

1. A patient has been hospitalized with complaints of headache, muscle pain during movement, pain during swallowing, chewing, and eye rotation, weakness, increased body temperature, edema of the eyelids and face. According to the patient's history, he was eating pork, bought from a private seller. What type of helminthiasis is most likely in this patient?

- A. Trichinellosis
- B. Ascariasis
- C. Trichuriasis
- D. Enterobiasis
- E. Ancylostomiasis

2. What material is most often used to determine the karyotype in the sex chromatin study?

- A. Epithelium of the oral cavity
- B. Erythrocytes
- C. Skin epidermis
- D. Nerve cells
- E. Sex cells

3. What anatomical parts make up the stomach?

- A. Body and fundus of the stomach, pyloric stomach and cardiac stomach
- B. Fundus of the stomach, greater and lesser curvatures of stomach, cardiac stomach
- C. Anterior and posterior stomach walls, pyloric stomach and cardiac stomach
- D. Fundus and fornix of the stomach, pyloric stomach, pyloric antrum, cardiac stomach
- E. Body and fundus of the stomach, greater and lesser curvatures of stomach

4. A patient has inflammation of the maxillary nerve. Through what cranial foramen does this nerve pass?

- A. Foramen rotundum
- B. Foramen ovale
- C. Foramen jugulare
- D. Foramen spinosum
- E. —

5. A patient presents with disturbed eye accommodation process. What muscle is damaged in this case?

- A. *Musculus ciliaris*
- B. *Musculus sphincter pupillae*
- C. *Musculus dilatator pupillae*
- D. *Musculus rectus superior*
- E. *Musculus rectus inferior*

6. As a result of an injury to the anterior surface of the shoulder, a man cannot flex his arm in the elbow joint. What muscle is likely to be damaged in this case?

- A. *M. biceps brachii*
- B. *M. deltoideus*
- C. *M. pectoralis major*
- D. *M. triceps brachii*
- E. *M. anconeus*

7. Auscultation of the heart detected reduplication of the first heart sound in the fifth intercostal space along the midclavicular line. In what valve was a pathology auscultated in this case?

- A. Bicuspid valve
- B. Tricuspid valve
- C. Aortic valve
- D. Pulmonary valve
- E. Superior vena cava valve

8. A histological specimen with a section of a dental crown shows a small number of radially positioned collagen fibers (Korff fibers) in the intercellular substance of dentin. What layer of dentin is it?

- A. Mantle dentin
- B. Peripulpal dentin
- C. Granular layer
- D. Interglobular dentin
- E. Predentin

9. A large cell with mildly basophilic cytoplasm and a bean-shaped nucleus was detected in the smear of peripheral blood. The cell is the largest among those in sight. What type of cell is it?

- A. Monocyte
- B. Macrophage
- C. Plasma cell
- D. Medium sized lymphocyte
- E. Small lymphocyte

10. In an experiment, one of the populations of blood cells was selectively stimulated. As a result, the permeability of blood vessels increased significantly, causing edema of the perivascular tissue and slowing down the blood coagulation process. What blood cells were stimulated in the experiment?

- A. Basophils
- B. Erythrocytes
- C. Platelets
- D. Eosinophils
- E. Lymphocytes

11. During puberty, the cells of the male gonads begin to produce the male sex hormone testosterone that causes the development of secondary sexual characteristics. What cells of male gonads produce this hormone?

- A. Leydig cells
- B. Sustentacular cells
- C. Sertoli cells
- D. Supporting cells
- E. Spermatozoa

12. A histological section of a human embryo demonstrates a vesicle connected to the gut tube. This vesicle is a provisional organ. Primary germ cells and primary erythrocytes (megaloblasts) are located in its wall. What provisional organ is observed in this case?

- A. Yolk sac
- B. Allantois
- C. Placenta
- D. Umbilical cord
- E. Amnion

13. A patient has been diagnosed with chronic neuritis of the trigeminal nerve. What digestive process will be disturbed the most in this case?

- A. Chewing
- B. Saliva secretion
- C. Formation of taste sensations
- D. Swallowing
- E. Saliva production

14. In an experiment, an excitatory cell was placed into a salt solution without sodium ions. What effect will it have on the process of cell excitation?

- A. Action potential is not generated
- B. Amplitude of action potential decreases
- C. Amplitude of action potential increases
- D. Duration of action potential increases
- E. Duration of action potential decreases

15. What compound forms in the process of ammonia neutralization in the brain cells?

- A. Glutamine
- B. Urea
- C. Asparagine
- D. NH_4^+
- E. Creatine

16. Hydroxyproline is an important amino acid in the structure of collagen. This amino acid forms as a result of proline hydroxylation. What vitamin takes part in this process of hydroxyproline formation?

- A. C
- B. D
- C. B_1
- D. B_2
- E. B_6

17. A sharp decrease in the serum sodium levels was detected in a patient diagnosed

with renal failure. In the morning, the patient develops pale and puffy facial edemas. What substance enters the intercellular matrix of connective tissue and binds sodium ions supplied from the bloodstream?

- A. Hyaluronic acid
- B. Collagen
- C. Elastin
- D. Procollagen
- E. Fibronectin

18. A patient has been diagnosed with megaloblastic anemia. This disease can be caused by the insufficient amount of a certain compound in the body. Name this compound.

- A. Cyanocobalamin
- B. Glycine
- C. Copper
- D. Cholecalciferol
- E. Magnesium

19. Long-term use of large doses of aspirin causes inhibition of prostaglandin synthesis by decreasing the activity of a certain enzyme. Name this enzyme.

- A. Cyclooxygenase
- B. Peroxidase
- C. 5-Lipoxygenase
- D. Phospholipase A2
- E. Phosphodiesterase

20. What adrenal hormone is synthesized with the participation of tyrosine?

- A. Adrenaline
- B. Glucagon
- C. Thyroxine
- D. Aldosterone
- E. Cortisol

21. A patient has been diagnosed with a malignant neoplasm of the tongue. What features of this tumor make it possible to classify it as malignant?

- A. Infiltrative growth
- B. Expansive growth
- C. Anaplasia
- D. Positive Pasteur effect
- E. Increased number of mitotic cells

22. Bleeding that occurred in a child after the tooth extraction could not be stopped for 6 hours. Testing of the hemostatic system revealed a sharp decrease in the levels of blood coagulation factor VIII. What type of inheritance is characteristic of this disease?

- A. Sex chromosome-linked
- B. Autosomal dominant
- C. Autosomal recessive
- D. Polygenic
- E. Incomplete dominance

23. Complete alimentary starvation (with water intake) results in development of generalized edemas in the human body. What is the leading pathogenetic factor in this case?

- A. Decreased plasma oncotic pressure
- B. Decreased intercellular hydrostatic pressure
- C. Decreased plasma osmotic pressure
- D. Increased interstitial oncotic pressure
- E. Increased intercellular osmotic pressure

24. When modelling inflammation of a lower limb in a test animal, the animal's body temperature and levels of antibodies and leukocytes in the blood increased. What substances have caused the development of this general response in the body in the course of the inflammation process?

- A. Interleukins
- B. Glucocorticoids
- C. Mineralocorticoids
- D. Leukotrienes
- E. Somatomedins

25. Examination of the oral cavity detected dark yellow and brown spots that cover more than half of the surface of the teeth on their labial and lingual surfaces, enamel and dentin are destroyed in these areas. What is the most likely diagnosis in this case?

- A. Fluorosis
- B. Enamel caries
- C. Dental erosion
- D. Cuneiform defects
- E. Deep caries

26. Examination of the oral cavity shows that gingival mucosa of the upper jaw is reddened, has signs of edema, and slightly bleeds, with the damage localized primarily in the interdental areas. What disease can be characterized by these symptoms?

- A. Catarrhal gingivitis
- B. Hypertrophic gingivitis
- C. Ulcerative gingivitis
- D. Local parodontitis
- E. Parodontosis

27. Autopsy of the body of a girl, who died of asphyxiation, shows that the mucosa of the trachea and bronchi is covered with

a white-gray film that is loosely attached to the underlying tissues and can be easily removed with tweezers. The lumina of the segmental bronchi are filled with loose gray-white masses. What type of tracheobronchitis was revealed during the autopsy, based on the nature of the exudate?

- A. Croupous
- B. Catarrhal
- C. Diphtheritic
- D. Purulent
- E. —

28. Microscopy of an extracted tooth detected a decrease in the number and size of odontoblasts and other cells in the dental pulp with a specific type of sclerosis observed in the connective tissue that makes up the base of the pulp. What general pathological process is observed in the tooth pulp in this case?

- A. Reticular atrophy of dental pulp
- B. Fatty dystrophy
- C. Amyloidosis
- D. Hyalinosis
- E. Pulp hyperplasia

29. A case of diphtheria made it necessary to carry out preventive vaccination in the group of students. What should be used in this case to induce artificial active immunity in the students?

- A. Diphtheria anatoxin
- B. Anti-diphtheria serum
- C. Specific immunoglobulin
- D. DPT vaccine
- E. Killed bacterial vaccine

30. A 5-year-old patient complains of intense headache and vomiting. Objectively, the following is observed: nuchal rigidity, vomiting without nausea, herpetic rash on the face, fever. Bacteriological study of a certain biological material is necessary to confirm the provisional diagnosis of meningitis in this case. Name this material.

- A. Spinal tap to obtain a sample of the cerebrospinal fluid
- B. Obtaining a urine culture of *N. meningitidis*
- C. Obtaining a stool culture of *N. meningitidis*
- D. Study of vomitus
- E. Obtaining *N. meningitidis* bacteria from the mucosa of the genitourinary system

31. A patient with acute leukemia was prescribed an anti-tumor agent with

an antimetabolite effect — a folic acid antagonist. What drug was prescribed in this case?

- A. Methotrexate
- B. Fluorouracil
- C. Myelosan (Busulfan)
- D. Mercaptopurine
- E. Synoestrol (Hexestrol)

32. A patient with syphilis, while undergoing treatment with bismuth-based drugs, developed gray spots on the oral mucosa and symptoms of nephropathy. What drug is used as an antidote in cases of poisoning caused by bismuth-based drugs?

- A. Unithiol
- B. Nalorphine
- C. Bemegride
- D. Naloxone
- E. Methylene blue

33. Which one of the listed drugs is a fluoroquinolone antibiotic?

- A. Ciprofloxacin
- B. Furazolidone
- C. Fluorouracil
- D. Ceftriaxone
- E. Cefazolin

34. What cells in the epidermis of the skin together with the terminals of afferent fibers form tactile receptors?

- A. Merkel cells
- B. Melanocytes
- C. Basal epidermal cells
- D. Spinous cells
- E. Langerhans cells

35. During absolute starvation, the process of oxidation of organic compounds is the only source of water in the body. What substance under these conditions becomes the main source of endogenous water?

- A. Fats
- B. Proteins
- C. Carbohydrates
- D. Glycoproteins
- E. Lipoproteins

36. A 50-year-old patient has been diagnosed with gout. In this case, disturbed metabolism of certain substances will be observed. Name these substances.

- A. Purines
- B. Fats
- C. Amino acids
- D. Carbohydrates
- E. Pyrimidine

37. An 18-year-old boy has been diagnosed with muscular dystrophy. What substance increases in the blood serum in this pathology?

- A. Creatine
- B. Myoglobin
- C. Myosin
- D. Lactate
- E. Alanine

38. One of the important clinical blood test is the determination of the leukocyte formula. What does this indicator show?

- A. Percentage ratio of different forms of leukocytes
- B. The total amount of leukocytes
- C. Percentage ratio of granulocytes and agranulocytes
- D. The percentage of lymphocytes in relation to the total number of white blood cells
- E. Percentage ratio of granulocytes

39. A woman diagnosed with syphilis needs to be prescribed treatment. She has a history of penicillin allergy. What antibiotic should be prescribed in this case?

- A. Ceftriaxone
- B. Ampicillin
- C. Ampiox
- D. Amoxicillin
- E. Augmentin (Co-amoxiclav)

40. A patient has undergone appendectomy. During the postoperative period, the patient was receiving an antibiotic. After a short while, the patient developed complaints of hearing impairment. What group of antibiotics has characteristic side effects that manifest as hearing impairment and damage to the vestibular apparatus?

- A. Aminoglycosides
- B. Penicillins
- C. Tetracyclines
- D. Macrolides
- E. Polymyxins

41. A histological section of an unknown organ has been prepared. The resulting microslide demonstrates its cortical and medullary substances. The medullary substance is represented by ribbon-like strands of B-lymphocytes. What organ is it?

- A. Lymph node
- B. Thymus
- C. Kidney
- D. Cerebellum
- E. Cerebral cortex

42. A patient diagnosed with essential

hypertension and bronchitis as a concomitant diagnosis needs to be prescribed treatment. What group of drugs can be prescribed in this case?

- A. Selective β_1 -blockers
- B. Non-selective β -blockers
- C. Nicotinic antagonists
- D. Nicotinic agonists
- E. Muscarinic agonists

43. What changes will manifest, if the fibers of the twelfth pair of cranial nerves are damaged during the dental procedures?

- A. Disturbed function of the lingual muscles
- B. Disturbed contraction of the muscles of the soft palate
- C. Disturbed contraction of the laryngeal muscles
- D. Disturbed contraction of the muscles that elevate the hyoid bone
- E. Disturbed contraction of the pharyngeal muscles

44. Vidal's reaction is used for serological diagnostics of typhoid fever. What mechanism of interaction between the antigens and antibodies is it based on?

- A. Agglutination
- B. Precipitation
- C. Bacteriolysis
- D. Hemolysis
- E. Immobilization of bacteria

45. A 57-year-old man diagnosed with chronic pyelonephritis presents with arterial hypertension. What is the main mechanism of arterial pressure increase in this case?

- A. Increased renin secretion in the kidneys
- B. Stimulation of hypothalamic vegetative centers
- C. Increased blood catecholamine levels
- D. Stimulation of sinocarotid baroreceptors
- E. Stimulation of the cerebral cortex

46. After an injury, the patient presents with the loss of skin sensitivity on the posterior surfaces of the shoulder and forearm. In this case, damage will be observed in the branches of which nerve?

- A. *N. radialis*
- B. *N. ulnaris*
- C. *N. medianus*
- D. *N. axillaris*
- E. *N. musculocutaneus*

47. A 35-year-old woman came to a doctor with complaints of weakness in her legs observed for the past 4 months. She noted that it was difficult for her to climb the

stairs. She complains of lethargy and loss of muscle mass. Her diet consists mainly of polished rice. What vitamin is most likely to be deficient in this patient?

- A. Vitamin B_1 (thiamine)
- B. Vitamin B_2 (riboflavin)
- C. Vitamin B_3 (nicotinic acid)
- D. Vitamin B_6 (pyridoxine)
- E. Vitamin C (ascorbic acid)

48. A man was hospitalized after a bee sting with signs of anaphylactic shock. What medicine must be administered to this patient?

- A. Adrenaline hydrochloride
- B. Morphine hydrochloride
- C. Clotrimazole
- D. Atracurium besylate
- E. Ibuprofen

49. A woman complains of itching and burning in the area of her external genitalia and purulent foamy discharge from them. Study of the discharge detected unicellular pear-shaped organisms with 4 flagella, an undulating membrane, and a spike at the end of the body. What pathogen was detected in this case?

- A. *Trichomonas vaginalis*
- B. *Lambliia intestinalis*
- C. *Trichomonas hominis*
- D. *Toxoplasma gondii*
- E. *Entamoeba gingivalis*

50. A patient complains of constant thirst and fatigability. The patient's 24-hour diuresis is 3–4 liters. Glucose levels in the blood are within the normal range. What hormone is deficient in this case, causing these changes in the body?

- A. Vasopressin
- B. Glucagon
- C. Insulin
- D. Aldosterone
- E. Natriuretic hormone

51. A patient has a mitral valve disorder. Where will the pathological noise be heard during auscultation?

- A. Apex of the heart
- B. Second intercostal space to the right of the sternum
- C. Second intercostal space to the left of the sternum
- D. Area of the xiphoid process
- E. Third intercostal space to the right of the sternum

52. A 17-year-old boy complains of sleep

disturbances, weight loss, and palpitations. After examination, he was diagnosed with thyroid hyperplasia, II degree. What hormone level imbalance would be most characteristic of this disease?

- A. Increased thyroxine levels
- B. Reduced thyroxine levels
- C. Increased somatotropin levels
- D. Reduced somatotropin levels
- E. Reduced triiodothyroxine levels

53. A patient was informed that serological testing for AIDS would consist of two stages. What reaction is used to test the blood serum for the presence of antibodies to the virus at the first stage of the diagnostics?

- A. Enzyme-linked immunosorbent assay
- B. Immunoblotting
- C. Radioimmunoassay
- D. Immunofluorescence
- E. Indirect hemagglutination assay

54. Several cases of tonsillitis are observed among the students at a boarding school. Microscopy of the smears prepared from the material obtained via a tonsil swab revealed thin yellow rod-shaped microorganisms with dark blue granules at their ends, arranged in the form of the Roman numeral five. The microorganisms were detected using the Neisser stain. What disease can be caused by the detected pathogen?

- A. Diphtheria
- B. Infectious mononucleosis
- C. Listeriosis
- D. Tonsillitis
- E. Scarlet fever

55. Microscopy reveals a parenchymal organ with epithelial strands that form zona glomerulosa, zona fasciculata, and zona reticularis. The central part of the organ is represented by clusters of chromaffin cells. What organ is it?

- A. Adrenal gland
- B. Thyroid gland
- C. Pineal gland
- D. Liver
- E. Pituitary gland

56. A doctor describes a specimen that demonstrates the wall of a tubular organ that is a component of the gastrointestinal tract. The doctor noted the presence of lymph node clusters in the lamina propria of the mucosa and in the submucosal base, above which the crypts are almost absent. What part of the gastrointestinal tract has

such structural features?

- A. Vermiform process
- B. Jejunum
- C. Large intestine
- D. Ileum
- E. Stomach

57. A patient has bile duct inflammation. Mobile, pear-shaped, binucleate protozoa with a supporting rod (axostyle) were detected in the portions of bile. What disease is indicated by their presence?

- A. Giardiasis
- B. Leishmaniasis
- C. Intestinal amebiasis
- D. Intestinal balantidiasis
- E. Trichomoniasis

58. Tooth section demonstrates a structure with alternating light and dark stripes, located perpendicular to its surface, and thin parallel lines of growth. What dental tissue is it?

- A. Enamel
- B. Dentin
- C. Cellular cementum
- D. Acellular cementum
- E. Pulp

59. A patient has been diagnosed with cheilosis, angular stomatitis, glossitis. What pathological condition is observed in the patient?

- A. Hypovitaminosis B_2
- B. Hypovitaminosis C
- C. Antioxidant deficiency
- D. Hypovitaminosis A
- E. Infectious stomatitis

60. A patient presents with impaired pain and thermal sensitivity of the tongue. What papillae are affected in this case?

- A. Filiform, cone-shaped
- B. Foliate, fungiform
- C. Circumvallate, filiform
- D. Cone-shaped, circumvallate
- E. Fungiform, filiform

61. How many segments are there in the cervical spinal cord?

- A. 8
- B. 7
- C. 5
- D. 12
- E. 2

62. A patient presents with restricted downward and lateral movements of the eyeball. What cranial nerve is damaged in

this case?

- A. *N. trochlearis*
- B. *N. abducens*
- C. *N. oculomotorius*
- D. *N. ophthalmicus*
- E. *N. infraorbitalis*

63. A 14-year-old patient has been diagnosed with impaired twilight vision. What vitamin is deficient in this case?

- A. A
- B. B₁
- C. B₆
- D. C
- E. B₁₂

64. Biogenic amines form under the effect of decarboxylase enzymes. What biogenic amine triggers the multistage regulation mechanism of *HCl* secretion in the stomach?

- A. Histamine
- B. Serotonin
- C. Dopamine
- D. GABA
- E. Glutamine

65. A patient came to a doctor complaining of infertility. Barr bodies were detected in the nuclei of the most cells of the patient's buccal mucosa. In this case, the patient's infertility is most likely associated with which disorder?

- A. Klinefelter syndrome
- B. Polysomy Y
- C. Down syndrome
- D. Trisomy X
- E. Tetrasomy X

66. A patient has sinus tachycardia. To restore the rhythm, the doctor prescribed potassium supplements and recommended eating foods rich in potassium. What is the mechanism of action of potassium in the heart?

- A. Reduces the pacemaking activity of the sinus node
- B. Increases the pacemaking activity of the sinus node
- C. Activates the sympathetic division of the autonomic nervous system
- D. Activates the parasympathetic division of the autonomic nervous system
- E. Inhibits the sympathetic division of the autonomic nervous system

67. A 37-year-old patient was diagnosed with essential hypertension and prescribed lisinopril. What is the mechanism of action of this drug?

- A. Binds angiotensin-converting enzyme and blocks the conversion of angiotensin I into angiotensin II
- B. Blocks angiotensin receptors in blood vessels
- C. Blocks potassium channels
- D. Blocks calcium channels
- E. Stimulates imidazoline receptors

68. In a chemical synapse, excitation is transmitted via a neurotransmitter. What ions facilitate its release into the synaptic cleft?

- A. Calcium ions
- B. Potassium ions
- C. Sodium ions
- D. Chlorine ions
- E. Magnesium ions

69. Cyanide poisoning causes disturbed activity in a certain enzyme. Name this enzyme.

- A. Cytochrome oxidase
- B. Catalase
- C. Peroxidase
- D. ATP synthase
- E. NADPH dehydrogenase

70. A child with Von Gierke disease has hepatomegaly, seizures, and hypoglycemia, observed especially often on an empty stomach or during stress. What enzyme has a genetic defect in patients with Von Gierke disease?

- A. Glucose 6-phosphatase
- B. Glycogen phosphorylase
- C. Phosphoglucomutase
- D. α -1,4-glycosidase
- E. Amylo-1,6-glycosidase

71. A patient with chronic enteritis developed anemia. Blood tests revealed hypochromia of erythrocytes, microangiocytosis, and poikilocytosis. What type of anemia is observed in the patient?

- A. Iron deficiency anemia
- B. B₁₂ deficiency anemia
- C. Aplastic anemia
- D. Hemolytic anemia
- E. Sideroblastic anemia

72. During an exacerbation of rheumatoid arthritis, the patient with a history of concomitant chronic gastritis was prescribed celecoxib. What decreases the side effects of this drug that affect the digestive tract?

- A. Predominant inhibition of cyclooxygenase-2
- B. Predominant inhibition of cyclooxygenase-1
- C. Phospholipase A2 inhibition
- D. Predominant stimulation of adenylate cyclase
- E. Phosphodiesterase inhibition

73. Microscopy of the patient's vaginal discharge detected Gram-negative bean-shaped diplococci. What is the provisional diagnosis in this case?

- A. Gonorrhea
- B. Syphilis
- C. Chlamydiosis
- D. Mycoplasmosis
- E. Toxoplasmosis

74. What hereditary disease combines hepatic cirrhosis, dystrophic processes in the brain, decreased ceruloplasmin levels in the blood plasma, and disturbed copper metabolism in the body?

- A. Wilson's disease
- B. Tay-Sachs disease
- C. Niemann-Pick disease
- D. Marfan syndrome
- E. Gilbert syndrome

75. Acid resistance of human teeth depends on the ratio of calcium to phosphorus in the enamel. What is the normal calcium to phosphorus ratio?

- A. 1.67
- B. 1.1
- C. 0.9
- D. 0.8
- E. 0.5

76. A 53-year-old man, a long time smoker, presents with a white patch 5x3 cm in size that looks like a plaque with blurry boundaries on the lateral surface of the tongue. Histology of the biopsy material obtained from the affected area allowed diagnosing significant keratinization and thickening of the mucosal epithelium and acanthosis. Under the epithelium, in the connective tissue, there is a mild infiltration consisting of lymphocytes, macrophages, and plasma cells. What type of damage to the oral mucosa is observed in this case?

- A. Leukoplakia
- B. Erythroplakia
- C. Hyperkeratosis
- D. Carcinoma in situ
- E. Keratinizing squamous cell carcinoma

77. What analgesic increases the probability of a hemorrhage developing after a

tooth extraction?

- A. Acetylsalicylic acid
- B. Paracetamol
- C. Dimedrol (Diphenhydramine)
- D. Analgin (Metamizole)
- E. Codeine phosphate

78. A 20-year-old woman has made an appointment with a doctor. Objectively, she is tall, with enlarged lips, nose, hands, and feet. In this case, increased secretion can be suspected in a certain gland. Name this gland.

- A. Anterior pituitary
- B. Parathyroid gland
- C. Pineal gland
- D. Thyroid gland
- E. Posterior pituitary

79. In an experiment, blood flow rate (mL/min) was measured in various organs and tissues. What organ has the highest blood flow rate per 100 g of its mass?

- A. Thyroid gland
- B. Skin
- C. Smooth muscles
- D. Skeletal muscles
- E. Stomach

80. A patient, who for a long time had been suffering from fibrocavitary tuberculosis accompanied by general emaciation, died of cardiopulmonary failure. Histology of the autopsy material detected accumulation of yellow-brown pigment in the liver, myocardium, and skeletal muscles, indicating disturbed metabolism of a certain pigment in the patient. Name this pigment.

- A. Lipofuscin
- B. Hemosoin
- C. Melanin
- D. Hemosiderin
- E. Porphyrin

81. Exposure to physical and chemical mutagens can cause DNA damage. Name the ability of cells to correct the damage in DNA molecules.

- A. Repair
- B. Replication
- C. Transcription
- D. Translation
- E. Regeneration

82. To which group of molecular metabolic diseases does phenylketonuria belong to?

- A. Amino acid metabolism disorders
- B. Carbohydrate metabolism disorders
- C. Hereditary disorders of connective tissue metabolism
- D. Hereditary disorders of lipid metabolism
- E. Mineral metabolism disorders

83. A 25-year-old patient suddenly developed a bronchospasm at the dental office. The doctor administered salbutamol in the form of an inhalation. What is the mechanism of action of this drug?

- A. Stimulation of β_2 -adrenoceptors
- B. Stimulation of β_1 -adrenoceptors
- C. Blockade of H_1 -histamine receptors
- D. Blockade of phosphodiesterase
- E. Blockade of muscarinic acetylcholine receptors

84. Examination of the oral cavity of a 52-year-old woman detected hyperemia, edema, and bleeding in the gums of her lower jaw. Her lower incisors have mobility of the II degree. Dentogingival pockets are observed. A yellow-green exudate is produced from under the gingival mucosa, when it is pressed. What disease can be characterized by these symptoms?

- A. Parodontitis
- B. Periodontitis
- C. Osteomyelitis
- D. Stomatitis
- E. Periostitis

85. A first-year school student received a facial injury in the gym, resulting in bleeding from the lower lip. In this case, damage will be observed in the branches of which artery.

- A. *A. facialis*
- B. *A. lingualis*
- C. *A. infraorbitalis*
- D. *A. alveolaris superior*
- E. *A. maxillaris*

86. A woman has developed a risk of premature termination of her pregnancy. What hormone is deficient in this case, causing this condition?

- A. Progesterone
- B. Estradiol
- C. Oxytocin
- D. Testosterone
- E. Aldosterone

87. Patients with ischemic heart disease are prescribed small doses of aspirin that inhibits the synthesis of platelet aggregation activator thromboxane A₂. Name the acid, from which the thromboxane A₂ is formed.

- A. Arachidonic
- B. Malonic
- C. Acetic
- D. Homogentisic
- E. Glutamic

88. What compound forms in the blood in cases of carbon monoxide poisoning?

- A. Carboxyhemoglobin
- B. Methemoglobin
- C. Carbaminohemoglobin
- D. Deoxyhemoglobin
- E. Fetal hemoglobin

89. During auscultation, the second heart sound can be heard better than the first in the II intercostal space along the parasternal line on the left. What valve causes this phenomenon when it closes?

- A. Pulmonary semilunar valve
- B. Aortic semilunar valve
- C. Left bicuspid valve
- D. Right tricuspid valve
- E. Bicuspid and tricuspid valves

90. In a car accident, a person received a strong blow to the epigastric region, which caused a cardiac arrest. What was the likely cause of such changes in the cardiac activity?

- A. Increased vagal tone
- B. Cortisol production
- C. Adrenaline production
- D. Aldosterone production
- E. Increased tone of the sympathetic nervous system

91. After a cerebral hemorrhage, the patient developed significant impairment of the sense of taste. What cerebral structure is most likely to be damaged in this case?

- A. Postcentral gyrus
- B. Hippocampus
- C. Hypothalamus
- D. Substantia nigra
- E. Amygdala

92. A woman with pheochromocytoma developed tachycardia, increased blood pressure, and sharp pain in the epigastric region after mental stress. What has caused the deterioration of the patient's condition?

- A.** Massive release of catecholamines by the adrenal glands
- B.** Noradrenaline release by sympathetic nerves
- C.** Activation of vegetative nuclei of the hypothalamus
- D.** Increased secretion of thyroid hormones
- E.** Increased synthesis of corticotropin

93. In cases of acidification of saliva and uncompensated carious process, the activity of a certain enzyme decreases. Name this enzyme.

- A.** Alkaline phosphatase
- B.** Elastase
- C.** Proteinase
- D.** Hyaluronidase
- E.** Collagenase

94. In the bone tissue, there are large multinucleated cells with processes that contain numerous lysosomes. Name these cells.

- A.** Osteoclasts
- B.** Mesenchymal cells
- C.** Semi-stem osteogenic cells
- D.** Chondroblasts
- E.** Chondrocytes

95. A 68-year-old woman with pulmonary tuberculosis has been prescribed an antibiotic that can cause red coloring of urine and tear fluid. What drug is it?

- A.** Rifampicin
- B.** Ethambutol
- C.** Ethionamide
- D.** Tetracycline
- E.** Co-amoxiclav

96. A boy presents with abnormalities in the facial part of the skull. He has maxillary hypoplasia, a high-arched palate, and incorrect development of teeth. Using the cytogenetic method, the karyotype of 47, XY, 21+ was determined. What pathological syndrome is observed in the patient?

- A.** Down syndrome
- B.** Patau syndrome
- C.** Edwards syndrome
- D.** Klinefelter syndrome
- E.** Turner syndrome

97. The process of tissue respiration is accompanied by the oxidation of organic compounds and the synthesis of macroergic molecules. In what organelles does this process take place?

- A.** Mitochondria
- B.** Lysosomes
- C.** Ribosomes
- D.** Peroxisomes
- E.** Golgi complex

98. In some diseases, a certain enzyme required for lipid hydrolysis is deficient in lysosomes. What hereditary disease is caused by insufficient activity of lysosomal enzymes?

- A.** Tay-Sachs disease
- B.** Hemophilia
- C.** Hereditary immunodeficiency
- D.** Down syndrome
- E.** Marfan syndrome

99. A histological specimen of decalcified mandible shows bundles of thick collagen fibers around the tooth root. Between these fibers, loose fibrous connective tissue with blood vessels can be identified. What structure is it?

- A.** Periodontium
- B.** Cellular cementum
- C.** Dentin
- D.** Dental alveolus
- E.** Gums

100. A mandibular fracture caused the bleeding from *a. alveolaris inferior*. In this case, damage will be observed in a branch of which artery.

- A.** *A. maxillaris*
- B.** *A. carotis externa*
- C.** *A. carotis interna*
- D.** *A. mentalis*
- E.** *A. facialis*

101. A patient has a skull injury. X-ray shows that the fracture line is located at the base of the skull and passes between the foramen ovale and foramen rotundum. What cranial bone is damaged in this case?

- A.** Sphenoid bone
- B.** Occipital bone
- C.** Ethmoid bone
- D.** Temporal bone
- E.** Zygomatic bone

102. A patient came to a doctor with complaints of general weakness and sleep disturbances. Objectively, the patient's skin is yellow. Laboratory studies detected increased levels of direct bilirubin and bile acids in the blood. Patient's stool is acholic. What pathological condition can be characterized by these changes?

- A. Mechanical jaundice
- B. Hemolytic jaundice
- C. Parenchymatous jaundice
- D. Gilbert's syndrome
- E. Chronic cholecystitis

103. An injured person has a fracture of the zygomatic arch. The lower jaw is shifted forwards and the patient complains of inability to move it backwards. What muscle is dysfunctional in this case?

- A. *M. temporalis*
- B. *M. pterigoideus medialis*
- C. *M. pterigoideus lateralis*
- D. *M. zygomaticus major*
- E. *M. zygomaticus minor*

104. Biochemical testing of the patient's blood and urine revealed hypercalcemia, hypophosphatemia, and hyperphosphaturia. What hormone is being overproduced in this case, causing this condition in the patient?

- A. Parathormone
- B. Thyroxine
- C. Vasopressin
- D. Oxytocin
- E. Corticotropin

105. At the dental office, a patient was diagnosed with caries. What is the main cause of this pathology?

- A. *Streptococcus mutans*
- B. Avitaminosis
- C. Masticatory load
- D. Malnutrition
- E. Gastric disease

106. A 45-year-old patient, who was prescribed complex therapy by a dentist due to recurrent aphthous stomatitis, developed an imbalance of the oral cavity microbiota with an increased amount of yeast fungi. What drug should be prescribed to this patient?

- A. Fluconazole
- B. Acyclovir
- C. Rifampicin
- D. Nifuroxazide
- E. Gentamicin

107. A 30-year-old woman has a distinct tumor-like formation in the area of her right lower premolars. This formation causes jaw deformity and is associated with destruction of a large part of the bone. On section, the tumor is red with whitish spots and cysts. Microscopy shows that the parenchyma of the tumor contains small mononuclear cells (osteoblasts) with giant

multinucleated cells (osteoclasts) located among them. In some places, small bone trabeculae are visible. What is the most likely diagnosis in this case?

- A. Giant-cell tumor of bone
- B. Ameloblastoma
- C. Osteoid osteoma
- D. Osteosarcoma
- E. Osteoma

108. A 60-year-old patient presents with high risk of pulmonary embolism due to a severe case of varicose veins in the legs. For prevention, the patient was prescribed an indirect anticoagulant that is a coumarin derivative and a vitamin K antagonist. Name this drug.

- A. Warfarin
- B. Phenylone (Phenindione)
- C. Nadroparin
- D. Ticlopidine
- E. Streptokinase

109. What changes in the ECG indicate tachycardia?

- A. Shortening of the RR interval
- B. Lengthening of the RR interval
- C. Lengthening of the QT segment
- D. Lengthening of the QRS complex
- E. Shortening of the PQ interval

110. An infectious agent was isolated from a patient with pneumonia of unknown etiology. This agent cannot reproduce on nutrient media and does not have a formed nucleus, but contains two types of nucleic acids (DNA and RNA). In this case, to which group of microorganisms does the causative agent of the disease belong?

- A. Chlamydia
- B. Mycoplasmas
- C. Protozoa
- D. Viruses
- E. Prions

111. What receptors trigger the protective reflex of sneezing, when stimulated?

- A. Irritant receptors
- B. Pulmonary stretch receptors
- C. Proprioceptors
- D. Nociceptors
- E. J-receptors

112. A patient with acute myocarditis developed clinical signs of cardiogenic shock. What pathogenetic mechanism is leading in the development of shock?

- A.** Impaired pumping function of the heart
- B.** Decreased vascular tone
- C.** Decreased diastolic blood inflow to the heart
- D.** Increased vascular tone
- E.** Blood deposition in the veins

113. During a visit to a doctor, examination of the patient's larynx detected incomplete closure of the vocal folds during phonation, with the vocal folds becoming oval-shaped in the process. What laryngeal muscle is dysfunctional in the patient?

- A.** *M. vocalis*
- B.** *M. cricoarytenoideus lateralis*
- C.** *M. cricoarytenoideus posterior*
- D.** *M. thyroarytenoideus*
- E.** *M. arytenoideus transversus*

114. In a patient with essential hypertension, a doctor observes the inability to pronounce words clearly due to a hemorrhage in the area of the left inferior frontal gyrus. In this case, the hemorrhage has occurred in the basin of which cerebral artery?

- A.** *A. cerebri media*
- B.** *A. cerebri anterior*
- C.** *A. cerebri posterior*
- D.** *A. communicans posterior*
- E.** *A. ophthalmica*

115. A patient came to a doctor with complaints of suppuration in the soft tissues of the orbit. Through what anatomical formation can the purulent process spread into the middle cranial fossa?

- A.** Superior orbital fissure
- B.** Zygomatico-orbital foramen
- C.** Posterior ethmoidal foramen
- D.** Inferior orbital fissure
- E.** Anterior ethmoidal foramen

116. A 36-year-old woman came to a dentist with complaints of facial edema localized under her right eye. After examination, the dentist diagnosed her with phlegmon of the infraorbital region. What teeth often become the source of infection that spreads into this region?

- A.** Upper canine and first premolar
- B.** Upper lateral and central incisors
- C.** Second premolar and first molar
- D.** Upper central incisor
- E.** Upper first and second molars

117. Excretion of a certain marker amino acid with urine reflects the rate of catabolism of collagen structures of connective tissue. What marker amino acid must be measured in biological substrates to assess

the collagen metabolism?

- A.** Oxyproline
- B.** Histidine
- C.** Phenylalanine
- D.** Threonine
- E.** Methionine

118. In a 6-year-old child, a dentist detected gray-white spots up to one millimeter in diameter on the buccal mucosa at the level of the premolars. The child was not vaccinated at the age of 12 months. The dentist suspects that the mucosal lesion was caused by a complex RNA virus with hemagglutinating properties. This virus has no neuraminidase activity and cannot be cultivated in chicken embryos. What virus has caused the development of this disease?

- A.** Measles virus
- B.** Herpes simplex virus
- C.** Varicella zoster virus
- D.** Coxsackievirus A
- E.** Mumps virus

119. A patient diagnosed with systemic lupus erythematosus has kidney damage with nephrotic syndrome. What is the cause of this pathological condition?

- A.** Autoimmune damage to nephron glomeruli
- B.** Mechanical damage to the urinary tract
- C.** Ischemic kidney damage
- D.** Hyperproteinemia
- E.** Glomerulosclerosis

120. A child developed hemolytic jaundice. In this case, an increase in a certain blood value would be the most significant and decisive in making the diagnosis. What blood value is it?

- A.** Indirect bilirubin
- B.** Direct bilirubin
- C.** Urobilinogen
- D.** Stercobilinogen
- E.** Mesobilinogen

121. A 40-year-old woman came to a dental surgeon with complaints of a neoplasm on the skin of her face. The neoplasm has been rapidly increasing in size over the course of the last 5 months. Objectively, the neoplasm is 0.7 cm in diameter, without clear boundaries, with uneven edges, surface, and pigmentation. Microscopy after the surgery detected the following: in the epidermis, the papillary dermis contains large cells with the nuclei of varying shape, a moderate number of mitoses, including the pathological

ones, pronounced nucleoli, and a varying amount of brown pigment in the cytoplasm (negative Perls' reaction). What is the most likely diagnosis in this case?

- A. Melanoma
- B. Melanocytic nevus
- C. Seborrheic keratosis
- D. Actinic lentigo
- E. Fibrous histiocytoma

122. For the diagnostics of generalized herpetic infection, blood serum was studied to detect specific antibodies of a certain class. What class of antibodies indicates the acute stage of a viral infection?

- A. *IgM*
- B. *IgA*
- C. *IgG*
- D. *IgE*
- E. *IgD*

123. Histology of a biopsy material obtained from the cervix of a 27-year-old woman detected the following: inflammatory infiltration with involvement of the walls of small vessels (veins and arteries), the presence of lymphocytes, plasma cells, epithelioid cells, and an area of tissue sclerosis and hyalinosis in the infiltrate. What disease corresponds with this histological presentation?

- A. Syphilis
- B. Leukoplakia
- C. Dysplasia
- D. Cervical erosion
- E. Papilloma

124. The thyroid gland of a 39-year-old woman is diffusely and symmetrically enlarged. Histology revealed mononuclear inflammatory infiltrations in the parenchyma of the gland. These infiltrations contain small lymphocytes, plasma cells, and well-developed germinal centers. Thyroid follicles are atrophied and lined with epithelial cells that can be characterized by a large amount of eosinophilic and granular cytoplasm — Hurthle cells or oxyphil cells. What is the most likely diagnosis in this case?

- A. Autoimmune (Hashimoto) thyroiditis
- B. De Quervain (subacute) thyroiditis
- C. Follicular adenoma
- D. Riedel (chronic fibrosing) thyroiditis
- E. Graves disease

125. A 42-year-old patient has hepatosplenomegaly and asymmetric enlargement of lymph nodes in the neck area (painless, medium density). Hi-

stology of a lymph node revealed giant cells with a large multilobed nucleus, textured nucleoli, and wide eosinophilic cytoplasm (Reed-Sternberg cells), as well as cells with two "mirrored" nuclei, each of which contains an acidophilic nucleolus surrounded by a clear zone ("owl's eye"). What is the most likely diagnosis in this case?

- A. Lymphogranulomatosis
- B. Acute lymphoblastic leukemia
- C. Chronic lymphocytic leukemia
- D. Burkitt lymphoma
- E. Non-Hodgkin lymphoma

126. Which one of the listed drugs is a monoamine reuptake inhibitor?

- A. Amitriptyline
- B. Diazepam
- C. Droperidol
- D. Amiodarone
- E. Furosemide

127. A doctor prescribed a drug that inhibits the proton pump function (H^+/K^+ -ATPase) to a patient with peptic ulcer disease of the stomach. What drug has such mechanism of action?

- A. Omeprazole
- B. De-nol (bismuth subcitrate)
- C. Pirenzepine
- D. Pancreatin
- E. Famotidine

128. What effect will decreased levels of Ca^{2+} in blood plasma have on the duration of coagulation hemostasis?

- A. The duration of hemostasis will increase
- B. The duration of hemostasis will decrease
- C. The duration of hemostasis will remain unchanged
- D. Ca^{2+} ions have no effect on the duration of hemostasis
- E. —

129. What hormone increases sodium reabsorption?

- A. Aldosterone
- B. Adrenaline
- C. Antidiuretic hormone
- D. Natriuretic hormone
- E. Parathormone

130. What main changes in the peripheral blood are characteristic of the second stage of acute radiation sickness?

- A. Lymphopenia
- B. Leukocytosis
- C. Lymphocytosis
- D. Monocytosis
- E. Erythrocytosis

131. A 49-year-old man, who had been a heavy drinker for a long time, has been hospitalized with complaints of fatigability, pain in the right hypochondrium, loss of appetite, and itching. Examination detected the following: reduced levels of total blood protein, hypoalbuminemia, increased levels of alkaline phosphatase, an enlarged liver, and generalized edema. What is the cause of the edema development in this patient?

- A. Reduced oncotic blood pressure
- B. Increased hydrostatic blood pressure
- C. Increased permeability of the capillary wall
- D. Disturbed neuroregulation of the water exchange
- E. Disturbed lymphatic efflux

132. Examination of a patient with a traumatic brain injury revealed a loss of tactile sensitivity. What part of the cerebral cortex is damaged in this case?

- A. Postcentral gyrus
- B. Occipital lobe of the cerebral cortex
- C. Parietal lobe of the cerebral cortex
- D. Precentral gyrus
- E. Frontal lobe of the cerebral cortex

133. Chest X-ray of a 26-year-old woman allowed diagnosis of her with bilateral lymphadenopathy and changes characteristic of a "honeycomb lung". In the respiratory part of the lungs, histology of the biopsy material detected numerous epithelioid cell granulomas with isolated Langhans giant cells and lymphocytes and without signs of caseous necrosis. What is the most likely disease in this case?

- A. Sarcoidosis
- B. Tuberculosis
- C. Aspergillosis
- D. Histoplasmosis
- E. Coccidiosis

134. A patient has been undergoing treatment for gastroesophageal reflux disease for a long time. A biopsy material was obtained from the esophageal mucosa above the gastroesophageal junction. Histology of the material revealed that stratified squamous epithelium of the mucosa had areas lined with cylindrical (columnar) epithelium that contained numerous goblet cells. What pathological

condition is observed in the patient?

- A. Barrett esophagus
- B. Herpes esophagitis
- C. Esophageal adenocarcinoma
- D. Esophageal achalasia
- E. Esophageal squamous cell carcinoma

135. A 22-year-old woman came to a gynecologist with complaints of irregular menstrual cycles, hemorrhagic discharge from the vagina, and pain in the lower abdomen. After a complex of laboratory and instrumental studies, the woman underwent uterine curettage. Histology of the obtained material detected acutely enlarged, cystically changed, edematous chorionic villi with proliferation of trophoblast cells and fragments of decidual tissue. What pathological process is observed in the patient?

- A. Hydatidiform mole
- B. Endometrial polyp
- C. Chorioepithelioma
- D. Endometrial carcinoma
- E. Endometrial hyperplasia

136. A patient came to a dentist with complaints of chronic local inflammatory processes observed in the oral mucosa. Examination detected a sharp decrease in secretory immunoglobulin levels in the patient's saliva. What cells are dysfunctional in this case?

- A. Plasma cells
- B. Mucosal epithelial cells
- C. Macrophages
- D. Serocytes
- E. Mucocytes

137. What mucolytic expectorant has an antioxidant, pneumoprotective, cardioprotective, and detoxifying effect and is used in cases of paracetamol poisoning?

- A. Acetylcysteine
- B. Bromhexine
- C. Ambroxol
- D. Codeine
- E. Glauicine

138. A doctor has diagnosed the patient with damage to the hypoglossal nucleus. What part of the brain is affected by the pathological process in this case?

- A. Medulla oblongata
- B. Pons
- C. Cerebellum
- D. Mesencephalon
- E. Diencephalon

139. A patient complains of headache

and difficulty breathing. X-ray allowed diagnosing the patient with frontitis (inflammation of the frontal sinus). Into what nasal meatus will purulent discharge spread in this case?

- A. Middle nasal meatus
- B. Inferior nasal meatus
- C. Superior nasal meatus
- D. Common nasal meatus
- E. Above the superior nasal concha

140. Impaired coordination of movements and disturbed muscle tone in cases of alcohol intoxication are associated with damage to certain cells in the cerebellum. Name these cells.

- A. Pear-shaped neurons of the Purkinje layer
- B. Basket cells of the granular layer
- C. Purkinje cells of the molecular layer
- D. Stellate cells of the molecular layer
- E. Golgi cells of the granular layer

141. Electron microscopy of a specimen revealed a round vesicle formed by a biological membrane and filled with enzymes (matrix). A dense core can be detected in the center of the matrix. Name this organelle.

- A. Peroxisome
- B. Proteasome
- C. Ribosome
- D. Centrosome
- E. Microtubule

142. A 7-year-old boy developed pain and edema in the throat and a low-grade fever observed for two weeks. Examination revealed hepatosplenomegaly and enlarged lymph nodes. A virus of the *Herpesviridae* family that causes proliferation of B-lymphocytes was isolated from the patient's oropharynx. What virus has most likely caused the disease in this case?

- A. Epstein-Barr virus
- B. HIV
- C. Herpes simplex virus type 2
- D. Measles virus
- E. Coxsackievirus A

143. After a head injury, the patient developed paralysis of the mimic muscles on the right. Examination detected damage to the facial nerve in the area after its exit from the facial canal. What anatomical structure is located at the end of the facial nerve canal?

- A. Stylomastoid foramen
- B. Jugular foramen
- C. External acoustic pore
- D. Internal acoustic pore
- E. Mastoid canaliculus

144. The following changes were observed in the ECG of a 30-year-old man: an area of abnormal contraction with missing P wave, deformed QRS complex, and negative T wave inverse to the QRS complex. What type of arrhythmia is observed in this case?

- A. Ventricular extrasystole
- B. Sinus arrhythmia
- C. Atrioventricular extrasystole
- D. Atrial extrasystole
- E. Paroxysmal tachycardia

145. What type of respiratory ventilatory insufficiency is characteristic of patients with pneumothorax?

- A. Restrictive
- B. Obstructive
- C. Mixed
- D. Disregulatory
- E. Pathological

146. Autopsy of the body of a 46-year-old woman with chronic heart failure revealed enlarged left ventricular chamber with thinned walls. Revision of the mitral valve area detected significant narrowing of the left atrioventricular orifice due to cicatricial changes at the level of the *annulus fibrosus cordis*. What heart defect is most likely observed in this case?

- A. Mitral valve stenosis
- B. Mitral valve insufficiency
- C. Mitral valve prolapse
- D. Coarctation of the ascending aorta
- E. Myogenic dilatation of the left ventricle

147. Autopsy of the body of a person, who died of secondary bacterial pneumonia, revealed pale yellow muscles with numerous calcinosis foci. Microscopy revealed dystrophic changes in the muscles, absence of striations, and reduced glycogen levels. Edema and inflammation are observed in the stroma. The cellular infiltrate is represented by lymphocytes, macrophages, and plasma cells. Sclerotic changes were detected in the heart, lungs, and liver. What is the most likely diagnosis in this case?

- A. Dermatomyositis (Wagner-Hepp-Unverricht disease)
- B. Myopathy
- C. Zenker's degeneration of muscles in typhoid fever
- D. Myositis
- E. Systemic scleroderma

148. A 2-month-old child has been diagnosed with cri-du-chat syndrome. This condition is caused by the deletion of the short arm of autosome 5. What total number of chromosomes will be detected in this child?

- A. 46
- B. 47
- C. 44
- D. 45
- E. 43

149. Autopsy of the body of a deceased 64-year-old woman with tuberculosis shows a dense and enlarged spleen with multiple

small gray-white foci. Microscopy detects caseous necrosis in the center of the foci, surrounded by epithelioid cells, multinucleated giant cells, and lymphocytes. What spleen disorder has developed in this woman?

- A. Miliary tuberculosis of the spleen
- B. Sago spleen
- C. Porphyry spleen
- D. Lardaceous spleen
- E. Septic spleen

150. Furosemide was prescribed to a patient with chronic heart failure as a part of complex treatment. What group of drugs does it belong to?

- A. Diuretics
- B. Calcium channel blockers
- C. β -blockers
- D. α -blockers
- E. Potassium channel blockers