer
e) ulcerated

24. Name the form of stomach cancer that has the appearance of a nodular formation with a villous surface, located on a stalk:

a) saucer-shaped
b) papillomatous
c) polyposis
d) fungoid
e) nodular

25. Name the form of stomach cancer that has the appearance of a nodular formation with a bumpy nodular surface on a broad stalk:

a) papillomatous
b) polyposis
c) fungoid
d) fungous
e) protruding

26. Give a characteristic of primary-ulcerative stomach cancer:

a) endophytic cancer with ulceration
b) fungous cancer with ulceration
c) malignant ulcer
d) predominantly exophytic growth with early ulceration
e) characterized by infiltrative growth

27. Name the macroscopic form of stomach cancer that grows endophytically in the mucous, submucous, and muscular layers:

a) mucous
b) diffuse
c) interstitial
d) skirr
e) early cancer

28. Define the term "early stomach cancer":

a) a small tumor in size
b) a tumor growing exophytically
c) grows no deeper than the submucosal layer
d) a tumor growing endophytically
e) a tumor without ulcers

29. Name the clinical feature of early stomach cancer:

a) high 5-year survival rate for patients
b) tendency to recurrence
c) hematogenous metastasis

d) rapid progression
e) multiple metastases

30. Identify the main histological types of stomach cancer:
a) adenocarcinoma
b) undifferentiated
c) signet-ring cell
d) all the answers are correct
e) all the answers are incorrect

31. Identify the common histological type of exophytic forms of stomach cancer:
a) squamous cell
b) undifferentiated
c) small cell
d) adenocarcinoma
e) signet-ring cell

32. Identify the common histological type of endophytic forms of stomach cancer:
a) adenocarcinoma
b) squamous cell
c) spindle cell
d) undifferentiated
e) solid

33. Specify the metastatic pathway that is primary in the spread of stomach cancer:
a) hematogenous
b) implantation
c) lymphogenous
d) embolic
e) thromboembolic

34. The first metastases of stomach cancer are detected:
a) in the mediastinal lymph nodes
b) in the lymph nodes of the lesser and greater curvature of the stomach
c) in the lungs
d) in the liver
e) in the spleen

35. The name of the metastasis of stomach cancer to the left supraclavicular lymph nodes:

a) Paget's disease
b) Hodgkin's disease
c) thymus
d) Sjögren's syndrome
e) Virchow's node

36. The pathway of metastasis to the left supraclavicular lymph nodes in stomach cancer:

a) orthograde
b) retrograde
c) paradoxical
d) implantation
e) hematogenous

37. Retrograde metastases in stomach cancer can be detected:

a) in the adrenal glands
b) in the lesser sac
c) Krukenberg metastasis
d) paranephric tissue
e) in the pancreas

38. Name the organs where lymphogenous metastases of stomach cancer may appear:

a) lungs
b) pleura
c) omentum
d) all the answers are correct
e) all the answers are incorrect

39. Name the pathological process that reflects the implantation pathway of stomach cancer metastasis:

a) Schnitzler's metastasis
b) metastases to the soft meninges
c) metastases to the liver
d) Carcinomatosis peritonei
e) Virchow's nodes

40. Name frequent secondary changes in stomach cancer:

a) amyloidosis
b) thrombosis

c) necrosis, inflammation
d) hyalinosis
e) congestion

41. Name complications that cannot occur due to necrosis of stomach cancer:

a) phlebitic abscesses, cholecystitis
b) perforation of the stomach wall
c) bleeding
d) pre-tumor inflammation
e) correct answer is absent

42. Specify a condition that cannot accompany the invasion of stomach cancer into the diaphragm:

a) peritonitis
b) seeding of the pleura
c) fibrinohemorrhagic pleuritis
d) empyema of the pleura
e) hemothorax

43. Specify a disturbance of lipid metabolism that may complicate stomach cancer:

a) amyloidosis
b) cachexia
c) hyalinosis
d) coagulopathy
e) obesity

44. Specify factors that play a role in the genesis of cachexia in stomach cancer:

a) peptic disorders
b) intoxication
c) alimentary deficiency
d) all the answers are correct
e) all the answers are incorrect

45. Name the malignant lung tumor that develops most often:

a) carcinoid
b) cancer
c) sarcoma
d) lymphoma
e) sarcoidosis

46. Indicate a criterion that is not considered in the classification of lung cancer:

a) location
b) growth pattern
c) macroscopic form
d) microscopic form
e) survival

47. Specify the localization of lung cancer that occurs most frequently:

a) central
b) peripheral
c) lobar
d) acinous
e) massive

48. Name the factor that plays a primary role in the etiology of central lung cancer:

a) intoxication
b) alcohol abuse
c) smoking
d) chronic tonsillitis
e) tuberculosis

49. Name the disease that is most often a background for central lung cancer:

a) tuberculosis
b) chronic pneumonia
c) pneumosclerosis
d) chronic bronchitis
e) sarcoidosis

50. Name a possible growth pattern of central lung cancer:

a) expansive
b) multicentric
c) exophytic
d) surface
e) monocentric

51. To possible macroscopic forms of central lung cancer include all of the following, except:

a) endobronchial diffuse

b) exophytic
c) nodular
d) Branching
e) nodular-branching

52. Name the change that does not complicate central lung cancer:
a) segmental atelectasis
b) pneumoconiosis
c) pneumonia
d) abscess
e) bronchiectasis

53. Name the organs and tissues to which a tumor of the main bronchus can spread with endophytic growth:
a) mediastinal tissues
b) pericardium
c) pleura
d) all the answers are correct
e) all the answers are incorrect

54. Specify the nature of pleurisy when lung cancer spreads to the pleura:
a) purulent
b) serous
c) serous-hemorrhagic
d) gangrenous
e) fibrinous

55. All of the following are main histological types of central lung cancer, except:
a) squamous cell with keratinization
b) squamous cell without keratinization
c) adenocarcinoma
d) undifferentiated
e) oat cell

56. Degree of differentiation of squamous cell lung cancer:
a) highly differentiated
b) moderately differentiated
c) poorly differentiated
d) all the answers are correct
e) all the answers are incorrect

57. Characteristics of well-differentiated squamous cell lung cancer include all of the following, except:

a) moderate polymorphism of cells and nuclei
b) absence of keratinization
c) formation of "cancer pearls"
d) presence of intercellular bridges
e) cells arranged in nests

58. Characteristics of poorly differentiated squamous cell lung cancer include all of the following, except:

a) marked polymorphism of cells and nuclei
b) formation of "cancer pearls"
c) absence of keratinization
d) presence of spindle-shaped cells
e) a large number of pathological mitoses

59. Specify which sections of the lung can be a source of peripheral lung cancer:

a) lobar bronchi
b) peripheral segments of the segmental bronchus
c) proximal segments of the segmental bronchus
d) bifurcation lymph nodes
e) trachea

60. Name the features of the growth of peripheral lung cancer:

a) rapid ulceration
b) exophytic growth
c) prolonged expansive growth
d) areas of necrosis
e) diffuse growth

61. Specify the most common histological type of massive lung cancer:

a) fibroplastic
b) noma
c) sclerosis
d) adenocarcinoma
e) diffuse

62. Name common metastatic pathways of peripheral lung cancer:

a) hematogenous
b) lymphogenous
c) implantation

d) all the answers are correct
e) all the answers are incorrect

63. Name an organ where hematogenous metastases of peripheral lung cancer are not characteristic:

a) liver
b) brain
c) pancreas
d) adrenal glands
e) bones

SYSTEMIC PATHOLOGICAL ANATOMY

12. ATHEROSCLEROSIS. ARTERIAL HYPERTENSION. CORONARY ARTERY DISEASE

1. Specify the types of vessels that are affected in atherosclerosis:
a) veins
b) small arteries
c) arterioles
d) venules
e) arteries of the muscular-elastic type

2. Specify the relationship between atherosclerosis and arteriosclerosis:
a) atherosclerosis - a type of arteriosclerosis
b) arteriosclerosis - a type of atherosclerosis
c) atherosclerosis - immune arteriosclerosis
d) atherosclerosis - senile arteriosclerosis
e) atherosclerosis - allergic arteriosclerosis

3. The types of arteriosclerosis do not include:
a) atherosclerosis
b) arteriolosclerosis
c) congenital aneurysm of the vessel
d) Monckeberg medial calcific sclerosis
e) inflammatory sclerosis

4. List the factors that play a major role in the etiology of atherosclerosis:
a) alimentary
b) exchange
c) hereditary
d) hemodynamic
e) all answers are correct

5. Specify the wall of the artery, which is affected in atherosclerosis:
a) outer
b) medium
c) outer and middle
d) internal
e) perivascular tissue

6. Name the type of uncomplicated macroscopic changes in the intima of arteries in atherosclerosis:

a) parietal thrombosis
b) ulceration
c) fibrous plaques
d) intramural hematoma
e) atherocalcinosis

7. Name the types of complicated macroscopic changes in the intima of arteries in atherosclerosis:

a) parietal thrombosis
b) parietal thrombosis, ulceration
c) intramural hematoma
d) fat stains and stripes
e) parietal thrombosis, ulceration, intramural hematoma

8. Give a macroscopic description of complicated changes in the intima of arteries in atherosclerosis:

a) intima rough, bumpy, with ulceration and parietal thrombi
b) intima is smooth
c) fatty spots and stripes in the intima
d) plaques of stony density
e) white-yellow plaques in the intima

9. Name the type of calcification, depending on the pathogenesis, in atherosclerotic plaques:

a) metabolic
b) dystrophic
c) metastatic
d) secondary
e) primary

10. Specify the origin of foam cells in atherosclerotic plaques:

a) granulocytes
b) macrophages
c) lymphocytes
d) plasmocytes
e) histocytes

11. Describe the morphogenesis of intramural hematomas in the thickness of an atherosclerotic plaque:

a) rupture of plaque cap

b) by thickening the walls of blood vessels in the plaque
c) by diapedesis from the lumen of the vessel
d) by diapedesis from newly formed vessels in the plaque
e) by tearing the wall of an artery

12. Describe the morphogenesis of atherosclerotic plaque ulceration:
a) plaque encapsulation
b) development of an intramural hematoma followed by rupture of the plaque cap
c) rupture of the vessel
d) corrosion of the plaque cap
e) due to atherocalcinosis

13. Specify morphological changes in internal organs as a result of chronic ischemia in atherosclerosis:
a) infarction
b) gangrene
c) hemorrhages
d) dystrophy and atrophy
e) necrosis

14. Specify morphological changes in the internal organs as a result of acute ischemia in atherosclerosis:
a) infarction
b) hyalinosis
c) hemorrhage
d) dystrophy and atrophy
e) stromal sclerosis

15. Name the clinical and anatomical form of atherosclerosis, in which uremia develops:
a) atherosclerosis of the arteries of the lower extremities
b) atherosclerosis of the mesenteric arteries
c) atherosclerosis of the renal arteries
d) atherosclerosis of the arteries of the brain
e) atherosclerosis of the aorta

16. Name the clinical and anatomical form of atherosclerosis, in which intestinal gangrene develops:
a) atherosclerosis of the arteries of the lower extremities
b) atherosclerosis of the mesenteric arteries
c) atherosclerosis of the renal arteries

d) atherosclerosis of the arteries of the brain
e) atherosclerosis of the aorta

17. Specify the reason for the development of gangrene of the lower extremities in atherosclerosis:
a) thrombosis of the veins of the lower extremities
b) spasm of the arteries of the lower extremities
c) thrombosis of the arteries of the lower extremities
d) lymphostasis
e) thromboembolism of the veins of the lower extremities

18. Specify the reason for the development of intestinal gangrene in atherosclerosis:
a) Budd–Chiari syndrome
b) thromboembolism of the mesenteric arteries
c) venous thrombosis
d) vasospasm
e) functional overstrain in conditions of circulatory failure

19. What cannot happen in aortic atherosclerosis:
a) pulmonary embolism
b) iliac arteries embolism
c) mesenteric arteries embolism
d) renal arteries embolism
e) celiac trunk embolism

20. Specify the characteristic changes in the kidneys in atherosclerosis of the renal arteries:
a) nephrosclerosis
b) glomerulonephritis
c) hydronephrosis
d) pyelonephritis
e) kidney infarction

21. Name the type of macroscopic changes in atherosclerosis:
a) atherosclerosis
b) lipoidosis
c) fat stains and stripes
d) liposclerosis
e) hyalinosis

22. Name the clinical and morphological form of atherosclerosis:

a) functional
b) mesenteric
c) latent
d) prelipid
e) generalized

23. Name the type of macroscopic changes in atherosclerosis:
a) atheromatosis
b) lipoidosis
c) fibrous plaques
d) sclerosis
e) hyalinosis

24. Describe atherocalcinosis:
a) metastatic calcification of atheromatous masses
b) dystrophic calcification of atheromatous masses
c) metabolic calcification of atheromatous masses
d) hyalinosis of the arteries
e) arterial lipoidosis

25. Name a synonym for primary arterial hypertension:
a) symptomatic hypertension
b) unclear hypertension
c) secondary hypertension
d) essential hypertension
e) neurogenic hypertension

26. Pathological conditions that can lead to symptomatic hypertension are listed correctly, except:
a) diseases of the central nervous system
b) liver disease
c) kidney disease
d) diseases of the endocrine system
e) vascular diseases

27. Name the types of arterial hypertension depending on the nature of its course:
a) primary and secondary
b) essential and secondary
c) benign and malignant
d) metastatic
e) renal and endocrine

28. All of the following are signs of malignant hypertension except:

a) reduction of the lumen of the vessel
b) spasm of arterioles
c) hemosiderosis
d) hemorrhages
e) infarction

29. Morphological manifestations of hypertensive crisis include all of the following except:

a) spasm of arterioles
b) plasma impregnation of the arteriole wall
c) fibrinoid necrosis of the arteriole wall
d) erythrocyte diapedesis and thrombosis
e) hyalinosis

30. Name the change in the brain tissue that develops during a hypertensive crisis:

a) plasmatic impregnation of the walls of arterioles
b) expansion of the 4th ventricle of the brain
c) diapedetic cerebral hemorrhage
d) senile dementia
e) brain cyst

31. Macroscopic characteristics of the kidneys in the benign course of arterial hypertension:

a) kidneys are reduced in size, the surface is fine-grained
b) kidneys are enlarged
c) kidneys are red
d) kidneys are brown
e) all answers are wrong

32. Specify the clinical expression of arteriolosclerotic nephrosclerosis in arterial hypertension:

a) acute heart failure
b) chronic heart failure
c) acute renal failure
d) chronic renal failure
e) amyloidosis

33. Specify the changes that develop in the aorta in arterial hypertension:

a) gummous infiltration, sclerosis
b) amyloidosis
c) atherosclerosis, hyperelastosis
d) congenital aneurysm
e) caseous necrosis

34. Name the morphological changes characteristic of a hypertensive crisis:

a) hyalinosis, sclerosis, calcification
b) fibrinoid necrosis of arterioles, spasm of arterioles, plasmorrhagia
c) atherosclerosis, hyperelastosis
d) perivascular sclerosis
e) elastofibrosis, atheromatosis

35. Severe atherosclerosis of the abdominal aorta in arterial hypertension can be complicated by the development of:

a) cerebral infarction
b) intestinal gangrene
c) myocardial infarction
d) lung infarction
e) pulmonary embolism

36. Name the characteristic changes in arterioles in arterial hypertension:

a) atherosclerosis
b) hyalinosis
c) liposclerosis
d) atheromatosis
e) atherocalcinosis

37. Name the main factors that are most important in the development of arterial hypertension:

a) stress, salt intake
b) viral infection
c) protein starvation
d) food rich in carbohydrates
e) alcohol consumption

38. Specify the type of vessels that are most often affected in arterial hypertension:

a) venules
b) capillaries, arterioles

c) arteries of the muscular type
d) arterioles
e) arteries of the elastic and musculo-elastic type

39. Name the disease in which cerebral hematoma often develops:
a) atherosclerosis
b) posthemorrhagic anemia
c) malignant anemia
d) arterial hypertension
e) multiple myeloma

40. Name the morphological manifestation of the cerebral form of arterial hypertension:
a) meningitis
b) hemorrhage
c) encephalitis
d) abscess
e) gangrene

41. Define ischemic heart disease:
a) myocardial disease due to exogenous intoxications
b) myocardial disease due to endogenous intoxications
c) myocardial disease due to exposure to infection
d) myocardial disease due to insufficiency of the coronary circulation
e) myocardial disease due to metabolic disorders

42. Background diseases in IHD do not include:
a) rheumatism
b) diabetes mellitus
c) symptomatic hypertension
d) atherosclerosis
e) essential hypertension

43. Pathogenetic factors in the development of coronary artery disease do not include:
a) hyperlipidemia, smoking
b) arterial hypertension
c) overweight
d) sedentary lifestyle
e) chronic infection

44. List the forms of acute IHD:

a) myocardial infarction
b) sudden coronary death
c) acute ischemic myocardial dystrophy
d) all answers are correct
e) all answers are wrong

45. Specify myocardial changes that can be attributed to acute IHD:
a) metabolic damage to the myocardium
b) fatty degeneration of the myocardium
c) myocardial infarction
d) granulomatous myocarditis
e) cardiomyopathy

46. Name the stages of myocardial infarction:
a) necrotic
b) organization
c) ischemic
d) all answers are correct
e) all answers are wrong

47. Name the type of myocardial infarction depending on the localization of the focus of necrosis:
a) transmural
b) intramural
c) subendocardial
d) subepicardial
e) all answers are correct

48. Specify the time of occurrence of the necrotic stage of myocardial infarction from the moment of the first signs of ischemia:
a) 6-8 hours
b) more than 12 hours
c) 10-12 hours
d) up to 6 hours
e) 2 hours

49. Specify the fatal complications of acute myocardial infarction:
a) kidney infarction
b) pulmonary infarction
c) rupture of the heart (myomalacia), asystole
d) cerebral infarction
e) supravalvular aortic rupture

50. Specify the causes of death in acute IHD:

a) cardiogenic shock
b) acute heart failure
c) ventricular fibrillation
d) asystole
e) all answers are correct

51. Specify the favorable outcome of myocardial infarction:

a) scarring
b) purulent fusion
c) myomalacia
d) the formation of an acute aneurysm of the heart
e) cyst formation

52. Specify changes in cardiomyocytes in acute focal ischemic myocardial dystrophy:

a) nucleus lysis
b) the disappearance of glycogen
c) lysis of the cytoplasm
d) increase in the amount of glycogen
e) coagulation of the cytoplasm

53. Morphological characteristics of acute aneurysm of the heart:

a) more often occurs in the wall of the right ventricle
b) often occurs in the wall of the left ventricle, the wall of the aneurysm is represented by necrotic muscle tissue
c) the wall of the aneurysm is represented by scar tissue
d) the aneurysm wall is calcified
e) there is no correct answer

54. Complications that can develop in a patient with an acute aneurysm of the heart include everything, except:

a) rupture of the aneurysm wall
b) tamponade of the pericardial cavity
c) pulmonary embolism
d) ischemic cerebral infarction
e) kidney infarction

55. Specify the fatal complication of myocardial infarction:

a) IHD
b) rupture of the heart

c) cardiosclerosis
d) development of chronic aneurysm of the heart
e) gangrene of the lung

56. Specify a possible non-cardiac complication associated with acute cardiac aneurysm:
a) pneumonia
b) gangrene of the intestine
c) hepatitis
d) lung gangrene
e) brain hemorrhage

57. Specify a pathological process that can be detected in organs as an expression of acute heart failure in myocardial infarction:
a) chronic venous congestion
b) lung edema
c) sclerosis
d) cyanotic induration
e) atrophy of internal organs

58. Specify the macroscopic changes in the coronary arteries that cannot be detected in patients with IHD:
a) fat stains and stripes
b) fibrous plaques
c) complicated lesions
d) calcification
e) microaneurysms

59. Causes of death associated with complications of myocardial infarction are listed correctly, except:
a) asystole
b) ventricular fibrillation
c) heart rupture or acute aneurysm
d) cardiogenic shock
e) femoral thromboembolism

60. Specify the most common cause of death in chronic ischemic heart disease:
a) coma
b) cardiogenic shock
c) chronic heart failure
d) acute vascular insufficiency

e) chronic lung failure

61. Name the morphological expression of chronic ischemic heart disease:

a) myocardial fatty degeneration
b) diffuse cardiosclerosis
c) myocardial hypertrophy
d) myocardial infarction
e) concentric myocardial hypoplasia

62. Non-cardiac complications that can develop in a patient with chronic aneurysm of the heart with parietal thrombosis as a result of thromboembolism include all of the following, except:

a) cerebral infarction
b) gangrene of the intestine
c) infarction of the spleen
d) pulmonary embolism
e) iliac thromboembolism

63. Name the change that can develop in the brain in a patient with chronic aneurysm of the heart:

a) hemorrhage
b) abscess
c) ischemic infarction
d) meningitis
e) brain atrophy

64. Name the common causes of death in chronic ischemic heart disease:

a) chronic heart failure, thromboembolism in the systemic circulation
b) chronic pulmonary insufficiency
c) chronic renal failure
d) pulmonary embolism
e) there is no correct answer

65. Specify the changes in the organs that can be detected in a patient with chronic heart aneurysm who died from chronic heart failure, except for:

a) porphyritic spleen
b) nutmeg liver
c) cyanotic induration of the spleen
d) anasarca
e) brown lung induration

13. SYSTEMIC CONNECTIVE TISSUE DISEASES. RHEUMATISM. VASCULITIS

1. Define the term "rheumatic diseases":

a) diseases of the connective tissue
b) diseases with systemic manifestations
c) collagen diseases
d) connective tissue diseases with immune disorders
e) autoimmune diseases

2. Specify the processes that form the structural basis of rheumatism:

a) exudation
b) progressive disorganization of connective tissue
c) immunopathological processes
d) damage to blood vessels
e) progressive disorganization of connective tissue, immunopathological processes

3. The clinical and morphological features of rheumatic diseases do not include:

a) the presence of a focus of chronic infection
b) violation of immune homeostasis
c) generalized vasculitis
d) systemic and progressive disorganization of connective tissue
e) predominantly acute undulating course

4. Specify the features of the clinical course of rheumatic diseases:

a) long latent period
b) chronic undulating course
c) quick death occurs
d) the onset of the disease is more often in old age
e) well treatable

5. Name the factors that are important for the development of rheumatic diseases:

a) infection, genetic factors
b) physical activity
c) overweight
d) hypodynamia
e) hypoglycemia

6. Specify where, except for the myocardium, rheumatic granulomas can be found:

a) valvular and parietal endocardium
b) only valvular endocardium
c) aorta
d) only epicardium
e) valvular endocardium, parietal endocardium, epicardium

7. Name one of the phases of connective tissue disorganization:

a) edema
b) formation of circulating immune complexes
c) mesenchymal dystrophy
d) formation of lipohyalin
e) mucoid swelling

8. Name the outcome of rheumatic myocarditis:

a) pericarditis
b) chronic aneurysm
c) endocarditis
d) diffuse cardiosclerosis
e) myocardial infarction

9. Specify microscopic changes in cardiomyocytes in rheumatic myocarditis:

a) sclerosis
b) dystrophy
c) atrophy
d) hyperplasia
e) hypertrophy

10. Specify the changes in the heart valves that are characteristic of the period of remission in rheumatism:

a) sclerosis, hyalinosis
b) amyloidosis
c) mucoid swelling
d) fibrinoid swelling
e) thrombotic overlays

11. Name the etiological factor characteristic of rheumatism:

a) E. coli
b) β-hemolytic streptococcus group A
c) Streptococcus pneumoniae

d) Staphylococcus aureus
e) Mycobacterium tuberculosis

12. Name the factors that play an important role in the pathogenesis of rheumatism:

a) cross-reactive antibodies
b) proteolytic enzymes of streptococcus
c) viruses
d) cross-reactive antibodies and proteolytic enzymes of streptococcus
e) there is no correct answer

13. Specify the characteristic morphological expression of cellular inflammatory reactions in rheumatism:

a) rheumatic atherosclerosis
b) rheumatic phlebitis
c) gumma
d) rheumatic granuloma
e) pannus

14. Specify the most common clinical and morphological form of rheumatism:

a) cardiovascular
b) paralytic
c) polyarthritic
d) cerebral
e) nodose

15. Give the name of the pathological process in which all the membranes of the heart are affected:

a) pericarditis
b) endocarditis
c) polycarditis
d) total myocarditis
e) pancarditis

16. Specify the valves of the heart that are most often affected in rheumatism:

a) tricuspid
b) pulmonary
c) aortic, mitral
d) none of the above
e) all valves equally

17. Specify histological changes that cannot be detected in endocarditis:

a) mucoid swelling
b) fibrinoid necrosis
c) amyloid deposits
d) cell proliferation
e) blood clots on the valve surface

18. Specify the pathological process underlying diffuse endocarditis:

a) fibrinoid swelling
b) hyalinosis
c) sclerosis
d) mucoid swelling
e) mesenchymal dystrophy

19. Specify the reason for the formation of thrombotic deposits on the valve in rheumatism:

a) mucoid swelling
b) sclerosis
c) endothelial necrobiosis
d) hyalinosis
e) formation of pannus

20. Specify the changes on the heart valves that allow distinguishing between acute and recurrent-verrucous endocarditis:

a) sclerosis, hyalinosis
b) amyloidosis
c) inflammatory cellular reactions
d) fibrinoid necrosis
e) thrombotic overlays

21. Specify the possible causes of death in patients with valvular endocarditis:

a) hemorrhagic syndrome
b) heart failure, thromboembolic syndrome
c) kidney failure
d) liver failure
e) asystole

22. Specify the most common cause of death in patients with rheumatic heart disease:

a) chronic heart failure

b) pulmonary insufficiency
c) thromboembolism
d) sepsis
e) kidney failure

23. Specify the general pathological process that can be detected at the autopsy of those who died from chronic heart failure:
a) amyloid dystrophy
b) diffuse pneumonitis
c) generalized venous congestion
d) lung edema
e) arterial hyperemia

24. Specify the form of myocarditis, which is most common in children:
a) nodular productive
b) intermediate
c) diffuse interstitial exudative
d) focal interstitial granulomatous
e) mixed

25. Specify the form of myocarditis, which is most common in adults:
a) nodular productive
b) intermediate
c) diffuse interstitial exudative
d) focal interstitial exudative
e) mixed

26. Name the characteristic morphological formation detected in rheumatic myocarditis:
a) fibroma
b) granuloma
c) fibrinoid
d) gumma
e) cardiosclerosis

27. Specify the pathological process that can be seen in the center of rheumatic granuloma:
a) sclerosis
b) blood clot
c) amyloid
d) fibrinoid necrosis
e) colliquative necrosis

28. Name the cells that do not take part in the formation of rheumatic granuloma:

a) fibroblasts
b) neutrophils
c) lymphocytes
d) plasma cells
e) macrophages

29. Specify the cells that predominate in mature rheumatic granuloma:

a) fibroblasts
b) epithelioid cells
c) macrophages
d) neutrophils
e) eosinophils

30. Specify the main function of macrophages in mature rheumatic granuloma:

a) fibrin synthesis
b) collagen synthesis
c) synthesis of amyloid
d) phagocytosis
e) erythrophagy

31. What is the main function of fibroblasts in rheumatic granuloma:

a) fibrin lysis
b) fibrin synthesis
c) collagen synthesis
d) fibrinoid synthesis
e) amyloid lysis

32. Specify the time cycle of development of rheumatic granuloma:

a) 3-4 months
b) 3-4 days
c) 1-1.5 years
d) 6-8 months
e) up to 2 years

33. Specify nonspecific tissue reaction as an outcome of rheumatism:

a) hyalinosis
b) lymphocytic and histiocytic infiltrates
c) vasculitis

d) amyloidosis
e) necrosis

34. Specify a variant of fibrinous inflammation that develops on the pericardium in rheumatism:
a) diffuse
b) croupous
c) diphtheritic
d) diphtheria
e) mixed

35. Specify the favorable outcome of pericarditis:
a) organization
b) autolysis
c) petrification
d) resorption of exudate
e) encapsulation

36. Specify the outcome of rheumatic vasculitis:
a) amyloidosis
b) plasma impregnation
c) edema
d) sclerosis
e) formation of a microaneurysm

37. Name the changes in the nervous system in the cerebral form of rheumatism:
a) vasculitis
b) degeneration of neurons
c) hemorrhages
d) all answers are correct
e) all answers are wrong

38. Name the morphological changes that are not characteristic of a rheumatic attack:
a) polyserositis
b) lipodystrophy
c) vasculitis
d) damage to skeletal muscles
e) erythema nodosa

39. Name the main complications of rheumatic fever:

a) tamponade of the pericardial cavity
b) chronic heart failure, thromboembolic syndrome
c) croupous pneumonia
d) pericarditis
e) pleuritis

40. List the organs and tissues that are not affected by rheumatoid arthritis:
a) articular cartilage
b) connective tissue of the membranes of the joints
c) periarticular connective tissue
d) microvessels
e) large vessels

41. Define the term "rheumatoid factor":
a) immunoglobulins acting as antigens
b) complement system
c) immunoglobulins that act as antibodies
d) circulating immune complexes
e) T-killer lymphocytes

42. Specify the anatomical structure in which rheumatoid factor is synthesized:
a) mucous membranes
b) kidneys
c) lymph nodes
d) serous membranes
e) liver

43. Specify the characteristic outcome of rheumatoid synovitis:
a) resorption of exudate
b) lysis of granulation tissue
c) amyloidosis
d) fibrous-osseous ankylosis
e) fibrinoid necrosis

44. List the organs and tissues that are predominantly affected in ankylosing spondylitis:
a) small joints
b) large joints
c) kidneys
d) cardiovascular system

e) articular-ligamentous apparatus of the spine

45. List the organs and tissues that are predominantly affected in systemic lupus erythematosus:

a) skin and kidneys
b) kidneys and vessels
c) only vessels
d) liver
e) skin, kidneys and vessels

46. Specify the main etiological factor of systemic lupus erythematosus:

a) mycoplasmas
b) fungi
c) viruses
d) β-hemolytic streptococcus
e) staphylococcus

47. Clinical and morphological features of systemic lupus erythematosus are indicated correctly, with the exception of:

a) young women often get sick
b) polymorphism of manifestations
c) generalized nature of the disease
d) great value of hereditary predisposition
e) benign course

48. Name the tissue and cellular changes that are not typical for systemic lupus erythematosus:

a) necrosis and dystrophic changes in the connective tissue
b) subacute interstitial inflammation in the organs
c) capillaritis
d) polyserosites
e) porphyria

49. Name the cells that predominate in the cell infiltrate in systemic lupus erythematosus:

a) macrophages
b) plasma cells
c) lymphocytes
d) all answers are correct
e) all answers are wrong

50. Specify the changes that are not typical for the microscopic picture of lupus nephritis:

a) wire loops
b) hematoxylin bodies
c) fibrinoid necrosis
d) hyaline thrombi
e) amyloidosis

51. Specify the cause of death of patients with lupus nephritis:

a) thromboembolic syndrome
b) uremia
c) hemorrhagic syndrome
d) anemia
e) sepsis

52. Name the organ that is most often affected in systemic scleroderma:

a) connective tissue
b) skin
c) liver
d) joints
e) nervous system

53. List the organs that are most often affected in dermatomyositis:

a) connective tissue
b) only striated muscles
c) joints
d) only skin
e) striated muscles and skin

54. List the organs and tissues that are most often affected in periarteritis nodosa:

a) connective tissue
b) myocardium
c) large arteries
d) arteries of medium and small caliber
e) venules

14. ACUTE RESPIRATORY INFECTIONS OF THE LUNGS

1. Acute inflammatory diseases of the lungs do not include:

a) pleuropneumonia

b) interstitial pneumonia
c) bronchopneumonia
d) acute emphysema of the lungs
e) croupous pneumonia

2. Specify synonyms of croupous pneumonia:
a) interstitial pneumonia
b) only pleuropneumonia
c) bronchopneumonia
d) only lobar pneumonia
e) pleuropneumonia and lobar pneumonia

3. Specify forms of interstitial pneumonia:
a) bronchopneumonia
b) peribronchial and interalveolar
c) interlobular
d) lobular
e) peribronchial, interlobular, interalveolar

4. The most common causative agents of croupous pneumonia:
a) Streptococcus pneumoniae
b) Staphylococcus aureus
c) Proteus mirabilis
d) Escherichia coli
e) Klebsiella pneumoniae

5. Extrapulmonary complications of croupous pneumonia include:
a) pleural empyema
b) bronchopneumonia
c) lung abscess
d) purulent pleuritis
e) purulent pericarditis

6. Specify the ways of spread of infection in bronchopneumonia:
a) hematogenous
b) intrabronchial
c) peribronchial
d) all answers are correct
e) there is no correct answer

7. Complications of croupous pneumonia include:
a) lung edema

b) steatohepatosis
c) malignancy
d) cor pulmonare
e) brown lung induration

8. In accordance with the size of the foci of inflammation, focal pneumonia can be:
a) microbial
b) uremic
c) miliary
d) mechanical
e) unspecified

9. Specify the form of interstitial pneumonia:
a) focal pneumonia
b) pleuropneumonia
c) interlobular
d) periaortic
e) peritracheal

10. Specify the nature of inflammation in the first stage of lobar pneumonia:
a) purulent
b) purulent-hemorrhagic
c) fibrinous
d) croupous
e) serous

11. The term "carnification" means:
a) purulent-fibrinous inflammation in the pleura and lungs
b) the formation of bronchiectasis
c) brown induration of the lungs
d) organization of fibrinous exudate
e) acute destructive process in the lungs

12. Specify a synonym for bronchopneumonia:
a) pleuropneumonia
b) lobar pneumonia
c) focal pneumonia
d) interstitial pneumonia
e) croupous pneumonia

13. Specify one of the variants of hepatization in lobar pneumonia:
a) red hepatization
b) yellow hepatization
c) green hepatization
d) central hepatization
e) peripheral hepatization

14. Bronchopneumonia can be caused by all of the following except:
a) physical factors
b) chemical factors
c) viruses
d) regenerative factors
e) microbial agents

15. Specify the nature of inflammation, which is characteristic of the stage of leukocyte infiltration in croupous pneumonia:
a) serous
b) purulent
c) hemorrhagic
d) fibrinous
e) croupous

16. Mandatory morphological components of focal pneumonia are:
a) bronchitis
b) bronchitis and pleurisy
c) bronchiolitis
d) bronchiolitis and alveolitis
e) bronchitis, pleurisy and alveolitis

17. In the outcome of interlobular pneumonia, all of the following can develop, except:
a) pneumofibrosis
b) pneumocirrhosis
c) bronchiectasis
d) cor pulmonary
e) croupous pneumonia

18. Specify the type of inflammation observed in the gray hepatization stage of lobar pneumonia:
a) catarrhal
b) fibrinous-purulent
c) granulomatous

d) serous
e) productive

19. Specify a synonym for bronchopneumonia:
a) interstitial pneumonia
b) pneumonitis
c) pleuropneumonia
d) focal pneumonia
e) caseous pneumonia

20. Acute destructive processes in the lungs include:
a) bronchopneumonia
b) croupous pneumonia
c) abscess
d) heart attack
e) pneumoconiosis

21. For focal pneumonia is not typical:
a) endomesobronchitis
b) panbronchitis
c) transient bronchiectasis
d) malignancy
e) alveolitis

22. What type of inflammation in pleura is most common during croupous pneumonia:
a) catarrhal inflammation
b) fibrinous inflammation
c) granulomatous inflammation
d) hemorrhagic inflammation
e) interstitial inflammation

23. The features of focal pneumonia in newborns and children of the first year of life include all of the following, except:
a) relatively mild
b) predominant localization in the posterior segments of the lungs
c) frequent development on the background of aspiration
d) formation of hyaline membranes
e) frequent and early development of complications

24. Gangrene of the lung is caused by:
a) viruses

b) mushrooms
c) poisons of endogenous origin
d) pyogenic microorganisms
e) putrefactive bacteria

25. Complications of croupous pneumonia are classified into:
a) pulmonary, extrapulmonary
b) acute, chronic
c) combined, transitory
d) primary, secondary
e) stable, unstable

26. Pulmonary complications of croupous pneumonia include:
a) fibrinous pleurisy
b) serous pericarditis
c) purulent pericarditis
d) abscess and gangrene of the lung
e) liver abscess

27. The stages of the course of croupous pneumonia do not include:
a) congestion
b) red hepatization
c) gray hepatization
d) resolution stage
e) stage of complications

28. Taking into account the etiological factor, bronchopneumonia cannot be:
a) staphylococcal
b) streptococcal
c) intermediate
d) pneumococcal
e) viral

15. CHRONIC NONSPECIFIC LUNG DISEASES

1. There are the following types of pulmonary atelectasis:
a) obstructive and suppressive
b) compressive and acinar
c) interstitial and lobar
d) centriacinar and panacinar

e) obstructive and compressive

2. Anthracosis of the lungs can be complicated by:
a) bronchopneumonia
b) pleuropneumonia
c) lung abscess
d) gangrene of the lungs
e) no correct answer

3. Chronic nonspecific lung disease includes all of the following except:
a) pneumosclerosis
b) chronic bronchitis
c) usual interstitial pneumonia
d) bronchiectasis
e) viral interstitial pneumonia

4. During an attack of bronchial asthma in the bronchi we can find:
a) accumulation of giant multinucleated cells
b) proliferation of fibroblasts
c) accumulation of eosinophils
d) accumulation of leukocytes
e) mucus hyposecretion

5. With panacinar emphysema is not observed:
a) predominance of changes in large bronchi
b) predominance of changes in small bronchi
c) expansion of the trachea
d) expansion of the entire acinus
e) lung enlargement

6. By the nature of the exudate, pleurisy cannot be:
a) serous
b) fibrinous
c) catarrhal
d) purulent
e) hemorrhagic

7. Microscopic examination of the bronchial wall in chronic bronchitis reveals:
a) disappearance of goblet cells
b) atrophy of the muscle layer
c) only epidermal metaplasia of the epithelium

d) the formation of polyps
e) muscle atrophy, epidermal epithelial metaplasia, polyp formation

8. Collapse of the lungs does not develop with:
a) traumatic pneumothorax
b) compression of a large bronchus by a tumor from the outside
c) hydrothorax
d) spontaneous pneumothorax
e) pleural empyema

9. Specify the most common cause of death in silicosis:
a) uremia
b) pulmonary and renal insufficiency
c) hemorrhage in the brain
d) primary pulmonary hypertension
e) secondary tuberculosis

10. With bronchial asthma, there are:
a) forced position of the patient
b) difficulty in exhaling
c) violation of bronchial patency
d) expiratory dyspnea
e) all answers are correct

11. Types of emphysema do not include:
a) chronic diffuse obstructive
b) acute diffuse obstructive
c) saccular
d) senile
e) compensatory (vicarious)

12. Violations of the drainage function in chronic bronchitis does not lead to the following bronchopulmonary complication:
a) lung atelectasis
b) pneumofibrosis
c) pleuropneumonia
d) obstructive pneumonia
e) bronchiectasis

13. Pneumosclerosis is characterized by:
a) hypertrophy of the left ventricle of the heart
b) cor pulmonale

c) mitral valve stenosis
d) aortic valve stenosis
e) myocardial infarction

14. Describe chronic focal pulmonary emphysema:
a) is panacinar
b) is centroacinar
c) also called cicatricial or perifocal
d) is centroacinar, occurs around old tuberculous foci
e) is panacinar, also called cicatricial or perifocal, occurs around old tuberculous foci

15. Silicosis is caused by prolonged inhalation of:
a) chlorine vapor
b) organic dust
c) silicon dioxide
d) coal dust
e) household dust

16. Bronchiectasis can be:
a) acquired
b) endobronchial
c) panacinar
d) spiral
e) there is no correct answer

17. Emphysema may be complicated by:
a) only cor pulmonale
b) spontaneous pneumothorax and subcutaneous emphysema
c) only spontaneous pneumothorax
d) cor pulmonale and subcutaneous emphysema
e) cor pulmonale, spontaneous pneumothorax and subcutaneous emphysema

18. Silicosis of the lungs manifests itself in the following forms:
a) nodular, diffuse sclerotic
b) branched, not branched
c) endophytic simple
d) exophytic complex
e) there is no correct answer

19. The following mechanisms of development of chronic nonspecific lung diseases are distinguished:

a) pleurogenic, bronchitogenic, pneumoniogenic
b) bronchitogenic
c) pneumoniogenic
d) bronchitogenic, pleurogenic, pneumonitogenic
e) bronchitogenic, pneumoniogenic, pneumonitogenic

20. With repeated attacks of bronchial asthma in the lungs does not develop:
a) sclerosis of the interalveolar septa
b) chronic obstructive emphysema
c) idiopathic panacinar emphysema
d) hypertrophy of endotheliocytes in capillaries
e) chronic bronchitis

21. Bronchiectasis can be:
a) primary and secondary
b) congenital and acquired
c) saccular and cylindrical
d) exophytic and endophytic
e) congenital and acquired; saccular and cylindrical

22. Lung atelectasis can be caused by:
a) hydrothorax
b) empyema of the pleura
c) spontaneous pneumothorax
d) obstruction of the bronchial lumen by a tumor
e) traumatic pneumothorax

23. Microscopic examination of the bronchus wall in chronic bronchitis does not reveal:
a) accumulation of goblet cells
b) the appearance of stratified squamous epithelium in the mucous membrane
c) the presence of an inflammatory infiltrate
d) accumulation of glycogen in muscle fibers
e) formation of polyps

16. DISEASES OF THE GASTROINTESTINAL TRACT

1. Define the term "acute gastritis":
a) dystrophic disease of the gastric mucosa

b) inflammatory disease of the gastric mucosa
c) dysregenerative disease of the gastric mucosa
d) an infectious disease with damage to the gastric mucosa
e) precancerous disease of the stomach

2. Specify the essence of morphological changes in acute gastritis:
a) exudative inflammation of the gastric mucosa
b) structural reorganization of the gastric mucosa
c) violation of the regeneration of the gastric mucosa
d) malignancy of the gastric mucosa
e) intestinal metaplasia of the epithelium of the stomach

3. Specify the forms of acute gastritis depending on the mechanism of action of pathogenic factors:
a) exogenous, endogenous gastritis
b) primary, secondary gastritis
c) type A gastritis, type B gastritis
d) superficial, diffuse gastritis
e) atrophic, hypertrophic gastritis

4. Specify the forms of acute gastritis depending on the localization of the process:
a) superficial, deep
b) with damage to the glands without atrophy of the mucous membrane
c) atrophic, hypertrophic
d) focal, diffuse
e) gastritis type A, gastritis type B

5. Specify the morphological forms of acute gastritis:
a) superficial, diffuse
b) fibrinous, purulent
c) with damage to the glands without atrophy of the mucous membrane
d) phlegmonous-ulcerative, apostematous
e) atrophic, hypertrophic

6. Name the variants of the course of acute fibrinous gastritis:
a) superficial, deep
b) catarrhal, erosive
c) croupous, diphtheritic
d) primary, secondary
e) focal, diffuse

7. Specify the essence of morphological changes in chronic gastritis:

a) impaired regeneration and restructuring of the gastric mucosa
b) necrosis of the gastric mucosa
c) proliferation of the gastric mucosa
d) hyalinosis of the vessels of the gastric mucosa
e) exudative inflammation of the gastric mucosa

8. The classification of chronic gastritis by pathogenesis does not include:

a) type A gastritis
b) type B gastritis
c) reflux gastritis
d) special forms of gastritis
e) primary, secondary

9. Specify the forms of chronic gastritis depending on the mechanism of action of pathogenic factors:

a) superficial, diffuse
b) exogenous, endogenous
c) primary, secondary
d) gastritis type A, gastritis type B, gastritis type C
e) acute, chronic

10. Specify the morphological form of chronic gastritis:

a) catarrhal
b) superficial
c) purulent
d) hemorrhagic
e) mucinous

11. Specify the form of chronic gastritis, in which intestinal metaplasia of the gastric epithelium develops:

a) catarrhal
b) fibrinous
c) atrophic
d) phlegmonous-ulcerative
e) superficial

12. Specify the precancerous condition of the stomach epithelium in chronic gastritis:

a) atrophy
b) erosion

c) dysplasia
d) desquamation
e) destruction

13. Specify the pathological process that underlies the development of gastric erosions:

a) deep necrosis of the stomach wall
b) inflammation of the gastric mucosa
c) proliferation of the epithelium
d) superficial necrosis of the gastric mucosa
e) atrophy of the gastric mucosa

14. Specify the pathological process that underlies the development of acute gastric ulcer:

a) necrosis of the mucous membrane and other layers of the stomach wall
b) superficial necrosis of the gastric mucosa
c) pathological regeneration of the gastric mucosa
d) diffuse purulent inflammation of the gastric mucosa
e) diffuse hemorrhagic inflammation of the gastric mucosa

15. Specify the difference between gastric erosion and acute ulcer:

a) presence of sclerosis
b) presence of bleeding
c) depth of necrosis (with erosion, necrosis is deeper)
d) depth of necrosis (with erosion, necrosis is superficial)
e) depth of inflammation

16. What is the difference between an acute stomach ulcer and a chronic one:

a) depth of necrosis
b) depth of inflammation
c) presence of hydrochloric hematin
d) absence of sclerosis
e) damage to intramural nerve endings

17. Specify the pathogenetic factors of a local nature that are important in the development of gastric ulcer:

a) impaired acid-peptic factor, disruption of the mucosal barrier
b) violation of the nervous regulation of the activity of the stomach
c) violation of the endocrine regulation of the activity of the stomach
d) autoimmune reactions
e) there is no correct answer

18. The state of the level of secretion of hydrochloric acid and gastrin in pyloroduodenal ulcers:

a) secretion of hydrochloric acid and gastrin is normal
b) secretion of hydrochloric acid and gastrin is increased
c) secretion of hydrochloric acid and gastrin is decreased
d) secretion of hydrochloric acid is increased, gastrin is decreased
e) secretion of hydrochloric acid is decreased, gastrin is increased

19. Specify a classic macroscopic description of an acute stomach ulcer:

a) localization on the lesser curvature and in the pyloroduodenal zone
b) localization in any area of the stomach, the edges are soft, even
c) the proximal edge is undermined, the distal one is gently sloping
d) the edges are dense, callused
e) localization in antrum, the edges are dense, callused

20. Specify the number and name of the zones that are distinguished in the bottom of a chronic ulcer during an exacerbation of the process:

a) 1 zone: scar tissue
b) 2 zones: scar tissue, epithelium
c) 3 zones: scar tissue, epithelium, muscle tissue
d) 4 zones: scar tissue, granulation tissue, necrosis, zone of inflammation
e) 5 zones: mucosa, submucosa, scar tissue, muscle tissue, serosa

21. Name the morphological markers of chronic ulcer exacerbation:

a) hemorrhage at the bottom of the ulcer
b) the appearance of hydrochloric hematin
c) the appearance of fresh foci of necrosis in the bottom of the ulcer, fibrinoid necrosis of the walls of blood vessels in the bottom of the ulcer
d) the appearance of amputation neuromas in the bottom of the ulcer
e) appearance of formalin pigment

22. Specify the main complications of peptic ulcer:

a) gastritis, perigastritis, perforation
b) duodenitis, periduodenitis, bleeding
c) perforation, penetration, bleeding
d) perforation, bleeding, malignization
e) penetration, bleeding, malignization

23. Name the inflammatory complications of gastric ulcer and duodenal ulcer:

a) hepatitis

b) gastritis, perigastritis, duodenitis, periduodenitis
c) phlegmon of the stomach
d) gangrene of the intestine
e) intestinal obstruction

24. Specify the precancerous changes in the gastric mucosa:
a) polyposis, dysplasia, metaplasia
b) dystrophy, hypertrophy
c) sclerosis, dystrophy, embolism
d) phlegmon, hypotrophy
e) hypotrophy, atrophy

25. Specify the clinical and anatomical forms of appendicitis:
a) primary, secondary
b) true, false
c) acute, chronic
d) recurrent
e) mucinous

26. Specify the morphological forms of acute appendicitis:
a) apostematous
b) superficial
c) simple
d) gangrenous
e) all answers are correct

27. Specify the morphological form of destructive appendicitis:
a) simple
b) phlegmonous
c) superficial
d) erosive
e) chronic

28. Specify the changes characteristic of acute simple appendicitis:
a) stasis in capillaries and venules, edema, hemorrhages
b) focal purulent inflammation in the mucous membrane
c) ulceration in the mucous membrane
d) leukocytic infiltrate in all layers of the process wall
e) putrid inflammation

29. Specify the condition necessary for the development of secondary gangrenous appendicitis:

a) ulceration of the mucous membrane of the process
b) necrosis of the muscular membrane of the process wall
c) primary thrombosis of the appendicular artery
d) secondary thrombosis of the appendicular artery
e) presence of putrefactive flora in the appendix

30. Specify the type of appendicitis that develops during the transition of a purulent-destructive process to the mesentery of the process with thrombosis of its artery:
a) phlegmonous-ulcerative
b) primary gangrenous
c) secondary gangrenous
d) erosive and ulcerative
e) infiltrative-ulcerative

31. Specify the type of appendicitis that develops in primary thrombosis (or thromboembolism) of the appendicular artery:
a) thrombotic-hemorrhagic
b) phlegmonous-ulcerative
c) destructive
d) primary gangrenous
e) secondary gangrenous

32. Specify the morphological changes in chronic appendicitis:
a) ulceration of the mucous membrane of the process
b) necrosis of the muscular membrane of the process
c) atrophy of all layers of the process
d) hypertrophy of the muscular membrane of the process
e) there is no correct answer

33. Complications of destructive appendicitis do not include:
a) peritonitis
b) pylephlebitic liver abscesses
c) self-amputation
d) perforation
e) adhesive disease of the abdominal organs

34. Complications of acute appendicitis do not include:
a) empyema
b) perforation of the process, peritonitis
c) pylephlebitic abscesses
d) self-amputation of the process

e) penetration

17. LIVER DISEASES

1. Microscopic changes that are found in the liver punctate in acute viral hepatitis include everything, except:

a) colliquative necrosis
b) hydropic dystrophy
c) balloon dystrophy
d) Councilman bodies
e) leukocytic infiltrate

2. Specify the possible outcomes of acute viral hepatitis:

a) recovery
b) transition to a chronic form
c) transition to postnecrotic cirrhosis
d) all answers are correct
e) all answers are wrong

3. The main etiological forms of liver cirrhosis include everything except:

a) infectious
b) toxic
c) biliary
d) alimentary
e) mixed

4. Name the main morphological forms of liver cirrhosis:

a) postnecrotic
b) portal
c) biliary
d) all answers are correct
e) all answers are wrong

5. Morphological features of liver cirrhosis include all of the following except:

a) dystrophy and necrosis
b) sclerosis and deformation
c) perverted regeneration
d) restructuring of the liver
e) hemochromatosis

6. Name the macroscopic forms of liver cirrhosis:

a) macronodular
b) micronodular
c) mixed
d) all answers are correct
e) all answers are wrong

7. Specify the most common etiology of macronodular cirrhosis of the liver:

a) virus
b) alcohol
c) medicines
d) small foci of necrosis in toxic dystrophy
e) ischemic disorders

8. Specify the most common etiology of micronodular cirrhosis of the liver:

a) cholestasis
b) medicines
c) alcohol
d) all answers are correct
e) all answers are wrong

9. Specify the characteristic outcome of chronic active hepatitis of any etiology:

a) recovery
b) transition to cancer
c) development of cirrhosis
d) development of cholestasis
e) development of fatty degeneration

10. Specify the most characteristic types of hepatocyte dystrophy in viral hepatitis:

a) fatty
b) hydropic
c) lipofuscinosis
d) hyalinosis
e) hemosiderosis

11. Specify the nature and location of infiltrates in the liver lobule during the icteric period of the cyclic form of viral hepatitis:

a) leukocytic infiltrate in the portal tracts
b) lymphocytic and macrophage infiltrate diffusely in the lobule
c) leukocyte infiltrate diffusely in the lobule
d) epithelioid cell infiltrate
e) all answers are wrong

12. All of the following are macroscopic characteristics of alcoholic cirrhosis of the liver except:
a) the surface of the liver is granular
b) the size of regenerated nodules is less than 1 cm
c) the surface of the liver is smooth
d) the liver is reduced in size
e) color of the liver is yellow-brown

13. Microscopic characteristics of alcoholic cirrhosis of the liver include all of the following except:
a) monolobular structure of nodules
b) fatty degeneration of hepatocytes
c) diffuse fibrous septa
d) leukocytic infiltration
e) Councilmen bodies in hepatocytes

14. The possible causes of death in patients with alcoholic cirrhosis of the liver include everything except:
a) hepatocellular insufficiency
b) pulmonary heart failure
c) bleeding from varicose veins of the esophagus
d) hepatic and renal insufficiency
e) Mallory-Weiss syndrome

15. The morphological characteristics of viral cirrhosis of the liver include all, except:
a) the size of the liver is reduced
b) the surface of the liver is unevenly granular
c) the cirrhosis is more often multilobular
d) narrow fields of connective tissue
e) post-necrotic path of development

16. Possible causes of death in patients with viral and alcoholic cirrhosis of the liver include all, except:
a) liver failure
b) hepatic and renal insufficiency

c) pneumonia
d) bleeding from varicose veins of the esophagus and stomach
e) cardiac insufficiency

17. Name the main pathogenetic factor in the development of secondary biliary cirrhosis of the liver:
a) venous congestion
b) cholestasis
c) lymphostasis
d) viruses
e) alcohol

18. Which disease of the biliary tract could lead to secondary biliary cirrhosis:
a) cholelithiasis
b) liver tumor
c) phlebitis in the portal vein
d) stomach ulcer
e) pneumonia

19. The main causes of death in patients with secondary biliary cirrhosis include all except:
a) asphyxia
b) liver failure
c) hepatic and renal insufficiency
d) encephalopathy
e) bleeding from varicose veins of the esophagus and stomach

20. Name the main etiological factors of toxic liver dystrophy:
a) infection (viral hepatitis), intoxication
b) pulmonary hypertension
c) trauma
d) radiation damage
e) heart failure

21. Specify the outcome of the disease in a protracted course of toxic liver dystrophy:
a) organ restoration
b) cirrhosis of the liver
c) liver cancer
d) jaundice
e) hemosiderosis

22. Specify the predominant nature of hepatocyte dystrophy in alcoholic hepatitis:

a) hemosiderosis
b) hydropic dystrophy
c) microvesicular fatty degeneration
d) lipofuscinosis
e) hyalinosis

23. Specify the morphological sign specific for alcoholic hepatitis:

a) Councilman bodies
b) Mallory bodies
c) foci of necrosis
d) foci of amyloidosis
e) granulomas

24. Specify the possible outcomes of alcoholic hepatitis:

a) recovery
b) death from liver failure
c) transition to cirrhosis
d) all answers are correct
e) all answers are wrong

25. Specify the main composition of the infiltrate in alcoholic hepatitis:

a) plasmacytic
b) lymphoid
c) leukocytic
d) macrophage
e) epithelioid and giant cells

26. Specify the pathogenetic types of liver cirrhosis:

a) postnecrotic
b) portal
c) cardiac
d) biliary
e) all answers are correct

27. Specify the macroscopic types of liver cirrhosis:

a) micronodular
b) macronodular
c) mixed
d) all answers are correct

e) all answers are wrong

28. Specify the morphological signs of cirrhosis activity:

a) foci of sclerosis

b) penetration of cellular infiltrate into the liver parenchyma, foci of necrosis

c) plasmorrhagia

d) centers of congestion

e) cholestasis

29. Possible causes of death in patients with viral (postnecrotic) cirrhosis of the liver include all, except:

a) pneumonia

b) asphyxia

c) liver failure

d) hepatic and renal insufficiency

e) bleeding from varicose veins of the esophagus and stomach

18. KIDNEY DISEASES

1. Specify the morphological substrate of necrotic nephrosis:

a) inflammation of the renal glomeruli

b) necrosis of nephrocytes of the convoluted tubules of the main sections of the nephron

c) fibrinoid necrosis of the capillaries of the renal glomeruli

d) necrotizing papillitis

e) cicatricial wrinkling of the kidneys

2. Specify the morphological equivalent of acute renal failure:

a) paraproteinuric nephrosis

b) lipoid nephrosis

c) necrotic nephrosis

d) primary sclerotic kidney

e) Alport syndrome

3. Specify the main pathogenetic mechanism of development of necrotic nephrosis in shock:

a) blood shunt through juxtamedullary shunt

b) increased glomerular filtration rate

c) increased reabsorption of nephrocytes

d) lymphostasis in the capillaries of the kidney

e) renal vein thrombosis

4. What are the main causes of increased intrarenal pressure in necrotizing nephrosis:

a) renal tubular obstruction, progressive interstitium edema
b) renal artery thrombosis
c) activation of the juxtaglomerular apparatus
d) development of kidney infarctions
e) renal vein thrombosis

5. Specify the nature of changes in renal circulation in the second stage of necrotizing nephrosis:

a) ischemia in the cortical layer, venous plethora in the medulla
b) venous plethora in the cortical layer, anemia in the medulla
c) renal blood flow is not changed
d) anemia in the cortex and medulla
e) plethora in the cortex and medulla

6. Specify the main pathogenetic factor causing necrotizing nephrosis:

a) inflammation in the renal interstitium
b) necrosis of the renal glomeruli
c) inflammation of the capsule of the kidneys
d) direct action of toxic substances on the tubular epithelium
e) deposition of amyloid in glomerular mesangium

7. Specify the main condition necessary for the complete regeneration of necrotic tubular nephrocytes in necrotizing nephrosis:

a) preservation of renal glomeruli
b) appearance of granulation tissue
c) deposition of calcium oxalate crystals in the stroma
d) spasm of afferent arterioles
e) preservation of the tubular basement membrane

8. Specify the immunopathological mechanisms of glomerulonephritis development:

a) cytotoxic and cytolytic
b) antibody-mediated
c) immunocomplex-mediated
d) all answers are correct
e) all answers are wrong

9. Name the morphological forms of glomerulonephritis in subacute course:

a) mesangiomembranous
b) extracapillary, proliferative
c) mesangioproliferative
d) minimal changes
e) intracapillary, proliferative

10. Specify one of the types of glomerulonephritis by etiology:
a) shock
b) toxic
c) mechanical
d) bacterial
e) traumatic

11. Specify the morphological manifestations of primary nephrotic syndrome:
a) nephropathy with minimal changes
b) focal segmental glomerular sclerosis
c) membranous nephropathy
d) all answers are correct
e) all answers are wrong

12. Name the morphological type of glomerulonephritis that develops as a result of arterial hypertension:
a) extracapillary proliferative
b) exudative intracapillary
c) primary wrinkled kidney
d) membranous nephropathy
e) arteriolosclerosing glomerulonephritis

13. Specify the diseases in which amyloidosis of the kidneys can develop:
a) trophic ulcers of the lower extremities
b) bronchiectasis
c) rheumatoid arthritis
d) tuberculosis
e) all answers are correct

14. Synonyms of rapidly progressive glomerulonephritis do not include:
a) extracapillary proliferative
b) glomerulonephritis with crescents
c) membranoproliferative glomerulonephritis
d) malignant
e) subacute

15. Specify the main immunopathological mechanism of Goodpasture's syndrome:

a) antibody
b) immunocomplex
c) cytotoxic and cytolytic
d) atopic and anaphylactic
e) granulomatosis

16. Specify the duration of the course of acute glomerulonephritis:

a) up to 6 months
b) up to 1 year
c) up to 1.5 years
d) up to 3 months
e) up to 3 years old

17. Specify the cells that predominate in the renal glomerulus in intracapillary proliferative glomerulonephritis:

a) podocytes, endothelial cells
b) podocytes, mesangial cells
c) endothelial, mesangial cells
d) nephrothelium, podocytes
e) podocytes, fibrocytes

18. Name the cells that take part in the formation of "crescents" in extracapillary productive glomerulonephritis:

a) podocytes, nephrothelium
b) endothelial cells
c) mesangial cells
d) mesangiocapillary
e) nephrocytes of the convoluted tubules of the kidney

19. The histological characteristics of extracapillary productive glomerulonephritis include all of the following except:

a) proliferation of nephrothelium with the formation of "crescents"
b) Kimmelstiel-Wilson nodules
c) necrosis of capillary loops
d) protein and fatty degeneration of the epithelium of the convoluted tubules of the kidneys
e) fibrin thrombi in glomerular capillaries

20. Specify the most common immunopathological mechanism of chronic glomerulonephritis:

a) antibody
b) immunocomplex
c) granulomatosis
d) neutralization and inactivation
e) extracellular

21. Specify the reason why the kidneys have a granular surface as a result of chronic glomerulonephritis:

a) abscesses in the cortex of the kidneys
b) deposition of amyloid in the glomeruli of the kidneys
c) alternating sclerosis and atrophy with areas of hypertrophied nephrons
d) inflammation of the glomeruli of the kidneys
e) deposition of calcium salts in areas of necrosis

22. Name the form of chronic glomerulonephritis, which is characterized by the rapid development of chronic renal failure:

a) extracapillary, productive
b) intracapillary, productive
c) membranous nephropathy
d) mesangioproliferative
e) mesangiocapillary

23. Localization of immune deposits in glomerulonephritis in the renal glomeruli is found in all of the following, except:

a) subendothelial
b) subepithelial
c) mesangial
d) intramembranous
e) cells of the renal glomerulus

24. The clinical syndrome of manifestation of lipoid nephrosis is:

a) nephrotic syndrome
b) acute renal failure
c) chronic renal failure
d) Cushing's syndrome
e) Horner's syndrome

25. The most important clinical syndromes that characterize nephrotic syndrome include all except:

a) proteinuria

b) hematuria
c) dysproteinemia and hypoproteinemia
d) hyperlipidemia and hypercholesterolemia
e) edema

26. Name a synonym for membranous nephropathy:
a) Alport syndrome
b) adult idiopathic nephrotic syndrome
c) Ehlers-Danlos syndrome
d) Kimmelstiel-Wilson syndrome
e) Patau syndrome

27. Specify the typical localization of immune complexes in membranous nephropathy:
a) intracellular
b) Bowman capsule
c) mesangial structures
d) subepithelial structures
e) subendothelial structures

28. Name the immunopathological mechanism of the occurrence of membranous nephropathy:
a) immunocomplex
b) antibody
c) granulomatosis
d) inactivation and neutralization
e) cellular cytolysis

29. Specify morphological changes in lipoid nephrosis:
a) interposition of mesangiocytes
b) capsular drop
c) loss of small processes of podocytes
d) fibrin cap
e) Kimmelstiel-Wilson's nodules

30. A distinctive feature of the nephrotic syndrome in lipoid nephrosis is:
a) selective proteinuria
b) Bence-Jones protein
c) lipoglobinuria
d) cystinuria
e) hematuria

31. Lipoid nephrosis is more common:

a) in childhood
b) at any age
c) in adolescents
d) in adulthood
e) in old age

32. Name a kidney disease that is accompanied by a lesion of the juxtaglomerular apparatus:

a) lipoid nephrosis
b) focal segmental glomerular hyalinosis
c) proliferative glomerulonephritis
d) renal amyloidosis
e) pyelonephritis

33. Name the syndrome that develops in the clinic with amyloidosis of the kidneys:

a) hepatorenal
b) Lowe's syndrome
c) Alport syndrome
d) nephrotic syndrome
e) nephritic syndrome

34. List the histological structures of the kidney in which amyloid deposits can be found in the nephrotic stage of amyloidosis, except:

a) in the basement membranes of the glomeruli
b) in the basement membranes of the tubules
c) in mesangial cells
d) in the walls of blood vessels
e) along the reticular stroma

35. Name the stain used to determine amyloid in the kidneys:

a) toluidine blue
b) Sudan III
c) hematoxylin and eosin
d) Picrofuchsin according to Van Gieson
e) Congo red

36. Specify the type of inflammation of the mucous membranes of the gastrointestinal tract in uremia:

a) fibrinous

b) purulent
c) serous
d) putrefactive
e) mucous

37. Specify the types of inflammation of the serous membranes in uremia:
a) hemorrhagic
b) putrefactive
c) fibrinous
d) catarrhal
e) purulent

38. Indicate the change in the lungs that may occur with uremia:
a) pneumonia
b) vicarious lung hypertrophy
c) emphysema
d) atrophy
e) pneumoconiosis

39. Specify changes in parenchymal organs in uremia:
a) atrophy
b) protein and fatty degeneration
c) hypertrophy
d) regeneration
e) hyperplasia

40. Specify brain changes in uremia:
a) edema
b) choreiditis
c) meningitis
d) encephalitis
e) glioblastoma

19. PATHOLOGY OF THE ENDOCRINE SYSTEM

1. Cerebro-pituitary diseases include:
a) Hashimoto disease
b) Cushing disease
c) Simmonds disease
d) Babinski-Fröhlich syndrome

e) correct answer b, c, d

2. Addison's disease is characterized by:
a) hyperfunction of the adrenal glands
b) bronze coloration of the skin, hypoglycemia
c) obesity
d) arterial hypertension
e) hyperglycemia

3. Specify the features of diabetes mellitus in young people:
a) leads to obesity
b) leads to exhaustion
c) tendency to ketoacidosis
d) proceeds malignantly
e) correct answer b, c, d

4. Riedel thyroiditis is characterized by:
a) thyroid gland hypofunction
b) fibrosis of the gland
c) atrophy of the parenchyma of the gland
d) all answers are correct
e) all answers are wrong

5. Endocrine organs include:
a) thyroid gland
b) pancreas
c) pituitary gland
d) adrenal gland
e) all answers are correct

6. Adiposogenital dystrophy is known as:
a) Cushing disease
b) Babinski-Fröhlich syndrome
c) Hashimoto disease
d) Simmonds disease
e) Zollinger-Ellison syndrome

7. Specify the features of diabetes mellitus in the elderly:
a) proceeds benignly, leads to obesity
b) leads to hypoglycemia
c) leads to exhaustion
d) always fatal

e) prone to ketoacidosis

8. Specify the changes in the thyroid gland in Hashimoto thyroiditis:
a) lymphoid infiltration of the stroma
b) colloid resorption
c) sclerosis of the gland
d) atrophy of the parenchyma
e) correct answer a, c, d

9. The development of Graves' disease is facilitated by:
a) lack of iodine in the biosphere
b) psychic trauma
c) hereditary predisposition
d) infectious diseases
e) correct answer b, c, d

10. In recent years, people with diabetes are more likely to die from the following causes, with the exception of:
a) diabetic coma
b) ischemic cerebral infarction
c) uremia
d) myocardial infarction
e) gangrene of limbs

11. The disease, with a primary lesion of the thyroid gland, include:
a) Cushing disease
b) Simmonds disease
c) Hashimoto disease
d) Addison disease
e) Babinski-Fröhlich syndrome

12. Parathyroid osteodystrophy can be caused by:
a) adrenal tuberculosis
b) kidney disease
c) damage to the colon
d) adenoma of the parathyroid gland
e) hypoplasia of the parathyroid gland

13. The reasons leading to disruption of the activity of the endocrine glands include:
a) disorder of the function of the central nervous system
b) malnutrition

c) congenital anomaly of the gland
d) violation of blood circulation in the gland
e) all of the above are correct

14. All of the following are common causes of death in diabetic patients except:
a) uremia
b) gangrene
c) myocardial infarction
d) allergic shock
e) sepsis

15. There are the following types of colloid goiter:
a) proliferating
b) microfollicular
c) macrofollicular
d) all answers are correct
e) all answers are incorrect

16. Adiposogenital dystrophy is characterized by the presence of:
a) progressive cachexia
b) obesity, underdevelopment of the sex glands
c) vitiligo
d) melasma
e) exophthalmos

17. The main factor contributing to the development of diabetes is:
a) psychic
b) genetic
c) infectious
d) peptic
e) autoimmune

18. The cause of Addison disease is often:
a) lack of iodine in the environment
b) tumor of the parathyroid gland
c) tuberculosis of the adrenal glands
d) atrophy of the islets of Langerhans
e) hypoplasia of the gonads

19. According to the histological structure, the goiter is divided into:
a) endemic

b) sporadic
c) parenchymal, colloidal
d) diffuse
e) there is no correct answer

20. Cushing disease manifests itself by:
a) increased growth of bones in length
b) upper type of obesity
c) dwarf growth
d) bronze coloration of the skin
e) arterial hypotension

21. Common causes of Addison disease are:
a) atrophy of the islets of Langerhans
b) aldosteroma
c) tuberculosis of the adrenal glands
d) basophilic pituitary adenoma
e) eosinophilic pituitary adenoma

22. Simmonds disease manifests itself by:
a) decreasing of sexual function
b) hypertrophy of internal organs
c) increased sexual function
d) exophthalmos
e) gigantism

23. For fibrous osteodystrophy is not typical:
a) hypocalcemia
b) calcareous metastases
c) nephrocalcinosis
d) bone resorption
e) hyperfunction of the parathyroid glands

24. The following clinical syndromes are characteristic of Conn's syndrome:
a) cardiovascular syndrome
b) neuromuscular syndrome
c) hypokalemic nephropathy
d) all answers are correct
e) all answers are wrong

25. Simmonds disease is caused mainly by damage of:

a) thyroid gland
b) pancreas
c) adrenals
d) pituitary gland
e) epiphysis

26. The following types of goiter are distinguished by etiology:
a) inflammatory
b) sporadic, endemic
c) traumatic
d) sclerotic
e) dystrophic

27. Addison disease is caused by:
a) hyperthyroidism
b) hypofunction of the thyroid gland
c) hyperfunction of the adrenal glands
d) hypofunction of the adrenal glands
e) hyperfunction of the parathyroid glands

28. One of the manifestations of Cushing disease is:
a) hypoglycemia
b) hypotension
c) hypertrichosis
d) accumulation of fat on the thighs
e) black acanthosis

29. All of the following are common causes of death in diabetic patients except:
a) uremia
b) myocardial infarction
c) brain infarction
d) gangrene of the extremities
e) sepsis

30. The disease caused by the primary lesion of the adrenal glands include:
a) Hashimoto disease
b) Simmonds disease
c) Graves' disease
d) Franklin's disease
e) Conn's syndrome

20. SEPSIS

1. Specify changes in internal organs in chronic sepsis:
a) hyalinosis
b) hemochromatosis
c) calcification
d) hemosiderosis
e) atrophy

2. Name the dysproteinosis that complicates the course of chronic sepsis:
a) mucoid swelling
b) fibrinoid swelling
c) anthracosis
d) amyloidosis
e) hyalinosis

3. Specify changes in blood vessels characteristic of septic endocarditis:
a) hemosiderosis
b) alterative productive vasculitis
c) hyalinosis
d) sclerosis
e) amyloidosis

4. Specify the localization of the first metastatic foci in septicopyemia:
a) lymph nodes
b) spleen
c) lungs
d) myocardium
e) skin

5. Specify the most common location of the septic focus in septic endocarditis:
a) mitral valve
b) tricuspid valve
c) aortic valves
d) valves of the pulmonary artery
e) endocardium of the left atrial appendage

6. Name the change characteristic of a septic focus:
a) hyalinosis

b) purulent inflammation
c) productive inflammation
d) fibrinous inflammation
e) amyloidosis

7. Specify the change in the kidneys that occurs in septic endocarditis due to thromboembolism:
a) glomerulonephritis
b) amyloidosis
c) embolic purulent nephritis
d) pyelonephritis
e) kidney infarcts

8. Bone marrow changes in septicemia:
a) hypoplasia
b) aplasia
c) dysplasia
d) neoplasia
e) hyperplasia and myeloid metaplasia

9. Name the mechanism of occurrence of abscesses of internal organs in septicopyemia:
a) thromboembolism
b) bacterial embolism
c) tissue embolism
d) fat embolism
e) retrograde embolism

10. Specify the form of sepsis, which is characterized by the development of abscesses:
a) septicemia
b) chroniosepsis
c) septic endocarditis
d) cryptogenic sepsis
e) septicopyemia

11. Specify changes in the stroma of internal organs in septicemia:
a) interstitial inflammation
b) dystrophy
c) necrosis
d) heart attack
e) hyperplasia

12. Specify the form of sepsis, which is characterized by the development of embolic purulent nephritis:

a) septicopyemia
b) septic endocarditis
c) septicemia
d) chroniosepsis
e) recurrent warty endocarditis

13. Specify the type of jaundice that develops in sepsis:

a) common
b) hemolytic
c) subhepatic
d) viral
e) hepatic

14. Specify changes in parenchymal organs in septicopyemia:

a) purulent inflammation, dystrophy
b) putrid inflammation, catarrhal inflammation
c) productive inflammation, dystrophy
d) mixed inflammation, atrophy
e) hemorrhagic inflammation, amyloidosis

15. Specify the form of sepsis in which metastatic abscesses occur:

a) septicopyemia
b) septicemia
c) surgical sepsis
d) chroniosepsis
e) septic endocarditis

16. Specify the change in lymphoid organs in septicemia:

a) hypoplasia
b) hyperplasia
c) heart attacks
d) purulent inflammation
e) hemosiderosis

17. Name the form of sepsis in which purulent leptomeningitis occurs:

a) septicopyemia
b) tonsillogenic sepsis
c) uterine sepsis
d) odontogenic sepsis

e) septicemia

18. Specify the nature of general changes in sepsis:
a) dystrophy and interstitial inflammation of parenchymal organs
b) vasculitis
c) hyperplasia of lymphoid tissue
d) all answers are correct
e) all answers are wrong

19. Name the form of sepsis depending on the entrance gate:
a) chroniosepsis
b) septicemia
c) odontogenic sepsis
d) typhoid sepsis
e) septicopyemia

20. Specify the changes that occur in the spleen in septicemia:
a) myeloid metaplasia, hyperplasia
b) sclerosis
c) atrophy
d) dystrophy
e) hypoplasia

21. Give a description of the septic focus in cryptogenic sepsis:
a) septic hearth at the entrance gate
b) septic center away from the entrance gate
c) there is no septic focus
d) septic focus - carious teeth
e) septic focus - uterus

22. The mechanism of development of jaundice in sepsis:
a) hyperbilirubinemia
b) necrosis of hepatocytes
c) deficiency of vitamin B12
d) cholestasis
e) increased erythrocyte hemolysis

23. Name the most common causative agent of sepsis at the present time:
a) fungi
b) typhoid bacillus
c) pneumococcus
d) anthrax

e) staphylococcus aureus

24. Specify one of the components of a septic focus:
a) purulent thrombophlebitis
b) productive vasculitis
c) hyalinosis of arterioles
d) fibrinoid necrosis of arterioles
e) local venous plethora

25. Specify the possible localization of primary metastatic foci in the presence of a septic focus in the appendix:
a) brain
b) spleen
c) skin
d) liver
e) lungs

26. Specify the change in the lymph node in the septic focus with septicopyemia:
a) hypoplasia
b) hyperplasia
c) metaplasia
d) atrophy
e) sclerosis

27. Name the general changes in sepsis:
a) general venous plethora
b) amyloidosis
c) hyalinosis of vessel walls
d) sclerosis
e) hyperplastic processes in hematopoietic and lymphoid tissues

28. Specify the change that occurs in the skin during sepsis:
a) pustules
b) papules
c) hemorrhages
d) vitiligo
e) leucoderma

29. What are the differences between sepsis and other infectious diseases:
a) polyetiological

b) there is no flow cyclicity
c) leaves no immunity
d) not contagious
e) all answers are correct

30. Specify changes in parenchymal organs in septicemia:
a) degeneration of the parenchyma, interstitial inflammation
b) heart attacks
c) abscesses
d) amyloidosis
e) hyalinosis

31. Name the most common form of neonatal sepsis depending on the entrance gate:
a) odontogenic
b) umbilical
c) tonsillogenic
d) staphylococcal
e) septicemia

32. Specify the form of sepsis depending on the entrance gate:
a) septicopyemia
b) cryptogenic
c) pneumococcal
d) fungal
e) staphylococcal

33. Specify the type of sepsis that will develop in a patient with osteomyelitis of the alveolar processes of the lower jaw:
a) staphylococcal
b) streptococcal
c) odontogenic
d) tonsillogenic
e) otogenic

34. Name the possible outcomes of purulent leptomeningitis in sepsis:
a) hydrocephalus, resorption of exudate
b) hyperplasia
c) amyloidosis
d) cardiopulmonary insufficiency
e) renal-liver failure

35. The septic focus includes all of the following except:

a) hemorrhagic inflammation
b) focus of purulent inflammation
c) purulent thrombophlebitis
d) purulent lymphangitis
e) lymphadenitis

36. Possible causative agents of sepsis are listed correctly, with the exception of:

a) viruses
b) fungi
c) streptococci
d) staphylococci
e) mycobacterium tuberculosis

21. INTESTINAL INFECTIONS

1. Typhoid fever is classified as:

a) airborne infection
b) quarantine infection
c) anthroponosis
d) anthropozoonosis
e) especially dangerous infections

2. Antibodies to the causative agent of typhoid fever appear in the blood on:

a) 1st week
b) 2nd week
c) 3rd week
d) 4th week
e) 5th week

3. Specify the change in the mucous membrane of the small intestine in typhoid fever:

a) diphtheritic enteritis
b) phlegmonous enteritis
c) ulcerative enteritis
d) catarrhal enteritis
e) purulent enteritis

4. Intestinal bleeding, as a complication of typhoid fever, can often develop on:

a) 1st week
b) 2nd week
c) 3rd week
d) 4th week
e) 5th week

5. Extraintestinal complications of typhoid fever do not include:

a) pneumonia
b) purulent perichondritis of the larynx
c) amyloidosis
d) necrosis of the rectus abdominis muscles
e) osteomyelitis

6. Salmonellosis is classified as:

a) anthropozoonosis
b) anthroponosis
c) airborne infections
d) quarantine infections
e) parenteral infections

7. Name the most typical complication of typhoid fever:

a) cicatricial stenosis of the intestine
b) amyloidosis
c) pyelonephritis
d) intestinal perforation
e) cachexia

8. Specify the type of intestinal inflammation in the second stage of dysentery:

a) phlegmonous
b) ulcerative
c) croupous
d) diphtheritic
e) catarrhal

9. Name the change in the colon in the third stage of dysentery:

a) catarrhal colitis
b) fibrinous colitis
c) ulcerative colitis
d) purulent colitis

e) serous colitis

10. Intestinal complications that can occur with dysentery do not include:

a) perforation of the intestine
b) paraproctitis
c) amyloidosis
d) intestinal phlegmon
e) intestinal bleeding

11. Extraintestinal complications in acute dysentery include all of the following except:

a) bronchopneumonia
b) pyelonephritis
c) meningitis
d) liver abscess
e) arthritis

12. Give a description of changes in mesenteric lymph nodes in the second stage of typhoid fever:

a) lymphoid tissue is displaced
b) the size of the lymph nodes is increased
c) possible occurrence of typhoid granulomas
d) all answers are incorrect
e) all answers are correct

13. Name the non-specific complication of cholera:

a) anemia
b) venous plethora
c) typhoid
d) sepsis
e) algid syndrome

14. The stages of changes in the small intestine in typhoid fever do not include:

a) swelling
b) stage of dirty ulcers
c) purulent enteritis
d) stage of necrosis
e) stage of clean ulcers

15. Specify the route of infection with typhoid fever:

a) fecal-oral
b) contact
c) parenteral
d) airborne
e) transmissive

16. Specify the biological environment in which the causative agent of typhoid fever can be detected in the first week of the disease:
a) feces
b) urine
c) blood
d) sweat
e) bile

17. Give the name of the second stage of cholera:
a) gastroenteritis
b) pyelonephritis
c) dehydration
d) anasarca
e) fibrinous colitis

18. Specify the changes that are characteristic of the algid period of cholera:
a) gastroenteritis, dehydration
b) colitis
c) anasarca
d) ascites
e) pulmonary edema

19. Name the morphological change in the small intestine in the algid period of cholera:
a) mucosal atrophy
b) enteritis
c) mucosal polyps
d) necrosis of the mucous membrane
e) mucosal pigmentation

20. Specify the change in the lymph nodes and spleen in typhoid fever:
a) amyloidosis
b) atrophy
c) anemia
d) formation of granulomas

e) hemosiderosis

21. Name the causative agent of cholera:
a) Salmonella
b) Shigella
c) Vibrio El Tor
d) Vibrio Virchow
e) Mycobacteria

22. Specify the route of infection with cholera:
a) airborne
b) parenteral
c) alimentary
d) transmissive
e) contact

23. List the periods of cholera:
a) enteritis
b) algid
c) gastroenteritis
d) all answers are correct
e) all answers are wrong

24. Name the section of the intestine in which the main changes in cholera are localized:
a) duodenum
b) ileum
c) sigmoid colon
d) transverse colon
e) rectum

25. Give the name of the changes in the group follicles of the small intestine in the first stage of typhoid fever:
a) ulcers
b) fibrinous enteritis
c) swelling
d) gangrene of the intestine
e) formation of clean ulcers

26. Name the type of inflammation in the lymphoid tissue of the intestine in typhoid fever:
a) exudative

b) fibrinous
c) chronic productive
d) acute productive
e) purulent

27. Name the cells that prevail in the group follicles of the small intestine in the first and second stages of typhoid fever:
a) macrophages
b) lymphocytes
c) leukocytes
d) eosinophils
e) giant cells of foreign bodies

28. The accumulation of macrophages in the lymphoid tissue of the intestine in typhoid fever is called:
a) abscess
b) heart attack
c) empyema
d) granuloma
e) phlegmon

29. Non-specific complications of cholera do not include:
a) pneumonia
b) abscesses
c) erysipelas
d) amyloidosis
e) sepsis

30. Specify the most frequent outcome of healing of dysentery ulcers:
a) complete regeneration
b) substitution
c) the formation of mild scars
d) malignancy
e) epithelial hyperplasia

31. Specify the changes in the small intestine that are typical for the 3rd week of typhoid fever:
a) venous plethora
b) lymph node swelling
c) dirty ulcers
d) gangrene
e) scarring

32. The most common complication of typhoid fever is:
a) hepatitis
b) meningitis
c) intestinal bleeding
d) otitis
e) exhaustion

33. Name the causative agent of dysentery:
a) Salmonella
b) Mycobacterium
c) Shigella
d) Cryptococcus
e) Streptococcus

34. Specify the path of pathogen penetration into the intestinal wall in case of dysentery:
a) interepithelial
b) transepithelial
c) intraepithelial
d) thixotropy
e) chemotaxis

35. Specify a possible intestinal complication that may develop in connection with the regeneration of ulcers in dysentery:
a) bleeding
b) perforation
c) peritonitis
d) stenosis of the intestinal lumen
e) diverticulosis

36. Common changes in dysentery include all of the following except:
a) hyperplasia of the spleen
b) fatty degeneration of the liver
c) necrosis of the epithelium of the tubules of the kidney
d) metastatic calcification
e) fibrosing alveolitis

37. Specify the change in the large intestine in typhoid fever:
a) mucosal atrophy
b) mucosal edema
c) purulent colitis

d) diphtheritic colitis
e) croupous colitis

38. Possible changes in the internal organs in typhoid fever include all except:
a) infarcts of the spleen
b) foci of liver necrosis
c) subacute extracapillary glomerulonephritis
d) hyperplasia of the spleen
e) amyloidosis of the spleen

39. The stages of changes in the intestine in typhoid fever include all except:
a) lymph nodes swelling
b) necrosis
c) the formation of ulcers
d) stage of dystrophy
e) healing

40. The accumulation of cells in the lymph nodes that are characteristic of typhoid fever are called:
a) follicle
b) abscess
c) granuloma
d) sinus histiocytosis
e) infiltrate

41. Specify the morphological manifestation of alteration in the lymph nodes in typhoid fever:
a) granuloma
b) abscess
c) necrosis
d) amyloidosis
e) hyalinosis

42. Specify the nature of inflammation in the small intestine in cholera:
a) productive
b) fibrinous
c) purulent
d) catarrhal
e) hemorrhagic

43. Give the name of the fourth stage of group follicle changes in typhoid fever:

a) dirty ulcers
b) clean ulcers
c) lymph nodes swelling
d) ulceration
e) scarring

44. Quarantine infections include all of the following except:

a) Smallpox
b) Ebola
c) Plague
d) Yellow fever
e) Malaria

45. Specify the duration of the incubation period for cholera:

a) a few minutes
b) 3-5 days
c) 1-2 months
d) 1-4 weeks
e) 1-2 weeks

46. Specify the main reason for the development of cholera coma:

a) hypoproteinemia
b) progressive exsicosis
c) hyperlipidemia
d) oliguria
e) hyperproteinemia

47. Specify the features of rigor mortis in cholera:

a) expressed significantly
b) long lasting
c) develops rapidly
d) all answers are correct
e) all answers are wrong

48. Microscopic changes in the kidneys in post-cholera uremia:

a) subacute extracapillary glomerulonephritis
b) mesangioproliferative glomerulonephritis
c) amyloidosis
d) infarct-like necrosis of the cortex
e) acute pyelonephritis

49. Specify the duration of the incubation period for typhoid fever:
a) 1-3 months
b) 2-6 weeks
c) 10-14 days
d) 1-2 days
e) 1-5 hours

50. The causes of death of patients with typhoid fever do not include:
a) intestinal bleeding
b) peritonitis
c) pneumonia
d) sepsis
e) amyloidosis

22. VIRAL INFECTIONS

1. A feature of the interaction of the virus and the body are:
a) species specificity of the virus
b) reactivity of the organism
c) hyperreactivity of the organism
d) hyperactivity of the organism
e) formation of immunity

2. The ability of a virus to infect certain cells and tissues is called:
a) virulence
b) tropism
c) pathogenicity
d) invasiveness
e) phagocytosis

3. Virus tropism is due to:
a) lipoproteins
b) perverted exchange in the cell
c) cell necrosis
d) features of cell and virus receptors
e) viral enzymes

4. The mechanisms of damage to cells of a macroorganism by a virus do not include:
a) violation of the synthesis of normal proteins

b) toxic effect of viral proteins
c) stimulation of the phagocytosis reaction
d) autoimmunization
e) destruction of the cell as a result of the accumulation of viral particles

5. Specify the source of influenza infection:
a) virus carrier
b) dogs
c) birds
d) sick person
e) pig

6. Name the route of transmission of influenza infection:
a) fecal-oral
b) airborne
c) contact
d) lymphogenic
e) hematogenous

7. The morphological manifestations of the vasopathic action of the virus include all of the following except:
a) fullness
b) fibrinoid necrosis
c) stasis
d) plasmorrhagia
e) hemorrhage

8. Inhibition of the body's defense systems is manifested by all of the following, except:
a) suppression of phagocytosis of neutrophils
b) suppression of chemotaxis of macrophages
c) activation of phagocytosis of macrophages
d) development of autoimmunization
e) appearance of toxic immune complexes

9. The immunosuppressive effect of the influenza virus is dangerous as a result of:
a) hyperplasia of the spleen
b) dystrophic changes in organs
c) accession of a secondary infection
d) autoimmunization
e) dyscirculatory disorders

10. Local changes in the anatomical regions of the respiratory system with influenza include all of the following, except:

a) rhinitis
b) pharyngitis
c) tracheitis
d) bronchitis
e) intermediate inflammation

11. Morphological manifestation of lesions of the mucous membrane of the upper respiratory tract in mild influenza:

a) purulent tracheitis
b) serous-hemorrhagic tracheitis
c) catarrhal laryngo-tracheobronchitis
d) mucopurulent bronchitis
e) hemorrhagic laryngitis

12. Microscopic changes in the mucous membrane of the upper respiratory tract with a mild form of influenza are characterized by all of the following, except:

a) ischemia
b) lymphoid cell infiltration
c) dystrophy and desquamation of epithelial cells
d) fuchsinophilic inclusions in the cytoplasm of epithelial cells
e) hypersecretion of mucosal glands

13. Type of dystrophy of epithelial cells in influenza:

a) mucoid swelling
b) cloudy swelling
c) fatty
d) horny
e) hydropic

14. Specify the outcome of changes in the mucous membrane of the upper respiratory tract in mild influenza:

a) formation of deep ulcers
b) scar formation
c) complete regeneration of the mucous membrane
d) chronic bronchitis
e) catarrhal tracheitis

15. List the possible causes of death of patients with influenza with general intoxication of the body:

a) asphyxia

b) toxic hemorrhagic pulmonary edema, hemorrhages in the vital centers of the brain

c) myocardial infarction

d) kidney failure

e) uremia

16. List the characteristic changes in the larynx and trachea in severe influenza:

a) catarrh

b) serous inflammation

c) croupous inflammation

d) fibrinous-hemorrhagic inflammation, necrosis of the mucous membrane

e) putrid inflammation

17. Specify the characteristic changes in the bronchi in severe influenza:

a) endobronchitis

b) mesobronchitis

c) destructive panbronchitis

d) chronic bronchitis

e) polyposis bronchitis

18. The characteristic appearance of the lung in influenza is due to all of the following except:

a) inflammation

b) hemorrhages

c) foci of atelectasis

d) pneumosclerosis

e) areas of necrosis and abscess formation

19. Brain changes in severe influenza include all of the following except:

a) serous meningitis

b) acute swelling of the brain

c) hydrocephalus

d) hemorrhages

e) dystrophic changes in neurons

20. Specify the route of transmission of the measles pathogen:

a) fecal-oral

b) parenteral

c) airborne
d) lymphogenic
e) neurogenic

21. The measles virus does not infect:
a) epithelium of the pharynx
b) epithelium of the trachea
c) bronchial epithelium
d) myocardium
e) conjunctiva

22. Name the characteristic changes in the bronchial epithelium in measles:
a) desquamation
b) necrosis
c) metaplasia
d) dysplasia
e) atrophy

23. Specify the possible cause of death, which is due to damage to the larynx in measles:
a) false croup and asphyxia
b) pulmonary edema
c) true croup and asphyxia
d) acute pulmonary insufficiency
e) acute cardiovascular failure

24. Name the changes that underlie false croup:
a) hyperemia of the mucous membrane
b) reflex bronchospasm
c) pulmocoronary reflex
d) spasm of the muscles of the larynx
e) fibrinous-hemorrhagic tracheitis

25. A change in the mucous membrane of the cheek with measles is called:
a) exanthema
b) petechiae
c) enantheme
d) hemorrhages
e) metaplasia

26. The change in the skin in measles is called:
a) enantheme
b) exanthema
c) papule
d) pustule
e) petechiae

27. Specify the cause of enanthema and exanthema in measles:
a) bacteremia
b) pyemia
c) uremia
d) embolism
e) viremia

28. Measles is called complicated when:
a) exanthema
b) enanthems
c) acute bronchitis
d) catarrhal bronchitis
e) focal pneumonia

29. Specify the route of infection with poliomyelitis:
a) fecal-oral
b) airborne
c) sexual
d) contact
e) parenteral

30. The polio virus infects:
a) intestinal epithelium
b) lymphoid tissue
c) bronchial epithelium
d) neurons of the anterior horns of the spinal cord
e) soft meninges

31. Specify the route of penetration of the poliomyelitis virus into the central nervous system:
a) lymphogenic
b) transplacental
c) hematogenous
d) perineural
e) contact

32. The stages of the course of poliomyelitis do not include:

a) preparative
b) paralytic
c) recovery
d) residual changes
e) sharp

33. The microscopic characteristics of the spinal cord in the paralytic stage of poliomyelitis are characterized correctly, with the exception of:

a) necrosis of neurons of the anterior horns
b) necrosis of neurons of the posterior horns
c) leukocyte infiltration
d) proliferation of neuroglia
e) vascular disorders

34. Localization of changes in poliomyelitis outside the spinal cord is listed correctly, with the exception of:

a) in the medulla oblongata
b) in the bridge
c) in paraventricular nuclei
d) in neurons of the anterior central gyrus
e) in the epiphysis

35. Name the change in the heart in poliomyelitis:

a) pericarditis
b) dystrophy of cardiomyocytes
c) endocarditis
d) pancarditis
e) diffuse cardiosclerosis

36. Name the change in the striated muscles in poliomyelitis:

a) hypertrophy
b) aplasia
c) hypotrophy
d) neurotrophic atrophy
e) amyloidosis

37. Specify the source of epidemic typhus:

a) cats and dogs
b) cattle
c) rats

d) mouse
e) sick person

38. Name the mechanism of infection with epidemic typhus:
a) parenteral
b) hit of the pathogen from the feces of the louse when scratching the skin
c) fecal-oral
d) transplacental
e) transmissive

39. In epidemic typhus, the following are not affected:
a) skin
b) brain
c) heart
d) sympathetic nervous system
e) kidneys and liver

40. Damage to organs and tissues in epidemic typhus is due to:
a) dystrophic changes
b) thrombosis
c) violation of blood clotting
d) increased vascular permeability
e) typhoid vasculitis

41. Vascular changes in typhoid vasculitis are listed correctly, except for:
a) swelling of the endothelium
b) foci of necrosis
c) desquamation of adventitia
d) formation of blood clots
e) proliferation of vascular wall cells

42. Specify the change in the brain in epidemic typhus:
a) hydrocephalus
b) meningoencephalitis
c) demyelination
d) meningitis
e) calcification

43. The macroscopic characteristics of the brain in epidemic typhus are described correctly, with the exception of:
a) fullness

b) multiple hemorrhages
c) edema
d) the meninges are swollen
e) atrophy of the cerebral cortex

44. The cellular composition of typhoid granulomas in the brain does not include:
a) endothelium
b) pericytes
c) adventitial cells
d) microglia
e) neutrophils

45. Specify the changes that are not observed in the brain with typhus:
a) hyperemia
b) centers of calcification
c) stasis
d) perivascular plasma cell proliferation
e) proliferation of microglia

46. Microscopic manifestation of typhoid granuloma in the skin:
a) enantheme
b) papule
c) exanthema
d) pustule
e) necrosis

47. Symptoms of typhus include all of the following except:
a) trophic disorders in the skin
b) mumps and otitis
c) metastatic calcification
d) pneumonia
e) oleogranulomas

48. Name the common cause of death in patients with typhus:
a) chronic pulmonary heart failure
b) asphyxia
c) hemorrhage in the pancreas
d) acute heart failure
e) pulmonary edema

49. Specify the source of HIV infection:

a) human carrier of the virus
b) rats
c) monkeys
d) mosquitoes
e) pets

50. Clinical variants of the course of HIV infection do not include:
a) acute viral lymphotropic infection
b) abortive
c) lymphadenopathy syndrome
d) pre-AIDS
e) AIDS

51. The main clinical manifestations of HIV infection do not include:
a) vasculitis
b) lymphadenopathy
c) fever
d) weight loss
e) diarrhea

52. Name the most common cause of death in HIV-infected patients:
a) hemorrhage in the brain
b) acute heart failure
c) opportunistic infections
d) uremia
e) fever

53. Specify the reason for the development of opportunistic infections in HIV infection:
a) fever
b) weight loss
c) lymphadenopathy
d) damage to the central nervous system
e) secondary immunodeficiency

54. The manifestations of opportunistic infections in HIV infection are listed correctly, except for:
a) Pneumocystis pneumonia
b) Candidiasis
c) Cytomegalovirus infection
d) Toxoplasma encephalitis
e) Ascariasis

55. Specify a characteristic change in lymphoid tissue in HIV infection:
a) atrophy of lymphoid tissue
b) dystrophic changes
c) hypoplasia
d) aplasia
e) metaplasia

23. PEDIATRIC INFECTIONS

1. In the pathogenesis of diphtheria, the main importance is:
a) isolation of endotoxin
b) release of exotoxin
c) isolation of exo- and endotoxin
d) intraepithelial reproduction of the pathogen
e) serological variant of streptococcus

2. True croup is:
a) diphtheritic inflammation of the tonsils and pharynx
b) diphtheritic inflammation of the larynx
c) lobar inflammation of the larynx
d) croupous inflammation of the bronchial tree
e) croupous inflammation of the pharynx and tonsils

3. In the mucous membrane of the upper respiratory tract with measles, there may be:
a) catarrh
b) diphtheritic inflammation
c) pityriasis peeling
d) putrefactive inflammation
e) ichthyosis

4. Scarlet fever is called extrabuccal if the primary affect is not localized in:
a) pharynx
b) conjunctiva
c) skin
d) genital tract
e) lungs

5. Local changes in measles do not occur:

a) on the skin
b) in the pharynx
c) in the trachea
d) in the bronchi
e) in the conjunctiva

6. The severe septic form of scarlet fever is characterized by:
a) purulent-necrotic changes in the soft tissues of the neck
b) myeloid metaplasia of lymphoreticular tissue
c) purulent-necrotic tonsillitis
d) all answers are correct
e) all answers are wrong

7. Way of infection with scarlet fever:
a) airborne
b) through intact skin
c) with blood transfusion and sera
d) through damaged skin
e) transmissive

8. Specify clinical and morphological forms of scarlet fever:
a) toxic
b) septic
c) toxic-septic
d) all answers are correct
e) all answers are wrong

9. Diphtheria is transmitted:
a) through damaged skin
b) alimentary way
c) with blood transfusion and sera
d) transmissively
e) airborne way

10. In severe septic form of scarlet fever, there may be:
a) retropharyngeal abscess
b) brain abscess
c) otitis
d) neck phlegmon
e) all answers are correct

11. In the kidneys with diphtheria can be observed:

a) pyelonephritis
b) glomerupopathy
c) necrotic nephrosis
d) glomerulonephritis
e) pyonephrosis

12. Typical for meningococcal meningitis:
a) catarrh
b) hemorrhagic inflammation
c) purulent inflammation
d) putrefactive inflammation
e) productive inflammation

13. Specify the localization of enanthems in measles:
a) on the entire surface of the body, with the exception of the nasolabial triangle
b) on the lips
c) in the nose
d) on the mucous membrane of the cheeks
e) on the skin of the face

14. The descending croup is:
a) croupous inflammation of the pharynx
b) croupous inflammation of the tonsils
c) croupous inflammation of the larynx
d) croupous inflammation of the bronchi
e) croupous inflammation of the pharynx

15. The causative agent of measles is:
a) RNA-containing virus variants A, B, C
b) RS virus
c) DNA-containing virus
d) RNA-containing virus related to myxoviruses
e) RNA-containing virus related to paramyxoviruses

24. TUBERCULOSIS

1. List the ways of tuberculosis mycobacteria entering the human body:
a) aerogenic
b) alimentary
c) sexual

d) transplacental
e) correct answer a, b

2. Give the definition of "latent infection":
a) carrier of the infection with the development of a specific tissue reaction
b) carrier of the infection
c) entry of the infection into tissues without the development of a specific inflammatory reaction
d) body's reaction to mycobacteria
e) incomplete phagocytosis

3. Primary tuberculosis develops against the background of the following change in the reactivity of the body:
a) persistent immunity
b) relative immunity
c) sensitization of the body
d) autoimmunization of the body
e) immunological tolerance

4. Name the changes that reflect the state of sensitization of the body to the causative agent of tuberculosis:
a) sclerosis
b) proliferation of tissue and hematogenous elements
c) exudative inflammation and necrosis
d) necrosis and petrification
e) granuloma

5. Name the tissue reactions that occur during the progression of primary tuberculosis:
a) proliferation and sclerosis
b) alteration and exudation
c) petrification and encapsulation
d) infiltrative-productive tissue reaction
e) organization

6. Primary tuberculosis develops as a result of:
a) the first contact of the human body with the mycobacterium
b) repeated contact of the human body with the mycobacterium
c) repeated entry of tuberculosis mycobacteria into the human body
d) activation of the infection in hematogenous foci of elimination
e) no correct answer

7. Primary tuberculosis is currently predominantly found in:
a) early childhood
b) school age
c) adolescence
d) all answers are correct
e) no answer is correct

8. Indicate the morphological expression of primary tuberculosis:
a) caseous pneumonia
b) primary tuberculosis complex
c) primary affect
d) miliary tuberculosis
e) tuberculous lymphadenitis

9. List the components of the primary pulmonary tuberculosis complex:
a) focus of bronchopneumonia and regional lymphadenitis
b) focus of caseous pneumonia, lymphangitis, regional lymphadenitis
c) purulent phlebitis
d) focus of hemorrhagic pneumonia
e) thromboarteritis

10. Specify the typical localization of the primary tuberculosis complex in the organs:
a) liver and kidneys
b) heart and joints
c) bones and muscles
d) intestines and lungs
e) brain and spinal cord

11. Specify the most typical localization of the primary tuberculosis pulmonary lesion:
a) 6-10 segments
b) 3, 8, 9, 10 segments below the pleura
c) 1-3 segments
d) 4-5 segments
e) 3-6 segments

12. Name the clinical and morphological form of tuberculosis:
a) with hematogenous progression
b) primary tuberculosis
c) Ghon focus
d) Abrikosov's focus

e) with lymph node progression

13. The primary lung lesion, depending on the affected area, is called:
a) caseous alveolitis
b) caseous lobular pneumonia
c) caseous lobar pneumonia
d) all answers are correct
e) all answers are incorrect

14. Name the pleural change that occurs in the area of the primary tuberculosis lesion:
a) dystrophic changes
b) atrophic changes
c) develops fibrinous-serous pleurisy
d) develops purulent pleurisy
e) develops petrification

15. The pathway to the root of the lung in primary tuberculosis of the lungs is represented by:
a) primary tuberculosis component
b) primary lesion
c) lymphangitis
d) lymphadenitis
e) pleurisy

16. Specify the typical tissue reactions in the primary tuberculosis lesion:
a) necrotic (caseous pneumonia)
b) exudative (perifocal)
c) productive with intermediate tissue damage
d) exudative with purulent exudate
e) correct answers are a, b

17. Name the typical tissue reaction in the lung lymph nodes in tuberculosis lymphadenitis:
a) fibrinoid necrosis
b) purulent inflammation
c) caseous necrosis and granuloma formation
d) hemorrhagic inflammation
e) dystrophic changes

18. List the organs affected by primary tuberculosis in the case of alimentary infection:

a) tonsils
b) small intestine
c) stomach
d) rectum
e) correct answers are a, b, c

19. Morphological characteristics of the primary tuberculosis lesion in case of alimentary infection:

a) fibrinous sigmoiditis
b) polyps of the sigmoid colon
c) enterocolitis
d) erosive enteritis
e) ulcers in the small and large intestines

20. Specify the site of localization of the primary tuberculosis lesion in the intestines:

a) in the area of group follicles of the small and large intestines
b) in the mucous membrane of the sigmoid colon
c) in the mucous membrane of the rectum
d) in the area of the antral part of the stomach
e) in the esophagus

21. Name the variants of the course of primary tuberculosis complex:

a) healing or progression
b) involvement of the reproductive system
c) bronchogenic spread of infection
d) chronic
e) correct answer a, d

22. Name the forms of progression of primary tuberculosis:

a) bronchogenic
b) hematogenous
c) lymphogenous
d) perineural
e) correct answer b, c

23. List the processes that lead to healing of primary lung lesion:

a) growth of the lesion with melting of necrotic masses
b) petrification and encapsulation
c) peri-focal serous inflammation

d) hematogenous progression
e) pulmonary emphysema

24. Name the clinical-morphological form of tuberculosis with involvement of lymph nodes:
a) primary
b) hematogenous
c) secondary
d) osteoarticular
e) urogenital

25. The macroscopic characteristic of the primary tuberculosis lesion in the lung is:
a) abscess pneumonia
b) caseous necrosis pneumonia
c) purulent lymphangitis
d) purulent thrombophlebitis
e) purulent lymphadenitis

26. Name the lung segments where Ghon's focus is most commonly localized:
a) segments 1, 3
b) segments 3, 8, 9, 10
c) segments 5, 6
d) segments 9, 10
e) segment 5

27. Reinfection tuberculosis complex occurs when:
a) activation of infection from hematogenous foci of seeding
b) activation of infection from Ghon's foci
c) activation of infection from Simon's foci
d) biological cure of primary tuberculosis in the elderly
e) no correct answer

28. Name the form of hematogenous dissemination of primary tuberculosis:
a) cavernous
b) focal
c) miliary
d) disseminated
e) no correct answer

29. Name the organs where seeding lesions most commonly develop in hematogenous dissemination of primary tuberculosis:

a) meninges
b) lower lung lobes
c) lung segments 1-2
d) bones
e) correct answer a, b, c

30. Name the forms of progression of primary tuberculosis:

a) bronchogenic
b) hematogenous
c) lymphadenopathic
d) perineural
e) correct answer b, c

31. List the processes that lead to healing of primary pulmonary lesion:

a) growth of lesion with liquefaction of necrotic masses
b) petrification and encapsulation
c) perifocal serous inflammation
d) hematogenous progression
e) pulmonary emphysema

32. Name the clinical-morphological form of tuberculosis with lymph node involvement:

a) primary
b) hematogenous
c) secondary
d) osteoarticular
e) urogenital

33. What is the macroscopic characteristic of primary tuberculous lesion in the lung?

a) abscess formation
b) caseous pneumonia
c) suppurative lymphangitis
d) suppurative thrombophlebitis
e) suppurative lymphadenitis

34. Identify the lung segments where Ghon's focus is most commonly localized:

a) segments 1 and 3
b) segments 3, 8, 9, and 10

c) segments 5 and 6
d) segments 9 and 10
e) segment 5

35. Reinfection tuberculous complex occurs:
a) when the infection is activated from hematogenous foci of seeding
b) when the infection is activated from Ghon's foci
c) when the infection is activated from Simon's foci
d) in elderly people during biological healing of primary tuberculosis
e) no correct answer

36. Name the form of hematogenous dissemination of primary tuberculosis:
a) cavernous
b) focal
c) miliary
d) disseminated
e) no correct answer

37. Name the organs where foci of seeding are most commonly developed in hematogenous dissemination of primary tuberculosis:
a) meninges
b) lower lobe of the lung
c) segments 1 and 2 of the lung
d) bones
e) correct answers a, b, d

38. Morphological characteristic of paraspecific reactions in tuberculosis:
a) nonspecific immune inflammation in internal organs
b) hyperplastic changes in hematopoietic tissue
c) fibrinoid changes in connective tissue
d) all answers are correct
e) all answers are incorrect

39. Name the change in the body's immune reactivity, against which hematogenous tuberculosis develops:
a) relative immunity
b) lack of immunity
c) autoimmunization
d) immune deficiency
e) immunological tolerance

40. Name the forms of hematogenous tuberculosis:

a) generalized
b) with extrapulmonary lesions
c) pulmonary
d) infiltrative
e) correct answers a, b, c

41. Name the tissue reaction characteristic of hematogenous tuberculosis:

a) necrotic
b) productive
c) exudative
d) exudative-necrotic
e) exudative-productive

42. Morphological manifestation of productive tissue reaction in tuberculosis:

a) caseous necrosis
b) focal bronchopneumonia
c) granuloma
d) tuberculoma
e) hemorrhage

43. Name the feature of acute tuberculosis sepsis:

a) develops in primary tuberculosis
b) develops in secondary tuberculosis
c) necrotic foci in internal organs
d) tuberculous granulomas appear in all organs
e) a type of hematogenous disseminated tuberculosis

44. The most common morphological manifestation of tuberculous nodule in miliary tuberculosis:

a) focal exudative inflammation
b) focal caseous necrosis
c) petrification
d) granuloma
e) scar

45. Name the type of tuberculosis with predominant extrapulmonary involvement:

a) focal

b) hematogenous progression
c) lymph node progression
d) large focal
e) hematogenous disseminated

46. Name the clinical-anatomical form of tuberculosis in which tuberculous spondylitis develops:
a) miliary
b) hematogenous disseminated
c) primary
d) hematogenous
e) secondary

47. Name the form of bone and joint tuberculosis:
a) secondary
b) primary
c) hematogenous disseminated
d) cavernous
e) destructive

48. List the organs and organ systems in which changes are most commonly localized in hematogenous tuberculosis with extrapulmonary lesions:
a) heart and brain
b) skeletal and urogenital systems
c) hematopoietic system
d) spleen and adrenal glands
e) bone marrow and liver

49. Name the form of hematogenous tuberculosis with necrotic tissue reaction:
a) miliary tuberculosis
b) acute tuberculous sepsis
c) hematogenously disseminated tuberculosis
d) skeletal tuberculosis
e) tuberculosis of the kidneys

50. Name the type of tissue reaction in general miliary tuberculosis:
a) exudative
b) necrotic
c) exudative-necrotic
d) productive with intermediate inflammation in organs

e) productive with development of tuberculous granulomas

51. Name the clinicomorphological form of tuberculosis in which miliary tuberculosis of the lungs develops:

a) primary
b) hematogenous
c) secondary
d) acute
e) chronic

52. Specify the preferred site of lesions in skeletal tuberculosis:

a) bones of the skull
b) diaphysis of long bones
c) epiphyses of bones forming the knee and hip joints, vertebral bodies
d) lower jaw
e) bones of the foot

53. Specify the predominant route of infection spread in secondary tuberculosis:

a) lymphatic
b) hematogenous
c) intracanalicular
d) implantation
e) perineural

54. Name the form of secondary tuberculosis:

a) generalized
b) hematogenously disseminated
c) tuberculoma
d) lymph node progression
e) acute miliary

55. Name the form of tuberculosis that develops during the progression of infiltrative tuberculosis:

a) Abrikosov's focus
b) caseous pneumonia
c) chronic destructive tuberculosis
d) fibrous-focal tuberculosis
e) fibrous-cavernous tuberculosis

56. Name the theory of the origin of secondary tuberculosis:

a) viral

b) physico-chemical
c) endogenous
d) polyetiological
e) toxic

57. Name the extrapulmonary complication of cirrhotic tuberculosis:
a) sepsis
b) amyloidosis
c) brown induration of the lungs
d) meningitis
e) fistulas

58. Give a description of a tuberculoma:
a) tumor
b) a type of hematogenous tuberculosis
c) phase of evolution of infiltrative tuberculosis
d) variant of the course of primary tuberculosis
e) initial form of secondary tuberculosis

59. Name the form-phase of secondary tuberculosis:
a) hematogenously disseminated
b) with extrapulmonary lesions
c) Ghon focus
d) infiltrative
e) with hematogenous progression

60. Specify the cellular composition of the tuberculosis granuloma:
a) lymphocytes, Berezovsky-Sternberg cells
b) epithelioid cells, lymphocytes
c) polymorphonuclear leukocytes, plasma cells
d) macrophages, giant cells of foreign bodies
e) erythrocytes, macrophages

61. Specify a possible route of dissemination of secondary tuberculosis into the terminal stage:
a) hematogenous
b) fecal-oral
c) transmissive
d) lymphogenous
e) intracanalicular

62. Name the form of secondary tuberculosis in which productive tissue reaction predominates:

a) tuberculoma
b) caseous pneumonia
c) Abrikosov's focus
d) cirrhotic tuberculosis
e) acute cavernous tuberculosis

63. Specify the localization of fresh foci of secondary tuberculosis in the lungs:

a) 3-4 segments
b) 5-6 segments
c) 8-9 segments
d) 7-10 segments
e) 1-2 segments

64. Specify the change in the bifurcation pulmonary lymph nodes in secondary tuberculosis:

a) caseous necrosis
b) granulomatosis
c) petrification
d) crystallization
e) amyloidosis

65. Name the form of secondary tuberculosis that acute cavernous tuberculosis can progress to:

a) fibrocavernous
b) generalized
c) cirrhotic
d) fibrofocal
e) Ghon focus

66. Specify one of the most common causes of death in patients with fibrocavernous tuberculosis:

a) cardiogenic shock
b) sepsis
c) cardiopulmonary failure
d) cerebral edema
e) liver failure

67. Fibrofocal tuberculosis is a variant of the course of:

a) primary tuberculosis

b) hematogenous generalized tuberculosis
c) lymphogenous tuberculosis
d) hematogenous tuberculosis with lung involvement
e) secondary tuberculosis

68. Name the form of secondary tuberculosis:
a) infiltrative
b) with extrapulmonary lesions
c) tuberculous sepsis
d) tuberculosis of the genitourinary system
e) tuberculosis of bones

69. Secondary tuberculosis develops against the background of:
a) relative immunity
b) sensitization
c) sustained immunity
d) immunodeficiency
e) autoimmunization

70. Name the form of tuberculosis that develops as infiltrative tuberculosis progresses:
a) Abrikosov's focus
b) caseous pneumonia
c) fibrofocal tuberculosis
d) chronic destructive tuberculosis
e) fibrocavernous tuberculosis

25. DISEASES OF THE FEMALE REPRODUCTIVE SYSTEM. PATHOLOGY OF PREGNANCY

1. Estrogen hormones are synthesized:
a) by theca cells of maturing follicles
b) by granulosa cells of follicles
c) by cells of the reticular zone of the renal cortex
d) by chromophobic cells of the pituitary gland
e) by the pineal gland

2. Glandular hyperplasia of the endometrium is not observed:
a) in young women
b) in middle-aged women
c) in elderly women

d) in ovarian dysfunction
e) in menstrual cycle disorders

3. Diseases of the female reproductive system that occur after pregnancy include:
a) chorionepithelioma
b) ectopic pregnancy
c) placental polyp
d) uterine birth infection
e) correct answers a, b, d

4. The causes of ectopic pregnancy can include all of the listed processes except:
a) inflammatory diseases of the fallopian tubes
b) scarred bends of the fallopian tubes
c) anomalies in the development of the fallopian tubes
d) agenesis of the fallopian tubes
e) tumors of the fallopian tubes

5. Progesterone hormones are biosynthesized:
a) by cells of the reticular zone of the adrenal cortex
b) by syncytiotrophoblast of the placenta during pregnancy
c) by theca cells of maturing follicles
d) by granulosa cells of follicles
e) correct answers a, b, d

6. The obligate precancer of the female reproductive organs is:
a) atypical glandular hyperplasia of the endometrium
b) focal adenomatosis of the endometrium
c) adenomatous polyps of the endometrium
d) endometrial adenocarcinoma
e) correct answers a, b, c

7. In eclampsia, the liver shows:
a) hepatocyte dystrophy
b) hepatocyte necrosis
c) infiltration with leukemic cells
d) hemorrhages
e) correct answers a, b, d

8. During pregnancy, the following may occur:
a) gestosis

b) placental polyp
c) premature birth
d) molar pregnancy
e) correct answers a, b, d

9. Estrogen hormones include:
a) progesterone
b) estradiol
c) estrone
d) folliculin
e) correct answers b, c, d

10. Chronic endometritis is characterized by:
a) lymphocytic infiltration
b) plasmacytic infiltration
c) sclerosis
d) all answers are correct
e) all answers are incorrect

11. The following types of tubal pregnancy are distinguished:
a) ampullary
b) intramural
c) isthmic
d) ovarian
e) correct answers a, b, c

12. Postpartum infection can manifest as:
a) endometritis
b) endomyometritis
c) sepsis
d) all answers are correct
e) all answers are incorrect

13. Estrogens cause in the endometrium:
a) proliferation of stromal and glandular cells
b) secretory changes in glandular epithelium
c) decidual reaction of stroma
d) increased vascular permeability
e) correct answer is a, d

14. Specify the main theories of the development of cervical erosion:
a) autoimmune

b) inflammatory
c) traumatic
d) dysfunctional
e) correct answer is b, c, d

15. When entering the abdominal cavity, the fetus may undergo all of the following, except:
a) autolysis
b) petrification
c) organization
d) malignization
e) abdominal pregnancy may occur

16. The main danger of a blighted ovum is:
a) disruption of pregnancy development
b) fetal death
c) possible development of a destructive process in the uterus
d) rapid reduction in the size of the uterus
e) possible development of congenital anomalies

17. Diseases of the female genital organs are classified into the following groups:
a) inflammatory
b) immunopathological
c) dysfunctional
d) neoplastic
e) correct answer is a, c, d

18. The following do not belong to the types of erosions of the cervix:
a) simple
b) glandular
c) papillary
d) glandular-papillary
e) fibrous-cystic

19. An ectopic pregnancy is:
a) pregnancy in the cervix
b) pregnancy in the fallopian tube
c) pregnancy in the ovaries
d) pregnancy in the abdominal cavity
e) all answers are correct

20. The following are not considered induced abortions:
a) abortion for medical reasons
b) abortion by the woman's request
c) criminal abortion
d) abortion for social reasons
e) spontaneous abortion

21. Acute endometritis can be:
a) destructive
b) interstitial
c) purulent-fibrinous
d) hemorrhagic
e) alternative

22. Specify the types of healing of cervical pseudo-erosions:
a) dysplastic
b) superficial
c) deep
d) induced
e) correct answer is b, c

23. Clinical manifestations of tubal pregnancy include:
a) elevated body temperature
b) lower abdominal pain
c) bloody discharge from the genital tract
d) all answers are correct
e) none of the answers are correct

24. Eclampsia cannot be:
a) as a manifestation of early preeclampsia
b) as a manifestation of late preeclampsia
c) before delivery
d) during delivery
e) after delivery

25. The causative agents of acute endometritis include everything except:
a) viruses
b) staphylococci
c) enterococci
d) E. coli
e) anaerobic bacteria

26. A placental polyp is:

a) a glandular polyp of the endometrium
b) one of the uterine tumors
c) organized remnants of the fetal egg in the uterine cavity
d) complete abortion with inflammation and organization
e) a pathology not related to pregnancy

27. The following is not considered an early manifestation of preeclampsia:

a) nausea in pregnancy
b) excessive salivation
c) taste perversion
d) hydrothorax in pregnancy
e) ptyalism

28. The following contribute to postpartum uterine involution disorders:

a) complete expulsion of the fetal egg from the uterus
b) presence of remnants of the fetal egg in the uterine cavity
c) incomplete abortion
d) placental polyp
e) correct answers are b, c, d

29. Chronic endometritis can be:

a) atrophic
b) hypertrophic
c) cystic
d) all answers are correct
e) all answers are incorrect

30. The danger of a placental polyp lies in the development of all of the following, except:

a) purulent-fibrinous endometritis
b) uterine bleeding
c) purulent endomyometritis
d) chorionepithelioma
e) hypernephroma

31. The following can be detected in the kidneys during eclampsia:

a) congestion of the pyramids
b) congestion of the cortical layer
c) necrosis of the tubular epithelium

d) hemorrhage in the stroma
e) correct answers are a, b, d

32. Violation of ectopic pregnancy is accompanied by:
a) uterine bleeding
b) regressive changes in the endometrium
c) increase in the concentration of steroid sex hormones in the blood
d) decrease in the concentration of steroid sex hormones
e) correct answers are a, b, and c

33. The following are not female sex hormones:
a) estrone
b) gestagen
c) androgen
d) progesterone
e) estradiol

34. Nabothian cysts are:
a) cystic dilated glands of the endometrium
b) a type of endometrial cancer
c) retention cysts of the cervix when the outflow ducts are closed
d) dysplasia of the cervix
e) a type of cervical cancer

35. The following are not late gestational disorders:
a) polyhydramnios
b) preeclampsia
c) nephropathy
d) eclampsia
e) ptyalism

36. The outcomes of tubal pregnancy include:
a) complete tubal abortion
b) incomplete tubal abortion
c) rupture of the fallopian tube
d) all answers are correct
e) all answers are incorrect

37. The following are not hyperplastic processes in the endometrium:
a) glandular polyp
b) endometrial glandular-cystic hyperplasia
c) atypical endometrial hyperplasia

d) simple glandular-cystic hyperplasia of the endometrium
e) squamous cell metaplasia of the endometrium

38. A placental polyp can develop as a result of:
a) tubal pregnancy
b) miscarriage
c) premature labor
d) emergency delivery
e) correct answers are b, c, and d

39. The diagnostic criteria for tubal pregnancy are:
a) presence of chorionic villi in the tube
b) presence of decidual tissue in the tube
c) presence of fetal tissue in the tube
d) all answers are correct
e) all answers are incorrect

40. Choriocarcinoma can develop as a result of:
a) molar pregnancy
b) endometritis
c) true erosion of the cervix
d) pseudoerosion of the cervix
e) adenomatous polyp of the uterus

CORRECT ANSWERS

1. Parenchymal intracellular degenerations.

1. b)
2. a)
3. a)
4. b)
5. c)
6. a)
7. e)
8. a)
9. d)
10. c)
11. c)
12. d)
13. b)
14. c)
15. d)
16. b)
17. b)
18. a)
19. b)
20. c)
21. c)
22. b)
23. c)
24. d)
25. a)
26. b)
27. c)
28. c)
29. d)
30. e)
31. d)
32. e)
33. b)
34. b)
35. a)
36. e)
37. c)

38. b)
39. a)
40. e)
41. d)
42. e)
43. c)
44. d)
45. b)
46. c)
47. d)
48. e)
49. d)
50. a)
51. b)
52. b)
53. e)
54. b)
55. b)

2. Mesenchymal degenerations.

1. a)
2. b)
3. e)
4. c)
5. b)
6. e)
7. b)
8. a)
9. c)
10. d)
11. e)
12. c)
13. b)
14. c)
15. b)
16. b)
17. a)
18. e)
19. d)
20. c)

21. d)
22. b)
23. c)
24. b)
25. d)
26. e)
27. e)
28. e)
29. a)
30. c)
31. e)
32. d)
33. d)
34. e)
35. d)
36. d)
37. c)
38. b)
39. e)
40. c)
41. b)
42. c)
43. d)
44. a)
45. a)
46. e)
47. a)
48. e)
49. b)
50. d)
51. a)
52. c)
53. c)
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57. c)
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64. a)
65. e)
66. d)
67. b)
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69. d)
70. b)
71. c)
72. c)
73. c)
74. b)
75. d)
76. e)
77. b)
78. d)
79. b)
80. d)
81. d)
82. c)
83. b)
84. d)
85. d)

3. Mixed degenerations.

1. c)
2. b)
3. d)
4. c)
5. b)
6. c)
7. a)
8. a)
9. d)
10. a)
11. a)
12. a)
13. a)
14. a)
15. b)

16. c)
17. d)
18. a)
19. c)
20. b)
21. d)
22. a)
23. a)
24. b)
25. d)
26. a)
27. b)
28. c)
29. a)
30. c)
31. b)
32. a)
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40. c)
41. c)
42. b)
43. b)
44. c)
45. b)
46. d)
47. b)
48. c)
49. c)
50. b)
51. c)
52. b)
53. d)
54. b)
55. c)
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57. d)

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61. d)
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63. c)
64. d)
65. c)
66. d)
67. c)
68. b)
69. a)
70. e)
71. b)
72. d)
73. c)
74. c)
75. c)
76. d)
77. e)
78. b)
79. e)
80. c)
81. b)

4. Necrosis, apoptosis

1. e)
2. e)
3. d)
4. c)
5. c)
6. b)
7. c)
8. d)
9. a)
10. c)
11. c)
12. a)
13. d)
14. b)
15. d)

16. a)
17. c)
18. d)
19. d)
20. d)
21. c)
22. c)
23. e)
24. b)
25. d)
26. c)
27. e)
28. b)
29. c)
30. b)
31. d)
32. d)
33. a)
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35. c)
36. c)
37. e)
38. a)
39. d)
40. d)
41. d)
42. a)
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45. b)
46. a)
47. d)
48. d)
49. b)
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51. a)
52. e)
53. e)
54. a)
55. e)
56. c)
57. d)

58. c)
59. b)
60. a)
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62. c)
63. a)
64. b)
65. a)
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67. a)
68. e)
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73. d)
74. d)
75. c)
76. d)
77. d)
78. a)
79. a)
80. d)
81. b)
82. a)
83. a)
84. b)

5. Circulatory disorders. hyperemia. Stasis

1. a)
2. c)
3. c)
4. e)
5. b)
6. a)
7. a)
8. d)
9. c)
10. d)
11. e)
12. d)

13. d)
14. b)
15. e)
16. b)
17. a)
18. d)
19. a)
20. e)
21. b)
22. b)
23. b)
24. c)
25. b)
26. d)
27. a)
28. e)
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32. a)
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53. b)
54. b)

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58. b)
59. d)
60. c)
61. a)
62. e)
63. c)
64. e)
65. d)
66. b)
67. b)
68. c)
69. c)

6. Thrombosis. Embolism. Infarction.

1. b)
2. c)
3. b)
4. c)
5. b)
6. a)
7. e)
8. d)
9. d)
10. d)
11. c)
12. c)
13. e)
14. c)
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17. c)
18. e)
19. e)
20. a)
21. a)
22. b)
23. a)
24. e)

25. c)
26. b)
27. a)
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29. c)
30. b)
31. e)
32. c)
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34. d)
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36. c)
37. c)
38. c)
39. c)
40. d)
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42. b)
43. b)
44. c)
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56. a)
57. c)
58. b)
59. a)
60. b)
61. d)
62. a)
63. d)
64. d)

7. Inflammation

1. a)
2. d)
3. d)
4. e)
5. c)
6. c)
7. c)
8. a)
9. c)
10. e)
11. b)
12. c)
13. e)
14. d)
15. d)
16. d)
17. d)
18. d)
19. b)
20. e)
21. d)
22. d)
23. d)
24. e)
25. d)
26. d)
27. a)
28. d)
29. c)
30. c)
31. d)
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33. c)
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94. d)
95. c)
96. b)
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98. c)
99. c)
100. d)
101. c)
102. e)
103. e)
104. b)
105. b)
106. d)
107. d)
108. d)
109. a)
110. c)
111. c)
112. c)
113. e)
114. c)
115. b)
116. d)
117. c)

8. Tissue repair, regeneration and adaptation

1. c)
2. d)
3. d)
4. e)

5. d)
6. d)
7. d)
8. b)
9. e)
10. d)
11. a)
12. b)
13. e)
14. e)
15. a)
16. a)
17. c)
18. e)
19. b)
20. a)
21. b)
22. c)
23. c)
24. d)
25. b)
26. a)
27. b)
28. b)
29. a)
30. d)
31. c)
32. a)
33. d)
34. d)
35. a)
36. c)
37. b)
38. b)
39. d)
40. d)
41. b)
42. d)
43. a)
44. c)
45. d)
46. b)

47. c)
48. e)
49. c)
50. d)
51. c)
52. e)
53. c)
54. b)
55. b)
56. d)
57. d)
58. c)
59. d)
60. c)
61. a)
62. e)
63. c)
64. b)
65. c)
66. a)
67. e)
68. d)
69. a)
70. e)
71. a)
72. d)
73. b)
74. a)
75. b)
76. d)
77. c)

9. Tumors. Part 1

1. a)
2. d)
3. e)
4. c)
5. d)
6. e)
7. a)
8. b)

9. d)
10. a)
11. e)
12. d)
13. b)
14. d)
15. b)
16. a)
17. a)
18. a)
19. e)
20. d)
21. d)
22. e)
23. e)
24. e)
25. e)
26. c)
27. c)
28. c)
29. a)
30. b)
31. d)
32. b)
33. a)
34. c)
35. e)
36. c)
37. d)
38. b)
39. b)
40. a)
41. d)
42. e)
43. a)
44. c)
45. e)
46. a)
47. d)
48. e)
49. a)
50. e)

51. b)
52. a)
53. c)
54. d)
55. b)
56. e)
57. a)
58. b)

10. Tumors. Part 2

1. d)
2. e)
3. e)
4. e)
5. b)
6. a)
7. d)
8. c)
9. e)
10. b)
11. e)
12. d)
13. c)
14. b)
15. d)
16. c)
17. a)
18. b)
19. b)
20. c)
21. a)
22. a)
23. e)
24. d)
25. a)
26. a)
27. e)
28. d)
29. b)
30. c)
31. d)

32. e)
33. d)
34. d)
35. a)
36. e)
37. e)
38. a)
39. c)
40. e)
41. e)
42. b)
43. c)
44. d)
45. b)
46. b)
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48. c)
49. d)
50. b)
51. d)
52. c)
53. b)
54. d)
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57. a)
58. a)
59. b)
60. d)
61. a)
62. d)
63. b)
64. e)
65. e)
66. b)
67. d)
68. b)
69. b)
70. b)
71. a)
72. c)
73. c)

74. d)
75. e)
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92. c)
93. e)
94. b)
95. c)
96. e)
97. c)
98. c)
99. b)
100. d)
101. a)
102. a)
103. a)
104. c)
105. a)
106. b)
107. c)
108. c)
109. c)
110. b)
111. d)
112. c)
113. b)
114. d)
115. d)

116. a)
117. b)
118. a)
119. a)
120. b)
121. b)
122. c)
123. c)
124. a)
125. e)
126. c)
127. b)
128. e)
129. a)
130. e)
131. a)
132. b)
133. b)
134. d)

11. Tumors. Part 3

1. a)
2. a)
3. e)
4. c)
5. d)
6. e)
7. a)
8. e)
9. a)
10. d)
11. d)
12. c)
13. c)
14. e)
15. b)
16. a)
17. d)
18. a)
19. e)
20. e)

21. b)
22. d)
23. b)
24. c)
25. d)
26. d)
27. b)
28. c)
29. a)
30. d)
31. d)
32. d)
33. c)
34. b)
35. e)
36. b)
37. c)
38. d)
39. d)
40. c)
41. a)
42. a)
43. b)
44. d)
45. b)
46. e)
47. a)
48. c)
49. d)
50. c)
51. b)
52. b)
53. d)
54. c)
55. e)
56. d)
57. b)
58. b)
59. b)
60. c)
61. d)
62. d)

63. c)

12. Atherosclerosis. Arterial hypertension. Coronary artery disease

1. e)
2. a)
3. c)
4. a)
5. d)
6. c)
7. e)
8. a)
9. b)
10. b)
11. a)
12. b)
13. d)
14. a)
15. c)
16. b)
17. c)
18. b)
19. a)
20. a)
21. c)
22. b)
23. c)
24. b)
25. d)
26. b)
27. c)
28. c)
29. e)
30. c)
31. a)
32. d)
33. c)
34. b)
35. b)
36. b)
37. a)
38. d)

39. d)
40. b)
41. d)
42. a)
43. e)
44. d)
45. c)
46. d)
47. e)
48. b)
49. c)
50. e)
51. a)
52. b)
53. b)
54. c)
55. b)
56. b)
57. b)
58. e)
59. e)
60. c)
61. b)
62. d)
63. c)
64. a)
65. a)

13. Systemic connective tissue diseases. Rheumatism. Vasculitis

1. d)
2. e)
3. e)
4. b)
5. a)
6. e)
7. e)
8. d)
9. b)
10. a)
11. b)
12. d)

13. d)
14. a)
15. e)
16. c)
17. c)
18. d)
19. c)
20. a)
21. b)
22. a)
23. c)
24. c)
25. a)
26. b)
27. d)
28. b)
29. c)
30. d)
31. c)
32. a)
33. d)
34. b)
35. d)
36. d)
37. d)
38. b)
39. b)
40. e)
41. c)
42. c)
43. d)
44. e)
45. e)
46. c)
47. e)
48. e)
49. d)
50. e)
51. b)
52. b)
53. e)
54. d)

14. Acute respiratory infections of the lungs

1. d)
2. e)
3. e)
4. a)
5. e)
6. d)
7. d)
8. c)
9. c)
10. e)
11. d)
12. c)
13. a)
14. d)
15. b)
16. e)
17. e)
18. b)
19. d)
20. c)
21. d)
22. b)
23. a)
24. e)
25. a)
26. d)
27. e)
28. c)

15. Chronic nonspecific lung diseases

1. e)
2. e)
3. e)
4. c)
5. c)
6. c)
7. e)
8. b)

9. e)
10. e)
11. c)
12. c)
13. b)
14. e)
15. c)
16. a)
17. e)
18. a)
19. e)
20. c)
21. e)
22. d)
23. d)

16. Diseases of the gastrointestinal tract

1. b)
2. a)
3. a)
4. d)
5. b)
6. c)
7. a)
8. e)
9. d)
10. b)
11. c)
12. c)
13. d)
14. a)
15. d)
16. d)
17. a)
18. b)
19. b)
20. d)
21. c)
22. d)
23. b)
24. a)

25. c)
26. e)
27. b)
28. a)
29. d)
30. c)
31. d)
32. c)
33. e)
34. a)

17. Liver diseases

1. e)
2. d)
3. e)
4. d)
5. e)
6. d)
7. a)
8. d)
9. c)
10. b)
11. b)
12. c)
13. e)
14. b)
15. d)
16. e)
17. b)
18. a)
19. a)
20. a)
21. b)
22. c)
23. b)
24. d)
25. c)
26. e)
27. d)
28. b)
29. b)

18. Kidney diseases

1. b)
2. c)
3. a)
4. a)
5. a)
6. d)
7. e)
8. d)
9. b)
10. d)
11. d)
12. e)
13. e)
14. c)
15. a)
16. b)
17. c)
18. a)
19. b)
20. b)
21. c)
22. e)
23. e)
24. a)
25. b)
26. b)
27. d)
28. a)
29. c)
30. a)
31. a)
32. b)
33. d)
34. c)
35. e)
36. a)
37. c)
38. a)
39. b)

40. a)

19. Pathology of the endocrine system

1. e)
2. b)
3. e)
4. d)
5. e)
6. b)
7. a)
8. e)
9. e)
10. a)
11. c)
12. d)
13. e)
14. d)
15. d)
16. b)
17. b)
18. c)
19. c)
20. b)
21. c)
22. a)
23. a)
24. d)
25. d)
26. b)
27. d)
28. c)
29. c)
30. e)

20. Sepsis

1. e)
2. d)
3. b)
4. c)
5. c)

6. b)
7. e)
8. e)
9. b)
10. e)
11. a)
12. a)
13. b)
14. a)
15. a)
16. b)
17. a)
18. d)
19. c)
20. a)
21. c)
22. e)
23. e)
24. a)
25. d)
26. b)
27. e)
28. c)
29. e)
30. a)
31. b)
32. b)
33. c)
34. a)
35. a)
36. a)

21. Intestinal infections

1. c)
2. b)
3. d)
4. d)
5. c)
6. a)
7. d)
8. c)

9. c)
10. c)
11. c)
12. e)
13. d)
14. c)
15. a)
16. c)
17. a)
18. a)
19. b)
20. d)
21. c)
22. c)
23. d)
24. b)
25. c)
26. d)
27. a)
28. d)
29. d)
30. b)
31. c)
32. c)
33. c)
34. c)
35. d)
36. e)
37. d)
38. e)
39. d)
40. c)
41. c)
42. d)
43. b)
44. e)
45. b)
46. b)
47. d)
48. d)
49. c)
50. e)

22. Viral infections

1. a)
2. b)
3. d)
4. c)
5. d)
6. b)
7. b)
8. c)
9. c)
10. e)
11. c)
12. a)
13. e)
14. c)
15. b)
16. d)
17. c)
18. d)
19. c)
20. c)
21. d)
22. c)
23. a)
24. d)
25. c)
26. b)
27. e)
28. e)
29. a)
30. d)
31. c)
32. e)
33. b)
34. e)
35. b)
36. d)
37. e)
38. b)
39. e)

40. e)
41. c)
42. b)
43. e)
44. e)
45. b)
46. c)
47. c)
48. d)
49. a)
50. b)
51. a)
52. c)
53. e)
54. e)
55. a)

23. Pediatric infections

1. b)
2. c)
3. a)
4. a)
5. a)
6. d)
7. a)
8. d)
9. e)
10. e)
11. c)
12. c)
13. d)
14. d)
15. e)

24. Tuberculosis

1. e)
2. c)
3. c)
4. c)
5. b)

6. a)
7. d)
8. b)
9. b)
10. d)
11. b)
12. b)
13. d)
14. c)
15. d)
16. e)
17. c)
18. e)
19. e)
20. a)
21. e)
22. e)
23. b)
24. a)
25. b)
26. b)
27. d)
28. c)
29. e)
30. e)
31. b)
32. a)
33. b)
34. b)
35. d)
36. c)
37. e)
38. d)
39. a)
40. e)
41. b)
42. c)
43. c)
44. d)
45. e)
46. d)
47. e)

48. b)
49. b)
50. e)
51. b)
52. c)
53. c)
54. c)
55. b)
56. c)
57. b)
58. c)
59. d)
60. b)
61. e)
62. d)
63. e)
64. c)
65. a)
66. c)
67. e)
68. a)
69. a)
70. b)

25. Diseases of the female reproductive system. Pathology of pregnancy

1. a)
2. a)
3. e)
4. d)
5. e)
6. e)
7. e)
8. e)
9. e)
10. d)
11. e)
12. d)
13. e)
14. e)
15. d)
16. c)

17. e)
18. e)
19. e)
20. e)
21. c)
22. e)
23. d)
24. a)
25. a)
26. c)
27. d)
28. e)
29. d)
30. e)
31. e)
32. e)
33. c)
34. c)
35. e)
36. d)
37. e)
38. e)
39. d)
40. a)